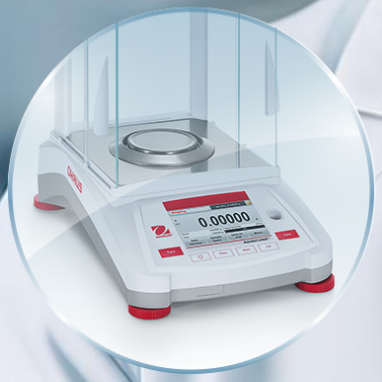
OHAUS

PRODUCT CATALOG



Featuring
ALL-NEW PRODUCTS for 2025

PRODUCTS AT WORK

Balances and Scales, Moisture Analyzers, Laboratory Equipment, Water Analysis Instruments, Calibration Weights

Ingeniously Practical

www.ohaus.com

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Introducing the All-New OHAUS Moisture Analyzers Featuring the Industry-Leading Carbon Fiber Heating Element

See pages 46-48

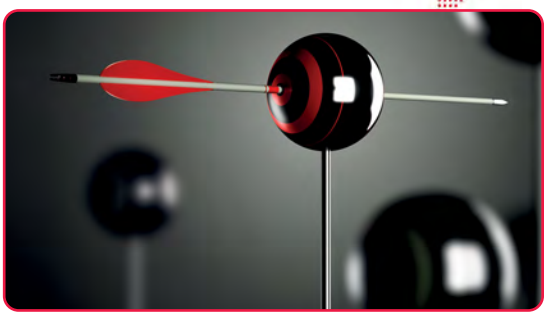
The OHAUS Advantage

For more than a century, the OHAUS name has been synonymous with precision and reliability. Our high-quality balances and scales, laboratory equipment and analytical instruments are designed to meet the evolving needs of a growing range of industries. In addition to supporting the need for precision in every setting, our Ingeniously Practical methodology—demonstrated in all of our products and services—provides tangible benefits that improve accuracy and quality for our customers.
At OHAUS, we have an unwavering dedication to four principles that guide the way we conduct business and support our customers: trust, agility, ingenuity and commitment. That's the OHAUS Advantage, and it's the promise we make to our customers every day.

TRUST

More Than A Century Of Precision & Reliability

Trust is a cornerstone of our relationship with our customers. With more than a century of expertise, we have become a trusted resource for those who rely on precision weighing products and life science equipment. As customer needs have evolved over the decades, our ability to adapt to change and offer the latest practical innovations has contributed to this enduring trust.
Today, we continue to deliver the same level of trusted quality and reliability that our customers have come to expect. While remaining grounded in our deep American roots established by Gustav and Karl Ohaus in 1907, we have expanded into 20 countries across six continents, creating a strong global network positioned to meet customer needs around the world.



AGILITY

Always Evolving

Over the years, OHAUS has brought the quality and value that define our weighing products to a wider range of specialized products, including analytical instruments and laboratory equipment for various industries. Our ability to be agile supports our commitment to embrace and adapt new technologies that benefit our customers.
Through our global network of office locations, representatives, and dealers, we stay on top of industry trends around the world and are positioned to quickly adapt to market changes and customer needs. Together with research/development and advanced manufacturing processes, this knowledge enables us to design and craft every OHAUS product to meet and exceed the demands, trends and expectations of our markets.

INGENUITY

Ingeniously Practical In Meeting Customer Needs

Whether you're looking for traditional weighing products or specialized laboratory or analytical equipment, all OHAUS products are built with ingenuity while also remaining practical in meeting customer needs. In fact, we call our expanded portfolio of products "Ingeniously Practical." To us, this means they offer both pinpoint accuracy and ease of use, and they feature the highest quality while being affordable and durable.
All OHAUS products are rigorously tested to meet national and international safety, quality, and accuracy standards. As an ISO 9001-2015 manufacturer, we maintain our commitment to quality through certifications, listings and ratings such as NTEP, OIML, IP, NEMA and NSF, ensuring legal and operational compliance. Our products are further backed by our extended warranties and ongoing technical support.
OHAUS products also feature superior mechanical overload protection to protect the weighing cells, while IP and NEMA ratings demonstrate further protection from harsh environments. These protective attributes prolong the life of our equipment.

COMMITMENT

Supporting Our Customers Around The Globe

At OHAUS, we are committed to providing comprehensive customer support, from technical advice and marketing insight to the logistical capacity to meet specific requests and turnaround times. We complement these offerings with onsite training, webinars, video demonstrations and a monthly newsletter.
We believe this commitment means developing a relationship that benefits our customers for the long-term. Our responsive customer service and technical support representatives go the extra mile to provide value-added solutions in a timely manner. With offices in 20 countries, you can receive personalized service and support from anywhere in the world.

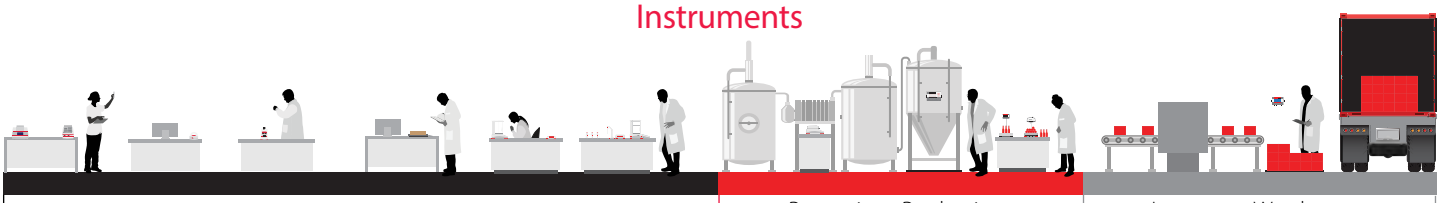
Products at Work

The OHAUS product range is specifically designed to help maximize productivity, across every surface of the workspace. From the office to the warehouse, our Ingeniously Practical portfolio is packed with products made with your customers' needs in mind. Our industry-leading line of scales and balances offer the accuracy, speed, and peace of mind your customers need to Weigh It with ease, while our ever-growing line of laboratory instruments products allows them to Test It with the confidence they need. Introduced in 2017, the OHAUS line of laboratory equipment rounds out the ability to Do More in the lab, offering products ranging from mixers and shakers to clamps and supports—and everything in between.
No matter what your customers' needs are, from research and development to fulfilment and receiving, you can depend on OHAUS for everything you need to let your customers' operations thrive.

Don't stop at just measurement—Do More.

6,181
Product Offerings

- **299** Laboratory Balances
- **385** Industrial Scales
- **883** Laboratory Equipment & Instruments
- **2,158** Calibration Weights
- **2,456** Accessories



Office • Training • R & D • Sample Preparation

Laboratory Balances
Explorer® Analytical
Intelligent performance no matter how difficult the task

Moisture Balances
MB92
Reliable and accurate moisture analyzers

Laboratory Equipment
Frontier™ 5000 Micro
Powerful and versatile universal centrifuges for virtually every lab application

Laboratory Equipment
Guardian™ 5000
Reliable performance with exceptional safety features

Processing • Production • Quality Control • Quality Assurance

Laboratory Instruments
AquaSearcher AB33M1
Easy to use and intuitive benchtop pH meters

Bench Scales
Defender®6000 Washdown
For harsh cleaning in processing and packaging areas with IP68/IP69 protection

Inventory • Warehouse • Shipping • Receiving

Counting Scales
Ranger® 7000
Bench scales from 6 to 150 lb for the toughest jobs

Floor Scales
Durable Portable Floor Scales
Durable floor scales for daily industrial usage from 500 to 10,000 lb

NOTES

Specifications and Prices subject to change without notice.

Laboratory Weighing

From our powerhouse flagship Explorer balance to our rugged and practical PR Series, OHAUS has a wide variety of semi-micro, analytical, precision, high-capacity, and moisture balances that are ideal for use in almost every area of your laboratory—and beyond.

		Semi-Micro Balances			Analytical Balances				Precision Balances			
		Explorer Semi-Micro	Adventurer Semi-Micro	Pioneer Semi-Micro	Explorer	Adventurer	Pioneer	PR Series	Explorer	Adventurer	Pioneer	PR Series
	Weighing Capacity Range	52 g - 220 g	82 g - 220 g	82 g - 220 g	120 g - 320 g	120 g - 320 g	80 g - 220 g	64 g - 220 g	220 g - 35,000 g	220 g - 12,000 g	160 g - 12,000 g	320 g - 6,200 g
	Readability Range	0.01 mg	0.01 mg	0.01 mg	0.1 mg	0.1 mg	0.1 mg	0.1 mg	0.001 g - 0.1 g	0.001 g - 0.1 g	0.001 g - 0.1 g	0.001 g - 0.1 g
APPLICATIONS	Weighing	●	●	●	●	●	●	●	●	●	●	●
	Parts Counting	●	●	●	●	●	●	●	●	●	●	●
	Percent Weighing	●	●	●	●	●	●	●	●	●	●	●
	Check Weighing	●	●		●	●			●	●		
	Density Determination	●	●	●	●	●	●		●	●	●	
	Dynamic / Animal Weighing	●	●	●	●	●	●		●	●	●	
	Filling	●			●				●			
	Totalization	●	●		●	●			●	●		
	Formulation	●	●	●	●	●	●		●	●	●	
	Differential Weighing	●			●				●			
	Ingredient Costing				●				●			
	SQC	●			●				●			
	Statistics	●	●		●	●			●	●		
	Fill Weight Variation	●			●				●			
	Pipette Calibration	●			●				●*			
	Mole Weighing											
	Batch Printing	●	●	●	●	●	●		●	●	●	
	Display Hold	●	●*		●*	●*			●	●*		
	Gross / Net / Tare	●	●	●	●	●	●	●	●	●	●	●
FEATURES	Control Interface	5.7" Touchscreen	4.3" Touchscreen / Mechanical Buttons	Backlit LCD / Mechanical Buttons	5.7" Touchscreen	4.3" Touchscreen / Mechanical Buttons	Backlit LCD / Mechanical Buttons	Backlit LCD / Mechanical Buttons	5.7" Touchscreen	4.3" Touchscreen / Mechanical Buttons	Backlit LCD / Mechanical Buttons	Backlit LCD / Mechanical Buttons
	Custom Units	●	●	●	●	●	●	●	●	●	●	●
	Multi-Language	●	●	●	●	●	●		●	●	●	
	Battery Power								●*			
	External Calibration Models	●	●	●	●	●	●	●	●	●	●	●
	Internal Calibration Models	●	●*	●	●	●*	●*	●*	●*	●*	●*	●*
	AutoCal Models	●	●*	●	●	●*			●*	●*		
	Draftshield	●	●	●	●	●	●	●	●*	●*	●*	●*
	Automatic Door	●*			●*							
	Built-In Ionizer	●*										
	Touchless Sensors	●			●				●			
	GLP / GMP / RTC	●	●	●	●	●	●		●	●	●	
	Password Protection	●	●	●	●	●	●		●	●	●	
	User Management	●	●		●	●			●	●		
	Weigh-Below Hook	●	●	●	●	●	●	●	●	●	●	●
	NTEP / Measurement Canada		●*		●*	●*			●*	●*		●*
COMMUNICATION PORTS	RS-232	●	●	●	●	●	●	●	●	●	●	●
	USB Device	●	●	●	●	●	●	O	●	●	●	O
	USB Host	●	●		●	●			●	●		
	Ethernet	O	O	O	O	O	O	O	O	O	O	O
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Specifications and Prices subject to change without notice.

		Portable Balances					
		Scout STX	Scout SPX	Scout SJX	Navigator	Compass CX	Compass CR
	Weighing Capacity Range	120 g - 8200 g	120 g - 8200 g	64 g - 8,200 g	120 g - 20,000 g	220 g - 5,200 g	220 g - 5,200 g
	Readability Range	0.001 g - 1 g	0.001 g - 1 g	0.001 g - 1 g	0.001 g - 1 g	0.1 g - 1 g	0.1 g - 1 g
APPLICATIONS	Weighing	●	●	●	●	●	●
	Parts Counting	●	●	●	●		
	Percent Weighing	●	●	●	●		
	Check Weighing	●	●	●	●		
	Density Determination	●		●			
	Dynamic / Animal Weighing	●					
	Totalization	●	●	●			
	Mole Weighing	●					
	Display Hold	●	●	●		●	
	Gross / Net / Tare	●	●	●			
FEATURES	Control Interface	4.3" Touchscreen / Mechanical Buttons	Backlit LCD / Mechanical Buttons	Backlit LCD / Mechanical Buttons	Backlit LCD / Mechanical Buttons	Backlit LCD / Mechanical Buttons	LCD / Mechanical Buttons
	Custom Units	●	●				
	Multi-Language	●					
	Battery Power	●	●	●	●	●	●
	External Calibration	●	●	●	●	●	●
	Draftshield	●*	●*	●*	●*		
	Touchless Sensors				●		
	GLP / GMP / RTC	●					
	Weigh-Below Hook	●	●	●	O		
	NTEP / Measurement Canada			●			
COMMUNICATION PORTS	RS-232	O	O	O	O		
	USB Device	O	O	O	O		
	USB Host	O	O	O			
	Ethernet	O	O	O	O		
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● Standard ●* Model Dependent O Optional

NEW CAL-PAK WEIGHT SETS
Find the weights to calibrate your balance!

		Recommended Cal-Pak Weight Sets Troemner ASTM Class 1 ISO/IEC 17025 Accredited Certificate Included		
	Balance Capacity (g)	Cal-Pak Item #	Cal-Pak Description	Cal-Pak List Price (USD)
Explorer	52 / 120	80859548	CalPak ASTM 100g/5g CL1 Accrd TR	530
	120 / 220	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	120	80859548	CalPak ASTM 100g/5g CL1 Accrd TR	530
	220	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	320	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	420	30391790	CalPak ASTM 200g-2g CL1 Accrd TR	639
	620	80859550	CalPak ASTM 500g/20g CL1 Accrd TR	727
	1100	80859551	CalPak ASTM 1kg/50g CL1 Accrd TR	958
	2200	80859552	CalPak ASTM 2kg/100g CL1 Accrd TR	1,385
	4200	30391783	CalPak ASTM 2kg-20g CL1 Accrd TR	1,840
	6200	80859553	CalPak ASTM 5kg/200g CL1 Accrd TR	1,975
	10200	80859553	CalPak ASTM 5kg/200g CL1 Accrd TR	1,975
Adventurer	82 / 120	80859548	CalPak ASTM 100g/5g CL1 Accrd TR	530
	102 / 220	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	82	30391795	CalPak ASTM 50g-2g CL1 Accrd TR	539
	120	80859548	CalPak ASTM 100g/5g CL1 Accrd TR	530
	220	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	320	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	420	30391790	CalPak ASTM 200g-2g CL1 Accrd TR	639
	520	80859550	CalPak ASTM 500g/20g CL1 Accrd TR	727
	620	80859550	CalPak ASTM 500g/20g CL1 Accrd TR	727
	820	80859550	CalPak ASTM 500g/20g CL1 Accrd TR	727
	1520	80859551	CalPak ASTM 1kg/50g CL1 Accrd TR	958
	2200	80859552	CalPak ASTM 2kg/100g CL1 Accrd TR	1,385
	4200	30391783	CalPak ASTM 2kg-20g CL1 Accrd TR	1840
	5200	80859553	CalPak ASTM 5kg/200g CL1 Accrd TR	1,975
	6200	80859553	CalPak ASTM 5kg/200g CL1 Accrd TR	1,975
	8200	80859553	CalPak ASTM 5kg/200g CL1 Accrd TR	1,975
Pioneer	82 / 220	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	82	30391795	CalPak ASTM 50g-2g CL1 Accrd TR	539
	120	80859548	CalPak ASTM 100g/5g CL1 Accrd TR	530
	160	80859548	CalPak ASTM 100g/5g CL1 Accrd TR	530
	220	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	320	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	620	80859550	CalPak ASTM 500g/20g CL1 Accrd TR	727
	1600	80859551	CalPak ASTM 1kg/50g CL1 Accrd TR	958
	2200	80859552	CalPak ASTM 2kg/100g CL1 Accrd TR	1,385
	3200	80859552	CalPak ASTM 2kg/100g CL1 Accrd TR	1,385
	4200	30391783	CalPak ASTM 2kg-20g CL1 Accrd TR	1840
	6200	80859553	CalPak ASTM 5kg/200g CL1 Accrd TR	1,975
PR Series	62	30391795	CalPak ASTM 50g-2g CL1 Accrd TR	539
	120	80859548	CalPak ASTM 100g/5g CL1 Accrd TR	530
	220	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	320	80859549	CalPak ASTM 200g/10g CL1 Accrd TR	556
	520	80859550	CalPak ASTM 500g/20g CL1 Accrd TR	727
	820	80859550	CalPak ASTM 500g/20g CL1 Accrd TR	727
	1600	80859551	CalPak ASTM 1kg/50g CL1 Accrd TR	958
	2200	80859552	CalPak ASTM 2kg/100g CL1 Accrd TR	1,385
	4200	30391783	CalPak ASTM 2kg-20g CL1 Accrd TR	1840
	5200	80859553	CalPak ASTM 5kg/200g CL1 Accrd TR	1,975
	6200	80859553	CalPak ASTM 5kg/200g CL1 Accrd TR	1,975

Class 1 Cal-Paks by Troemner avoids the need to purchase an entire weight set. Cal-Paks contain a small weight perfect for repeatability testing, and a large weight suited for testing accuracy and performing a span calibration. Useful for most industries including pharmaceutical applications.

EXPLORER™ SEMI-MICRO

Flagship Balances from OHAUS

Display
Full-color VGA graphic display (5.7 in. diagonal), 4-wire resistive touch screen. QWERTY keyboard and numeric keypad to quickly input GLP and GMP data and other application data

Communication
Easy access communication ports including 2 units of USB port and RS232 and an optional fourth port of either RS232 or Ethernet. GLP/GMP Data Ouput with Real Time Clock. Data Transfer Function.

Construction
Metal base, ABS top housing, stainless steel pan,anti-static glass draftshield with flip-top door, replaceable in-use cover, automatic door as option models

Design Features
AutoCal™ fully-automatic internal calibration system, fast stabilization time, four touchless sensors, built-in ionizer with automatic door models, up to 14 operating languages, OIML models available, SAVE to USB function, menu lock switch, security bracket, integral weigh below hook for below balance weighing applications, removable stainless steel weighing platform, stability indicator, overload and underload indicators, auto standby.

Operation
AC Adapter (Included)

Recommended **CAL-PAK WEIGHT SET** *for your laboratory balance!* *See page 10*

Explorer's weighing cells precision-machined from a solid metal block, together with AutoCal™ provides exceptional accuracy and durability suitable for laboratory and industrial environments.

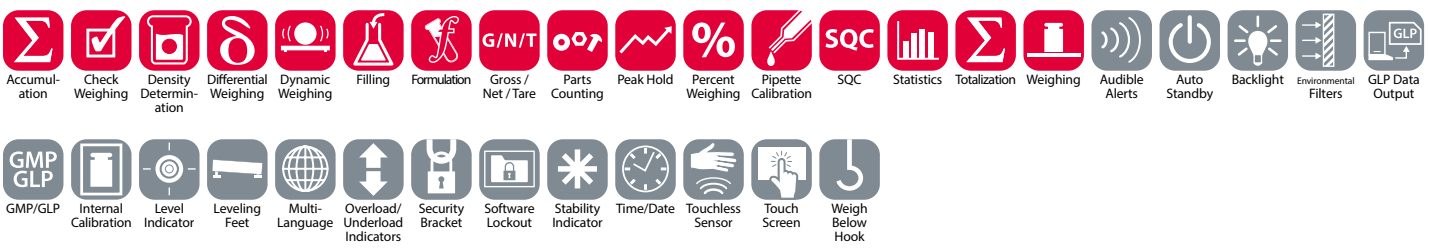
Features such as four-level user management with password protection, and un-editable system log plus a high level of configurability make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, optional built-in Ionizer & automatic doors, and a frameless draftshield make Explorer balances easy & convenient to use.

Model	Auto Door	Built-in Ionizer	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
EX125	-	•	•	120 g	0.01 mg	3.14 in (80 mm)	30139511	9320
EX125D	-	•	•	52 g/120 g	0.01 mg; 0.1 mg	3.14 in (80 mm)	30139510	7477
EX225D	-	•	•	120 g/220 g	0.01 mg; 0.1 mg	3.14 in (80 mm)	30139512	9536
EX225D/AD	•	•	•	120 g/220 g	0.01 mg; 0.1 mg	3.14 in (80 mm)	30139513	9852
EX225/AD	•	•	•	220 g	0.01 mg	3.14 in (80 mm)	30139514	12098

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Cable, RS422, 9m, EX EX-HiCap	30078078	208
Static Ionizer, ION-100A, AM	30130302	2353
Pipette Adjustment Kit, EX Semi-Micro	30252145	1956
Interface Kit, RS232-USB	30304101	197
Gridding Pan, EX5	30369673	214
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Paper Roll, CBM910	80251932	29
Ink Ribbon, CBM910	80251933	77

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Ethernet Kit, EX EX-HiCap	83021082	262
Cable Extension RS422 2m EX EX-HiCap	83021083	148
In-Use-Cover, Terminal, EX	83033633	116
Sinker, Glass, Liquid, Density Kit	83034024	885



EXPLORER™ ANALYTICAL

Flagship Balances from OHAUS

Display
5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication
RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors & flip/sliding top door, illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, 4 touchless sensors, in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation
AC adapter (included)

Recommended CAL-PAK WEIGHT SET for your laboratory balance! See page 10

Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

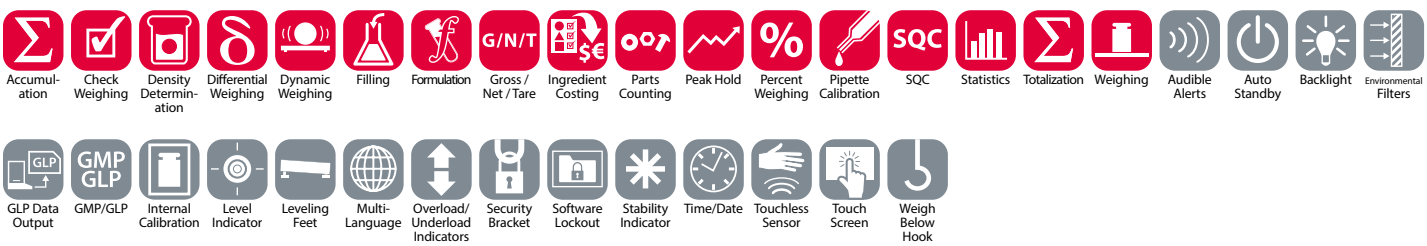
Features such as four-level user management with password protection and a non-editable system log plus a high level of configuration make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, automatic doors, and a frameless draftshield make Explorer analytical balances easy and convenient to use.

Model	Auto Door	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
EX124/AD	•	•	120 g	0.1 mg	3.5 in (90 mm)	30061976	5,747
EX124	-	•	120 g	0.1 mg	3.5 in (90 mm)	83021331	5,552
EX224/AD	•	•	220 g	0.1 mg	3.5 in (90 mm)	30061977	6,377
EX224	-	•	220 g	0.1 mg	3.5 in (90 mm)	83021332	6,169
EX324/AD	•	•	320 g	0.1 mg	3.5 in (90 mm)	30061978	7,489
EX324	-	•	320 g	0.1 mg	3.5 in (90 mm)	83021335	7,244

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Cable, RS422, 9m, EX EX-HiCap	30078078	208
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053

Accessories	Item Number	List Price (USD)
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device, SP PA AV NV	80850000	122
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Ethernet Kit, EX EX-HiCap	83021082	262
Cable Extension RS422 2m EX EX-HiCap	83021083	148
Column Kit, EX	83021102	227
In-Use-Cover, Terminal, EX	83033633	116
Sinker, Glass, Liquid, Density Kit	83034024	885



EXPLORER™ ANALYTICAL NTEP

Flagship Balances from OHAUS

Display
5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication
RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors & flip/sliding top door, illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, 4 touchless sensors, in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation
AC adapter (included)

Recommended **CAL-PAK WEIGHT SET** for your laboratory balance!
See page 10

Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

Features such as four-level user management with password protection, and un-editable system log plus a high level of configurability make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, automatic doors, and a frameless draftshield make Explorer analytical balances easy and convenient to use.

Model	Auto Door	AutoCal™	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
EX224N/AD	•	•	220 g	0.1 mg	1 mg	I	3.5 in (90 mm)	30061998	7,601
EX224N	-	•	220 g	0.1 mg	1 mg	I	3.5 in (90 mm)	83021334	6,782
EX324N/AD	•	•	320 g	0.1 mg	1 mg	I	3.5 in (90 mm)	30061999	8,292
EX324N	-	•	320 g	0.1 mg	1 mg	I	3.5 in (90 mm)	83021337	7,939

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Cable, RS422, 9m, EX EX-HiCap	30078078	208
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053

Accessories	Item Number	List Price (USD)
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device, SP PA AV NV	80850000	122
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Ethernet Kit, EX EX-HiCap	83021082	262
Cable Extension RS422 2m EX EX-HiCap	83021083	148
Column Kit, EX	83021102	227
In-Use-Cover, Terminal, EX	83033633	116
Sinker, Glass, Liquid, Density Kit	83034024	885

Accumulation · Check Weighing · Density Determination · Differential Weighing · Dynamic Weighing · Filling · Formulation · Gross / Net / Tare · Ingredient Costing · Parts Counting · Peak Hold · Percent Weighing · Pipette Calibration · SQC · Statistics · Totalization · Weighing · Audible Alerts · Auto Standby · Backlight · Environmental Filters

GLP Data Output · GMP/GLP · Internal Calibration · Level Indicator · Leveling Feet · Multi-Language · Overload/Underload Indicators · Security Bracket · Software Lockout · Stability Indicator · Time/Date · Touchless Sensor · Touch Screen · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

EXPLORER™ PRECISION

Flagship Balances from OHAUS

Display
5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

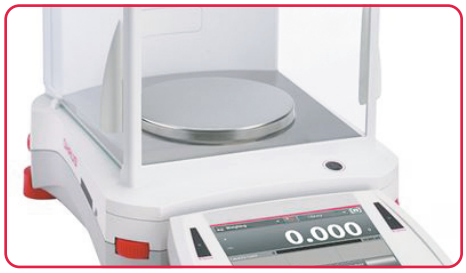
Communication
RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors & flip/sliding top door (1mg models), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, 4 touchless sensors, in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation
AC adapter (included)

Recommended CAL-PAK WEIGHT SET for your laboratory balance! See page 10



Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

Features such as four-level user management with password protection and a non-editable system log plus a high level of configuration make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, and a frameless draftshield make Explorer precision balances easy and convenient to use.

Model	AutoCal™	Draftshield	Capacity	Readability	Pan Size	Item Number	List Price (USD)
EX223/E	-	•	220 g	1 mg	5.1 in (130 mm)	30061979	3,127
EX223	•	•	220 g	1 mg	5.1 in (130 mm)	83021341	3,644
EX423/E	-	•	420 g	1 mg	5.1 in (130 mm)	30061980	3,780
EX423	•	•	420 g	1 mg	5.1 in (130 mm)	83021342	4,261
EX623	•	•	620 g	1 mg	5.1 in (130 mm)	83021348	5,207
EX1103	•	•	1,100 g	1 mg	5.1 in (130 mm)	83021350	6,103
EX2202/E	-	-	2,200 g	0.01 g	7.5 in × 8 in (190 mm × 200 mm)	30061981	3,411
EX2202	•	-	2,200 g	0.01 g	7.5 in × 8 in (190 mm × 200 mm)	83021356	3,941
EX4202/E	-	-	4,200 g	0.01 g	7.5 in × 8 in (190 mm × 200 mm)	30061982	3,977
EX4202	•	-	4,200 g	0.01 g	7.5 in × 8 in (190 mm × 200 mm)	83021357	4,530
EX6202/E	-	-	6,200 g	0.01 g	7.5 in × 8 in (190 mm × 200 mm)	30061983	4,553
EX6202	•	-	6,200 g	0.01 g	7.5 in × 8 in (190 mm × 200 mm)	83021360	5,141
EX10202	•	-	10,200 g	0.01 g	7.5 in × 8 in (190 mm × 200 mm)	83021362	6,098
EX6201/E	-	-	6,200 g	0.1 g	7.5 in × 8 in (190 mm × 200 mm)	30061984	3,655
EX6201	•	-	6,200 g	0.1 g	7.5 in × 8 in (190 mm × 200 mm)	83021361	4,275
EX10201	•	-	10,200 g	0.1 g	7.5 in × 8 in (190 mm × 200 mm)	83021365	4,683

Accessories on next page

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GLP Data Output · GMP/GLP · Internal Calibration · Level Indicator · Leveling Feet · Multi-Language · Overload/Underload Indicators · Security Bracket · Software Lockout · Stability Indicator · Time/Date · Touchless Sensor · Touch Screen · Weigh Below Hook

Specifications and Prices subject to change without notice.

EXPLORER™ PRECISION ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Cable, RS422, 9m, EX EX-HiCap	30078078	208
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053

Accessories	Item Number	List Price (USD)
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device, SP PA AV NV	80850000	122
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Ethernet Kit, EX EX-HiCap	83021082	262
Cable Extension RS422 2m EX EX-HiCap	83021083	148
Draft Shield Kit,EX	83021084	1,270
Column Kit, EX	83021102	227
In-Use-Cover, Terminal, EX	83033633	116
Sinker, Glass, Liquid, Density Kit	83034024	885

EXPLORER™ PRECISION NTEP

Flagship Balances from OHAUS

Display
5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

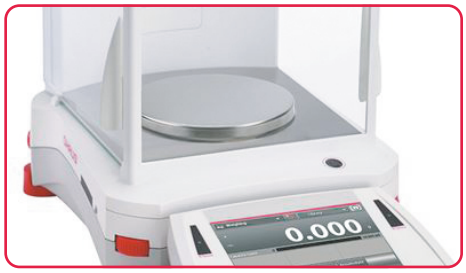
Communication
RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors & flip/sliding top door (1mg models), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, 4 touchless sensors, in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation
AC adapter (included)

Recommended CAL-PAK WEIGHT SET for your laboratory balance! See page 10



Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

Features such as four-level user management with password protection and a non-editable system log plus a high level of configuration make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, and a frameless draftshield make Explorer precision balances easy and convenient to use.

Model	AutoCal™	Draftshield	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
EX223N/E	-	•	220 g	1mg	0.01 g	II	5.1 in (130 mm)	30553844	3,394
EX223N	•	•	220 g	1mg	0.01 g	II	5.1 in (130 mm)	30553843	3,899
EX423N/E	-	•	420 g	1mg	0.01 g	II	5.1 in (130 mm)	30553845	4,042
EX423N	•	•	420 g	1 mg	0.01 g	II	5.1 in (130 mm)	83021344	4,749
EX1103N	•	•	1,100 g	1 mg	0.01 g	I	5.1 in (130 mm)	83021352	6,662
EX2202N/E	-	-	2,200 g	0.01 g	0.1 g	II	7.5 in × 8 in (190 mm × 200 mm)	30553846	3,668
EX4202N/E	-	-	4,200 g	0.01 g	0.1 g	II	7.5 in × 8 in (190 mm × 200 mm)	30553847	4,227
EX4202N	•	-	4,200 g	0.01 g	0.1 g	II	7.5 in × 8 in (190 mm × 200 mm)	83021359	4,974
EX6202N/E	-	-	6,200 g	0.01 g	0.1 g	II	7.5 in × 8 in (190 mm × 200 mm)	30553889	4,819
EX6202N	•	-	6,200 g	0.01 g	0.1 g	II	7.5 in × 8 in (190 mm × 200 mm)	30553888	5,402
EX10202N	•	-	10,200 g	0.01 g	0.1 g	I	7.5 in × 8 in (190 mm × 200 mm)	83021364	6,662
EX6201N/E	-	-	6,200 g	0.1 g	0.1 g	II	7.5 in × 8 in (190 mm × 200 mm)	30553891	3,916
EX6201N	•	-	6,200 g	0.1 g	0.1 g	II	7.5 in × 8 in (190 mm × 200 mm)	30553890	4,530
EX10201N	•	-	10,200 g	0.1 g	0.1 g	I	7.5 in × 8 in (190 mm × 200 mm)	83021367	5,147

Accessories continued on next page

Accumulation · Check Weighing · Density Determination · Differential Weighing · Dynamic Weighing · Filling · Formulation · Gross / Net / Tare · Ingredient Costing · Parts Counting · Peak Hold · Percent Weighing · Pipette Calibration · SQC · Statistics · Totalization · Weighing · Audible Alerts · Auto Standby · Backlight · Environmental Filters

GLP Data Output · GMP/GLP · Internal Calibration · Level Indicator · Leveling Feet · Multi-Language · Overload/Underload Indicators · Security Bracket · Software Lockout · Stability Indicator · Time/Date · Touchless Sensor · Touch Screen · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

EXPLORER™ PRECISION NTEP ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Cable, RS422, 9m, EX EX-HiCap	30078078	208
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053

Accessories	Item Number	List Price (USD)
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device, SP PA AV NV	80850000	122
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Ethernet Kit, EX EX-HiCap	83021082	262
Cable Extension RS422 2m EX EX-HiCap	83021083	148
Draft Shield Kit,EX	83021084	1,270
Column Kit, EX	83021102	227
In-Use-Cover, Terminal, EX	83033633	116
Sinker, Glass, Liquid, Density Kit	83034024	885

EXPLORER™ PRECISION HIGH CAPACITY

Flagship Balances from OHAUS

Display
5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication
RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction
Modular design, IP54 metal base, Die-cast top housing, stainless steel pan, up-front level indicator, integral weigh below hook, calibration lock, two touchless sensors, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation
AC Adapter (included) or rechargeable battery (accessory sold separately)

Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

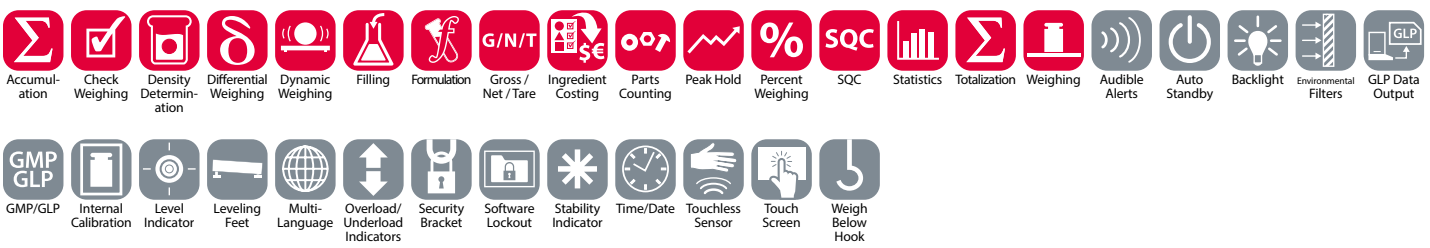
2-D shock protection and IP54 base enclosure protect the balance from damage, while the AutoCal™ automatic internal calibration system ensures performance.

A detachable terminal with a large color touchscreen and programmable IR sensors make Explorer High-Capacity balances easy and convenient to use.

Model	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
EX12001	•	12,000 g	0.1 g	14.8 in × 12.2 in (377 mm × 311 mm)	30057099	5,177
EX24001	•	24,000 g	0.1 g	14.8 in × 12.2 in (377 mm × 311 mm)	30057100	6,306
EX35001	•	35,000 g	0.1 g	14.8 in × 12.2 in (377 mm × 311 mm)	30057101	7,406

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
BATTERY,pack,Li-ion,R,14.8V,2600mAh	30041295	523
Wheel Kit, Set(4), EX-HiCap	30041470	227
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Cable, RS422, 9m, EX EX-HiCap	30078078	208
Column Kit, EX-HiCap	30078082	208
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Ethernet Kit, EX EX-HiCap	83021082	262
Cable Extension RS422 2m EX EX-HiCap	83021083	148
In-Use-Cover, Terminal, EX	83033633	116



EXPLORER™ PRECISION HIGH CAPACITY NTEP

Flagship Balances from OHAUS

Display
5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication
RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction
Modular design, IP54 metal base, Die-cast top housing, stainless steel pan, up-front level indicator, integral weigh below hook, calibration lock, two touchless sensors, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation
AC Adapter (included) or rechargeable battery (accessory sold separately)

Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

2-D shock protection and IP54 base enclosure protect the balance from damage, while the AutoCal™ automatic internal calibration system ensures performance.

A detachable terminal with a large color touchscreen and programmable IR sensors make Explorer High-Capacity balances easy and convenient to use.

Model	AutoCal™	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
EX12001N	•	12,000 g	0.1 g	1 g	II	14.8 in × 12.2 in (377 mm × 311 mm)	30553892	5,444
EX24001N	•	24,000 g	0.1 g	1 g	II	14.8 in × 12.2 in (377 mm × 311 mm)	30553893	6,562
EX35001N	•	35,000 g	0.1 g	1 g	II	14.8 in × 12.2 in (377 mm × 311 mm)	30553894	7,666

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
BATTERY,pack,Li-ion,R,14.8V,2600mAh	30041295	523
Wheel Kit, Set(4), EX-HiCap	30041470	227
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Cable, RS422, 9m, EX EX-HiCap	30078078	208
Column Kit, EX-HiCap	30078082	208
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Ethernet Kit, EX EX-HiCap	83021082	262
Cable Extension RS422 2m EX EX-HiCap	83021083	148
In-Use-Cover, Terminal, EX	83033633	116

Accumulation · Check Weighing · Density Determination · Differential Weighing · Dynamic Weighing · Filling · Formulation · Gross / Net / Tare · Ingredient Costing · Parts Counting · Peak Hold · Percent Weighing · SQC · Statistics · Totalization · Weighing · Audible Alerts · Auto Standby · Backlight · Environmental Filters · GLP Data Output

GMP/GLP · Internal Calibration · Level Indicator · Leveling Feet · Multi-Language · Overload/ Underload Indicators · Security Bracket · Software Lockout · Stability Indicator · Time/Date · Touchless Sensor · Touch Screen · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

ADVENTURER™ SEMI-MICRO

Intuitive Balances Designed for a Variety of Needs

Display
4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication
RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with two piece top mounted side doors and sliding top door, illuminated up-front level indicator, integral weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation
AC adapter (included)

Recommended CAL-PAK WEIGHT SET for your laboratory balance! See page 10

EASY OPERATION & TIME SAVING

Adventurer balances feature a color touchscreen, icon-based user interface, and an ergonomic design, making them easy to configure and use.

Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	Draftshield	Built-in Ionizer	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
AX85	•	-	•	82 g	0.01 mg	3.15 in (80 mm)	30852314	6,278
AX125D	•	-	•	82 g/120 g	0.01 mg; 0.1 mg	3.15 in (80 mm)	30852313	6,700
AX225D	•	-	•	102 g/220 g	0.01 mg; 0.1 mg	3.15 in (80 mm)	30852315	8,066

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
In-Use-Cover DS AX	30111792	41
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885

Batch Printing · Check Weighing · Density Determination · Display Hold · Dynamic Weighing · Formulation · Gross / Net / Tare · Parts Counting · Percent Weighing · Statistics · Totalization Accumulation · Weighing · Backlight · Environmental Filters · GLP Data Output · GMP/GLP · Internal Calibration · Level Indicator · Leveling Feet · Multi-Language · Overload/ Underload Indicators

Security Bracket · Software Lockout · Stability Indicator · Time/Date · Touch Screen · Weigh Below Hook

ADVENTURER™ ANALYTICAL

Intuitive Balances Designed for a Variety of Needs

Display
4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication
RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with two piece top mounted side doors and sliding top door, illuminated up-front level indicator, integral weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation
AC adapter (included)

Recommended **CAL-PAK WEIGHT SET** *for your laboratory balance!* *See page 10*

EASY OPERATION & TIME SAVING

Adventurer balances feature a color touchscreen, icon-based user interface, and an ergonomic design making them easy to configure and use.

Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	Draftshield	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
AX124/E	•	-	120 g	0.1 mg	3.5 in (90 mm)	30100601	3,346
AX124	•	•	120 g	0.1 mg	3.5 in (90 mm)	30100600	4,054
AX224/E	•	-	220 g	0.1 mg	3.5 in (90 mm)	30100603	3,673
AX224	•	•	220 g	0.1 mg	3.5 in (90 mm)	30100602	4,475
AX324	•	•	320 g	0.1 mg	3.5 in (90 mm)	30100604	4,890

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
In-Use-Cover DS AX	30111792	41
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885

ADVENTURER™ ANALYTICAL NTEP

Intuitive Balances Designed for a Variety of Needs

Display
4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication
RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with two piece top mounted side doors and sliding top door, illuminated up-front level indicator, integral weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation
AC adapter (included)

EASY OPERATION & TIME SAVING

Recommended CAL-PAK WEIGHT SET for your laboratory balance!
See page 10

Adventurer balances feature a color touchscreen, icon-based user interface, and an ergonomic design making them easy to configure and use.

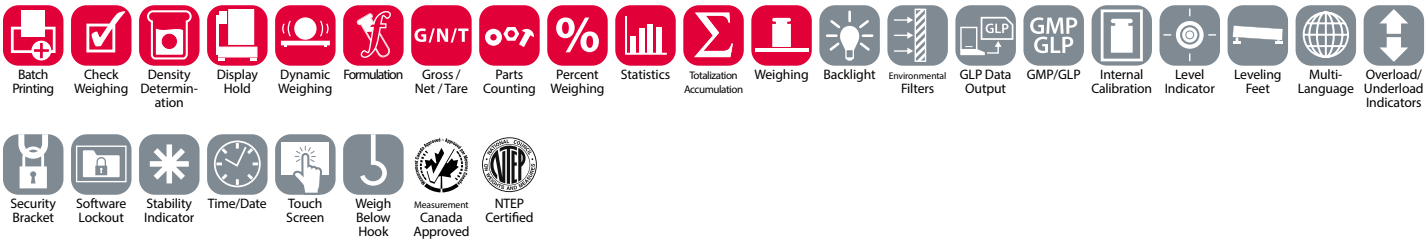
Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	Draftshield	AutoCal™	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
AX224N	•	•	220 g	0.1 mg	1 mg	I	3.5 in (90 mm)	30100630	4,749

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
In-Use-Cover DS AX	30111792	41
Static Ionizer, ION-100A, AM	30130302	2,353
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885



Specifications and Prices subject to change without notice.

ADVENTURER™ PRECISION

Intuitive Balance Designed for a Variety of Needs

Display
4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication
RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with 2-piece top mounted side doors & sliding top door (1mg models only), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation
AC adapter (included)

Recommended
CAL-PAK
WEIGHT SET
for your laboratory balance!
See page 10

Adventurer balances come with a color touchscreen, an icon-based user interface, and an ergonomic design, making them easy to configure and use.

Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

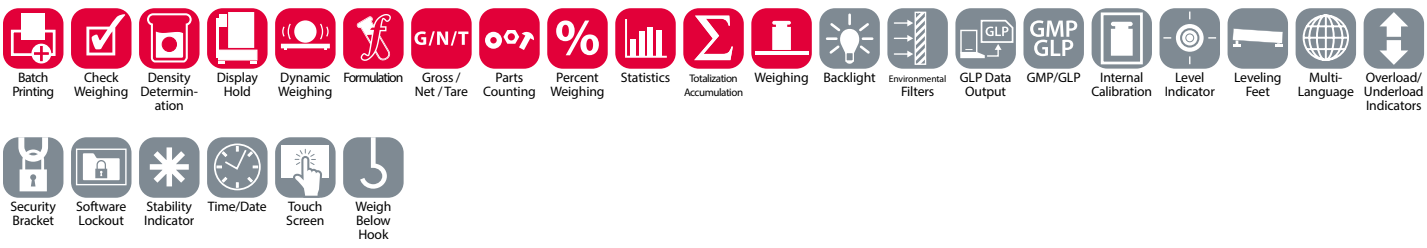
Model	AutoCal™	Draftshield	Capacity	Readability	Pan Size	Item Number	List Price (USD)
AX223/E	-	•	220 g	1 mg	5.1 in (130 mm)	30100606	1,950
AX223	•	•	220 g	1 mg	5.1 in (130 mm)	30100605	2,456
AX423/E	-	•	420 g	1 mg	5.1 in (130 mm)	30100608	2,407
AX423	•	•	420 g	1 mg	5.1 in (130 mm)	30100607	2,961
AX523/E	-	•	520 g	1 mg	5.1 in (130 mm)	30100610	2,651
AX523	•	•	520 g	1 mg	5.1 in (130 mm)	30100609	3,234
AX623	•	•	620 g	1 mg	5.1 in (130 mm)	30805882	3,431
AX623/E	-	•	620 g	1 mg	5.1 in (130 mm)	30805883	2,914
AX422/E	-	-	420 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30127981	1,368
AX622	•	-	620 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30122632	1,861
AX822/E	-	-	820 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30127983	1,612
AX1502/E	-	-	1,520 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100612	1,743
AX1502	•	-	1,520 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100611	2,271
AX2202/E	-	-	2,200 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100614	1,885
AX2202	•	-	2,200 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100613	2,419
AX4202/E	-	-	4,200 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100616	2,443
AX4202	•	-	4,200 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100615	3,037
AX5202	•	-	5,200 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100617	3,441
AX6202	•	-	6,200 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30805884	3,674
AX6202/E	-	-	6,200 g	0.01 g	7.7 in × 6.9 in (195 mm × 175 mm)	30805885	3,178
AX2201/E	-	-	2,200 g	0.1 g	7.7 in × 6.9 in (195 mm × 175 mm)	30248912	1,540
AX4201/E	-	-	4,200 g	0.1 g	7.7 in × 6.9 in (195 mm × 175 mm)	30122635	1,743
AX4201	•	-	4,200 g	0.1 g	7.7 in × 6.9 in (195 mm × 175 mm)	30122634	2,004
AX8201/E	-	-	8,200 g	0.1 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100619	1,950
AX8201	•	-	8,200 g	0.1 g	7.7 in × 6.9 in (195 mm × 175 mm)	30100618	2,342

Product applications, features, and accessories on next page

ADVENTURER™ PRECISION ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
In-Use-Cover wo DS AX	30111777	41
In-Use-Cover DS AX	30111792	41
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262



ADVENTURER™ PRECISION NTEP

Intuitive Balance Designed for a Variety of Needs

Display
4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication
RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with 2-piece top mounted side doors & sliding top door (1mg models only), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation
AC adapter (included)

Recommended CAL-PAK WEIGHT SET for your laboratory balance! See page 10

Adventurer balances come with a color touchscreen, an icon-based user interface, and an ergonomic design, making them easy to configure and use.

Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	AutoCal™	Draftshield	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
AX223N/E	-	•	220 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30100631	2,159
AX423N/E	-	•	420 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30100633	2,574
AX423N	•	•	420 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30100632	3,162
AX523N/E	-	•	520 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30100634	2,858
AX623N/E	-	•	620 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30805899	3,140
AX622N/E	-	-	620 g	0.01 g	0.1 g	II	7.7 in × 6.9 in (195 mm × 175 mm)	30100635	1,671
AX1502N/E	-	-	1,520 g	0.01 g	0.1 g	II	7.7 in × 6.9 in (195 mm × 175 mm)	30100636	1,885
AX2202N/E	-	-	2,200 g	0.01 g	0.1 g	II	7.7 in × 6.9 in (195 mm × 175 mm)	30100637	2,093
AX4202N/E	-	-	4,200 g	0.01 g	0.1 g	II	7.7 in × 6.9 in (195 mm × 175 mm)	30122655	2,651
AX6202N/E	-	-	6,200 g	0.01 g	0.1 g	II	7.7 in × 6.9 in (195 mm × 175 mm)	30805900	3,448
AX8201N/E	-	-	8,200 g	0.1 g	1 g	II	7.7 in × 6.9 in (195 mm × 175 mm)	30100639	2,093

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
In-Use-Cover wo DS AX	30111777	41
In-Use-Cover DS AX	30111792	41
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262

Batch Printing · Check Weighing · Density Determination · Display Hold · Dynamic Weighing · Formulation · Gross / Net / Tare · Parts Counting · Percent Weighing · Statistics · Totalization Accumulation · Weighing · Backlight · Environmental Filters · GLP Data Output · GMP/GLP · Internal Calibration · Level Indicator · Leveling Feet · Multi-Language · Overload/ Underload Indicators

Security Bracket · Software Lockout · Stability Indicator · Time/Date · Touch Screen · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

ADVENTURER™ PRECISION HIGH CAPACITY

Intuitive Balances Designed for a Variety of Needs

Display
4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication
RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with 2-piece top mounted side doors & sliding top door (1mg models only), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation
AC adapter (included)

EASY OPERATION & TIME SAVING

Adventurer balances feature a color touchscreen, icon-based user interface, and an ergonomic design, making them easy to configure and use.

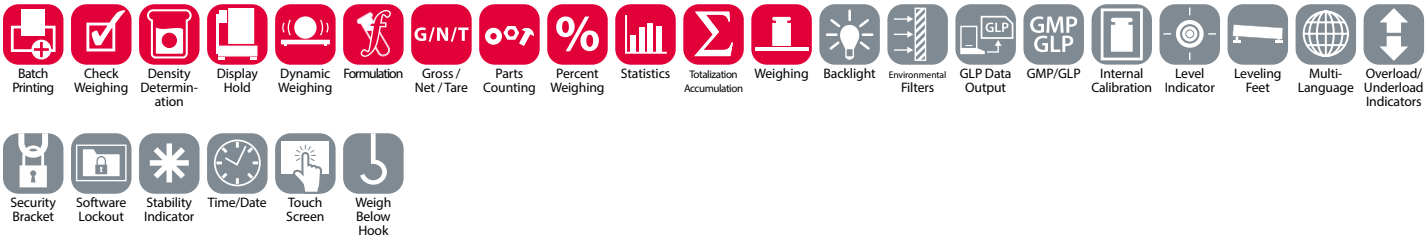
Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
AX12001/E	-	12,000 g	0.1 g	7.7 in × 6.9 in (195 × 175 mm)	30805887	2,899
AX12001	•	12,000 g	0.1 g	7.7 in × 6.9 in (195 × 175 mm)	30805886	3,473

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
In-Use Cover wo DS AX	30111777	41
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885



ADVENTURER™ PRECISION HIGH CAPACITY NTEP

Intuitive Balances Designed for a Variety of Needs

Display
4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication
RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction
Metal base, ABS top housing, stainless steel pan, glass draftshield with 2-piece top mounted side doors & sliding top door (1mg models only), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features
Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation
AC adapter (included)

EASY OPERATION & TIME SAVING

Adventurer balances feature a color touchscreen, icon-based user interface, and an ergonomic design, making them easy to configure and use.

Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	AutoCal™	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
AX12001N/E	-	12,000 g	0.1 g	1 g	II	7.7 in × 6.9 in (195 × 175 mm)	30805901	3,113

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
In-Use Cover wo DS AX	30111777	41
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
Auxiliary display AD7-RS	30472064	99
Paper Roll, Thermal, STP103	80251931	31
Printer, Thermal, STP-103, US	80251992	1,035

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885

Batch Printing · Check Weighing · Density Determination · Display Hold · Dynamic Weighing · Formulation · Gross / Net / Tare · Parts Counting · Percent Weighing · Statistics · Totalization Accumulation · Weighing · Backlight · Environmental Filters · GLP Data Output · GMP/GLP · Internal Calibration · Level Indicator · Leveling Feet · Multi-Language · Overload/ Underload Indicators

Security Bracket · Software Lockout · Stability Indicator · Time/Date · Touch Screen · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

PIONEER™ SEMI-MICRO

Combining Economy and High Performance for Essential Weighing

Display
Backlit Liquid Crystal Display (LCD); Second line display for additional information or guidance (dot matrix)

Communication
RS232 and USB device (included)

Construction
Metal base, plastic top housing, removable stainless steel pan, glass draftshield, integrated weigh-below-hook, security bracket, calibration lock and in-use cover

Design Features
User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator, four operating languages

Operation
AC adapter (included)

Recommended
CAL-PAK WEIGHT SET
for your laboratory balance!
See page 10

The PX5 offers high accuracy and repeatability for essential weighing applications in laboratory, industrial and education settings at an economical price point.

Featuring a cast metal lower housing, sub-pan and stainless steel weighing pan, the PX5 is durably constructed for versatile, long-term use.

The PX5 features a second line display for additional information or guidance, a static removal bar for convenient grounding, and USB and RS232 connectivity for easy communication.

Model	InCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
PX85	•	82 g	0.01 mg	80 mm	30475733	5,541
PX225D	•	82 g/220 g	0.01 mg; 0.1 mg	80 mm	30475734	6,419

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
In-Use-Cover, PX	30372546	64
Auxiliary display AD7-RS	30472064	99
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	69
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885

Specifications and Prices subject to change without notice.

PIONEER™ ANALYTICAL

Affordable Balance to Achieve Reliable Results

Display
Backlit Liquid Crystal Display (LCD); Second line display for additional information or guidance (dot matrix)

Communication
RS232 and USB device (included); GLP/GMP data output with real-time clock

Construction
Metal base, plastic top housing, removable stainless steel pan, glass draftshield, integrated weigh-below-hook, security bracket, calibration lock and in-use cover

Design Features
User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator, four operating languages

Operation
AC adapter (included)

ECONOMY & ACCURACY

Recommended **CAL-PAK WEIGHT SET** *for your laboratory balance!*
See page 10

The PX offers high accuracy and repeatability for essential weighing applications in laboratory, industrial and education settings at an economical price point.

Featuring a cast metal lower housing, sub-pan and stainless steel weighing pan, the PX is durably constructed for versatile, long-term use.

PX features a second line display for additional information/guidance, & USB/RS232 connectivity for easy communication. Draftshield models feature a static removal (ESR) bar for convenient grounding.

Model	InCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
PX84/E	-	82 g	0.1 mg	90 mm	30429845	2,247
PX84	•	82 g	0.1 mg	90 mm	30429837	2,621
PX124/E	-	120 g	0.1 mg	90 mm	30429846	2,593
PX124	•	120 g	0.1 mg	90 mm	30429838	3,002
PX224/E	-	220 g	0.1 mg	90 mm	30429847	2,878
PX224	•	220 g	0.1 mg	90 mm	30430053	3,300

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
In-Use-Cover, PX	30372546	64
Auxiliary display AD7-RS	30472064	99
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	69
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885

PIONEER™ PRECISION

Combining Economy and High Performance for Essential Weighing

Display
2-Line LCD with Backlight

Communication
RS232, USB

Construction
Metal base, plastic top housing, removable stainless steel pan, weigh-below-hook

Design Features
Metal base, plastic top housing, removable stainless steel pan, glass draftshield, Real Time Clock with GLP/ GMP Data integrated, weigh-below-hook, security bracket, calibration lock and in-use cover, user selectable environmental filters and brightness settings, auto-tare, auto-dim, user selectable span calibration points, overload indicator, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator, four operating languages

Operation
Power Adaptor

Recommended
CAL-PAK WEIGHT SET
for your laboratory balance!
See page 10

The PX offers high accuracy and repeatability for essential weighing applications in laboratory, industrial and educational settings at an economical pricepoint.

Featuring a cast metal lower housing, sub-pan and stainless steel weighing pan, the PX is durably constructed for versatile, long-term use.

The PX features a second line display for additional information or guidance, a static removal bar for convenient grounding, and USB and RS232 connectivity for easy communication.

Model	InCal™	Draftshield	Capacity	Readability	Pan Size	Item Number	List Price (USD)
PX163/E	-	•	160 g	0.001 g	120 mm	30429848	1,308
PX163	•	•	160 g	0.001 g	120 mm	30429839	1,641
PX323/E	-	•	320 g	0.001 g	120 mm	30429849	1,522
PX323	•	•	320 g	0.001 g	120 mm	30429840	1,843
PX623/E	-	•	620 g	0.001 g	120 mm	30699093	1,923
PX623	•	•	620 g	0.001 g	120 mm	30699092	2,202
PX1602/E	-	-	1,600 g	0.01 g	180 mm	30430058	1,260
PX1602	•	-	1,600 g	0.01 g	180 mm	30430055	1,563
PX2202/E	-	-	2,200 g	0.01 g	180 mm	30429850	1,380
PX2202	•	-	2,200 g	0.01 g	180 mm	30429841	1,694
PX3202/E	-	-	3,200 g	0.01 g	180 mm	30429851	1,659
PX3202	•	-	3,200 g	0.01 g	180 mm	30429842	1,992
PX4202/E	-	-	4,200 g	0.01 g	180 mm	30429852	1,885
PX4202	•	-	4,200 g	0.01 g	180 mm	30429843	2,234
PX6202/E	-	-	6,200 g	0.01 g	180 mm	30699095	2,379
PX6202	•	-	6,200 g	0.01 g	180 mm	30699094	2,750
PX2201/E	-	-	2,200 g	0.1 g	180 mm	30430059	1,171
PX2201	•	-	2,200 g	0.1 g	180 mm	30430056	1,445
PX4201/E	-	-	4,200 g	0.1 g	180 mm	30429853	1,349
PX4201	•	-	4,200 g	0.1 g	180 mm	30429844	1,636
PX12001	•	-	12,000 g	0.1 g	248 × 193 mm	30868075	2,536
PX12001/E	-	-	12,000 g	0.1 g	248 × 193 mm	30868076	2,122

Accessories on next page

Density Determination · Dynamic Weighing · G/N/T Gross / Net / Tare · Parts Counting · Percent Weighing · Weighing · Backlight · Environmental Filters · Internal Calibration · Level Indicator · Leveling Feet · Overload Protection · Security Bracket · Software Lockout · Stability Indicator · Weigh Below Hook

Specifications and Prices subject to change without notice.

PIONEER™ PRECISION ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
In-Use-Cover, PX	30372546	64
In-Use-Cover Full, w/o DS, PX	30759721	41
Auxiliary display AD7-RS	30472064	99
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	69
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885
300 × 225mm Pan (PX12001, PX12001/E only)	30868077	196

PR SERIES ANALYTICAL

Designed for Routine Weighing Applications in Your Workplace

Display
Backlit Liquid Crystal Display (LCD)

Communication
RS232 (one port included)

Construction
ABS top housing, removable stainless steel pan, removable glass draftshield with sliding top door, integrated weigh-below-hook, security bracket, calibration lock

Design Features
User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator

Operation
AC adapter (included)

Recommended
CAL-PAK WEIGHT SET
for your laboratory balance!
See page 10

The PR is equipped with 3 essential weighing modes, RS-232 connectivity for data transfer and storage, and internal calibration (in select models), making it ideal for routine weighing applications.

Equipped with an easy-to-read, bright backlit display and a simple user interface, the PR is incredibly easy to operate, with almost no training required.

The PR's small footprint saves desktop space while providing a large weighing surface. The PR is durably constructed, and features a stainless steel pan to withstand day-to-day use in the workplace.

Model	InCal™	Capacity	Readability	Class	Pan Size	Item Number	List Price (USD)
PR64/E	-	62 g	0.1 mg	-	3.5 in (90 mm)	30430060	1,820
PR124/E	-	120 g	0.1 mg	-	3.5 in (90 mm)	30529066	2,098
PR124	•	120 g	0.1 mg	-	3.5 in (90 mm)	30529065	2,365
PR224/E	-	220 g	0.1 mg	-	3.5 in (90 mm)	30430062	2,331
PR224	•	220 g	0.1 mg	-	3.5 in (90 mm)	30430061	2,621

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
In-Use-Cover, PR	30372547	64
Auxiliary display AD7-RS	30472064	99
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	69
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885

Specifications and Prices subject to change without notice.

PR SERIES PRECISION

Designed for Routine Weighing Applications in Your Workplace

Display
Backlit Liquid Crystal Display (LCD)

Communication
RS232 (one port included)

Construction
ABS top housing, removable stainless steel pan, removable glass draftshield with sliding top door, integrated weigh-below-hook, security bracket, calibration lock

Design Features
User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator

Operation
AC adapter (included)

Recommended
CAL-PAK WEIGHT SET
for your laboratory balance!
See page 10

The PR is equipped with 3 essential weighing modes, RS-232 connectivity for data transfer and storage, and internal calibration (in select models), making it ideal for routine weighing applications.

Equipped with an easy-to-read, bright backlit display and a simple user interface, the PR is incredibly easy to operate, with almost no training required.

The PR's small footprint saves desktop space while providing a large weighing surface. The PR is durably constructed, and features a stainless steel pan to withstand day-to-day use in the workplace.

Model	InCal™	Draftshield	Capacity	Readability	Class	Pan Size	Item Number	List Price (USD)
PR223/E	-	•	220 g	0.001 g	-	4.7 in (120 mm)	30529239	1,154
PR523/E	-	•	520 g	0.001 g	-	4.7 in (120 mm)	30430063	1,377
PR1602/E	-	-	1,600 g	0.01 g	-	7.1 in (180 mm)	30529067	1,065
PR2202/E	-	-	2,200 g	0.01 g	-	7.1 in (180 mm)	30430064	1,213
PR4202/E	-	-	4,200 g	0.01 g	-	7.1 in (180 mm)	30430065	1,450
PR2201/E	-	-	2,200 g	0.1 g	-	7.1 in (180 mm)	30529238	947
PR4201/E	-	-	4,200 g	0.1 g	-	7.1 in (180 mm)	30430066	1,095

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
In-Use-Cover, PR	30372547	64
Auxiliary display AD7-RS	30472064	99
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	69
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885

PR SERIES PRECISION NTEP

Designed for Routine Weighing Applications in Your Workplace

Display
Backlit Liquid Crystal Display (LCD)

Communication
RS232 (one port included)

Construction
ABS top housing, removable stainless steel pan, removable glass draftshield with sliding top door, integrated weigh-below-hook, security bracket, calibration lock

Design Features
User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator

Operation
AC adapter (included)

Recommended
CAL-PAK
WEIGHT SET
for your laboratory balance!
See page 10

The PR is equipped with 3 essential weighing modes, RS-232 connectivity for data transfer and storage, and internal calibration (in select models), making it ideal for routine weighing applications.

Equipped with an easy-to-read, bright backlit display and a simple user interface, the PR is incredibly easy to operate, with almost no training required.

The PR's small footprint saves desktop space while providing a large weighing surface. The PR is durably constructed, and features a stainless steel pan to withstand day-to-day use in the workplace.

Model	InCal™	Draftshield	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
PR323N/E	-	•	320 g	0.001 g	0.01 g	II	4.7 in (120 mm)	30455605	1,409
PR523N	•	•	520 g	0.001 g	0.01 g	II	4.7 in (120 mm)	30452494	2,081
PR523N/E	-	•	520 g	0.001 g	0.01 g	II	4.7 in (120 mm)	30455606	1,795
PR822N/E	-	-	820 g	0.01 g	0.1 g	III	7.1 in (180 mm)	30455607	1,160
PR2202N/E	-	-	2,200 g	0.01 g	0.1 g	II	7.1 in (180 mm)	30455668	1,291
PR5202N/E	-	-	5,200 g	0.01 g	0.1 g	II	7.1 in (180 mm)	30455670	1,801
PR6201N/E	-	-	6,200 g	0.1 g	1 g	III	7.1 in (180 mm)	30455673	1,445

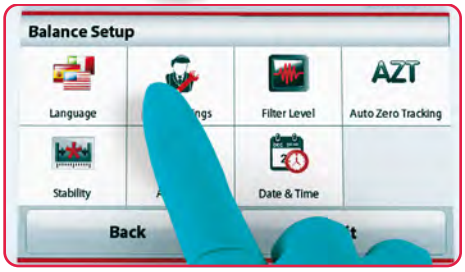
Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A , SF40A/BT, AM	12120799	26
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Static Ionizer, ION-100A, AM	30130302	2,353
Interface Kit, RS232-USB	30304101	197
In-Use-Cover, PR	30372547	64
Auxiliary display AD7-RS	30472064	99
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	69
Paper Roll, Thermal, STP103	80251931	31

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable ST103-EX MB PA TxxP	80252581	262
Density Kit, Solids	80253384	1,053
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Software, Winwedge	80850080	723
Cable, USB, Type A-B	83021085	262
Sinker, Glass, Liquid, Density Kit	83034024	885

Specifications and Prices subject to change without notice.

SCOUT™ STX

High-Performance Portable Balances with Intuitive Touchscreens for High Accuracy and Productivity



Display
4.3" (109mm) full-color VGA graphic touchscreen display with user-controlled brightness

Communication
RS232, USB Host, USB Device or Ethernet (available as an accessory)

Construction
ABS housing, stainless steel pan, ABS draftshield (1mg models only), weigh below hook, transportation lock, manual calibration lock switch, security slot, adjustable leveling feet, illuminated up-front level indicator

Design Features
Stability indicator, stackable design with included storage cover (excluding 1mg models), mechanical and software overload/underload protection, low battery indicator, auto shut-off, auto tare, span calibration mass included on models up to 620g capacity

Operation
AC Adapter (Included) or 4 AA Batteries (Not included)

Large, intuitive, color touchscreen display allows for easy operation - guiding the user through every step of the weighing application.

Advanced weighing technology allows for one-second stabilization time for increased productivity.

Integrated overload protection system rated at ten times the capacity protects the balance in demanding environments.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
STX123	120 g	0.001 g	3.7 in (93 mm)	30253005	1,040
STX223	220 g	0.001 g	3.7 in (93 mm)	30253006	1,166
STX222	220 g	0.01 g	4.7 in (120 mm)	30253007	767
STX422	420 g	0.01 g	4.7 in (120 mm)	30253008	1,071
STX622	620 g	0.01 g	4.7 in (120 mm)	30253009	1,255
STX1202	1,200 g	0.01 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253010	1,433
STX2202	2,200 g	0.01 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253011	1,600
STX421	420 g	0.1 g	4.7 in (120 mm)	30253012	434
STX621	620 g	0.1 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253013	649
STX2201	2,200 g	0.1 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253014	821
STX6201	6,200 g	0.1 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253015	1,297
STX8200	8,200 g	1 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253016	672

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
RS232 Interface, Scout	30268982	227
USB Host Interface, Scout	30268983	227
USB Device Interface, Scout	30268984	159
Ethernet Interface, Scout	30268986	245
Stacking Kit, x6, STX SPX SKX SJX/E	30268987	90

Accessories	Item Number	List Price (USD)
Stacking Kit, x1, STX SPX SKX SJX/E	30268988	32
Density Kit, SKX STX SJX/E	30269020	31
Carrying Case, Scout	30269021	177
Power Adapter 5V 1A US Scout CX	30330714	36
Auxiliary display AD7-MD	30472063	179
Anti-Theft Device Lab Balance	80850043	314

Check Weighing · Density Determination · Display Hold · Dynamic Weighing · Gross / Net / Tare · Parts Counting · Percent Weighing · Specific Gravity · Totalization · Weighing · Auto Shut-Off · Backlight · Battery Power · Environmental Filters · Ethernet · GLP Data Output · GMP/GLP · Hinged Cover · Level Indicator · Leveling Feet · Low Battery Indicator

Multi-Language · Overload Protection · Overload/Underload Indicators · RS232 · Security Bracket · Stability Indicator · Stackable · Time/Date · Touch Screen · Weigh Below Hook

SCOUT™ SPX

Portable Precision Balances Provide Consistently Accurate Measurements

Display
Liquid crystal display (LCD) with backlight

Communication
RS232, USB Host, USB Device or Ethernet (available as an accessory)

Construction
ABS housing, stainless steel pan, ABS draftshield (1mg models only), weigh below hook, transportation lock, manual calibration lock switch, security slot, adjustable leveling feet, illuminated up-front level indicator

Design Features
Stability indicator, stackable design with optional storage cover (excluding 1mg models), mechanical and software overload/underload protection, low battery indicator, auto shut-off, auto tare, span calibration mass included on models up to 620g capacity

Operation
AC Adapter (Included) or 4 AA Batteries (Not included)

Large backlit display improves readability in low light conditions and is easier to view from a distance.

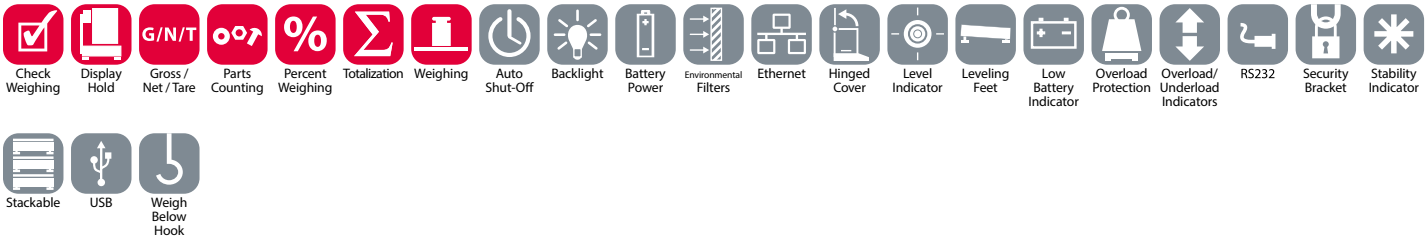
Integrated overload protection and impact-resistant pan allow the balance to operate efficiently in demanding environments.

Increase productivity with advanced weighing technology and stabilization time as fast as one-second.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
SPX123	120 g	0.001 g	3.7 in (93 mm)	30253017	916
SPX223	220 g	0.001 g	3.7 in (93 mm)	30253018	1,023
SPX222	220 g	0.01 g	4.7 in (120 mm)	30253019	666
SPX422	420 g	0.01 g	4.7 in (120 mm)	30253020	934
SPX622	620 g	0.01 g	4.7 in (120 mm)	30253021	1,095
SPX1202	1,200 g	0.01 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253022	1,249
SPX2202	2,200 g	0.01 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253023	1,404
SPX421	420 g	0.1 g	4.7 in (120 mm)	30253024	368
SPX621	620 g	0.1 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253025	544
SPX2201	2,200 g	0.1 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253026	696
SPX6201	6,200 g	0.1 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253027	1,136
SPX8200	8,200 g	1 g	5.5 in × 6.7 in (140 mm × 170 mm)	30253028	569

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
RS232 Interface, Scout	30268982	227
USB Host Interface, Scout	30268983	227
USB Device Interface, Scout	30268984	159
Ethernet Interface, Scout	30268986	245
Stacking Kit, x6, STX SPX SKX SJX/E	30268987	90

Accessories	Item Number	List Price (USD)
Stacking Kit, x1, STX SPX SKX SJX/E	30268988	32
Density Kit, SKX STX SJX/E	30269020	31
Carrying Case, Scout	30269021	177
Power Adapter 5V 1A US Scout CX	30330714	36
Auxiliary display AD7-MD	30472063	179
Anti-Theft Device Lab Balance	80850043	314



SCOUT™ SJX/E

Class II Legal-for-Trade Portable Balances Ideal for Jewelry Weighing

Display
Liquid crystal display (LCD) with backlight

Communication
RS232, USB Host, USB Device or Ethernet (available as an accessory)

Construction
ABS housing, stainless steel pan, ABS draftshield (1mg model only), weigh below hook, transportation lock, manual calibration lock switch, security slot, adjustable leveling feet, illuminated up-front level indicator

Design Features
Stability indicator, mechanical and software overload/underload protection, low battery indicator, auto shut-off, auto tare, scoop and weight on 64g model

Operation
AC Adapter (Included) or 4 AA Batteries (Not included)

Scout meets Class II and III accuracy requirements for countertop retail applications.

Multiple connectivity options are available for easy data logging and communication. An optional auxiliary display can also be installed for retail applications.

Advanced weighing technology ensures reliable, repeatable weighing results.

Model	Capacity	Readability	Certified Readability	Pan Size	Item Number	List Price (USD)
SJX323N/E	64 g	0.001 g	0.01 g	3.7 in (93 mm)	30253054	916
SJX622N/E	1.37 lb (620 g)	0.00005 lb (0.01 g)	0.0005 lb (0.1 g)	4.7 in (120 mm)	30253055	1,148
SJX1502N/E	3.3 lb (1,500 g)	0.00005 lb (0.01 g)	0.0005 lb (0.1 g)	5.5 in × 6.7 in (140 mm × 170 mm)	30253056	1,333
SJX6201N/E	13.67 lb (6,200 g)	0.0005 lb (0.1 g)	0.005 lb (1 g)	5.5 in × 6.7 in (140 mm × 170 mm)	30253057	1,176

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
RS232 Interface, Scout	30268982	227
USB Host Interface, Scout	30268983	227
USB Device Interface, Scout	30268984	159
Ethernet Interface, Scout	30268986	245
Stacking Kit, x6, STX SPX SKX SJX/E	30268987	90

Accessories	Item Number	List Price (USD)
Stacking Kit, x1, STX SPX SKX SJX/E	30268988	32
Density Kit, SKX STX SJX/E	30269020	31
Carrying Case, Scout	30269021	177
Power Adapter 5V 1A US Scout CX	30330714	36
Auxiliary display AD7-MD	30472063	179
Anti-Theft Device Lab Balance	80850043	314

Check Weighing · Display Hold · Gross / Net / Tare · Parts Counting · Percent Weighing · Totalization · Weighing · Auto Shut-Off · Backlight · Battery Power · Environmental Filters · Ethernet · Hinged Cover · Level Indicator · Leveling Feet · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · RS232 · Security Bracket · Stability Indicator

Stackable · USB · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

NAVIGATOR™

Multi-Purpose Portable Balances Suitable for Everyday Weighing

Display
Liquid Crystal Display (LCD) with backlight

Communication
RS232, USB, or Ethernet (available as accessories)

Construction
ABS housing, stainless steel pan, transportation lock, slip-resistant and adjustable feet, leveling bubble

Design Features
Menu and calibration lock switch, mechanical and software overload/underload protection, stability indicator, low battery indicator, auto shut-off, user-selectable print options, user-selectable communication settings

Operation
AC adapter (included) or 4 C batteries (not included)

Navigator offers essential weighing applications at a competitive price point.

Advanced weighing technology offers one-second stabilization for fast and accurate weighing results, improving operator efficiency, productivity and throughput.

Overload protection system that can withstand loads up to four times the rated capacity safeguards the balance.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
NV123	120 g	0.001 g	3.7 in (93 mm)	30642238	536
NV223	220 g	0.001 g	3.7 in (93 mm)	30642239	596
NV323	320 g	0.001 g	3.7 in (93 mm)	30642240	654
NV222	220 g	0.01 g	5.7 in (145 mm)	30456410	482
NV422	420 g	0.01 g	5.7 in (145 mm)	30456411	613
NV622	620 g	0.01 g	5.7 in (145 mm)	30467960	625
NV1202	1,200 g	0.01 g	5.7 in × 7.5 in (144 mm × 190 mm)	30642241	696
NV2202	2,200 g	0.01 g	5.7 in × 7.5 in (144 mm × 190 mm)	30642242	732
NV3202	3,200 g	0.01 g	5.7 in × 7.5 in (144 mm × 190 mm)	30642243	767
NV221	220 g	0.1 g	5.7 in × 7.5 in (144 mm × 190 mm)	30456412	282
NV621	620 g	0.1 g	5.7 in × 7.5 in (144 mm × 190 mm)	30456413	413
NV1201	1,200 g	0.1 g	5.7 in × 7.5 in (144 mm × 190 mm)	30456414	468
NV2201	2,200 g	0.1 g	5.7 in × 7.5 in (144 mm × 190 mm)	30456415	519
NVT2201	2,200 g	0.1 g	6.9 in × 9.1 in (174 mm × 230 mm)	30456416	519
NVT4201	4,200 g	0.1 g	6.9 in × 9.1 in (174 mm × 230 mm)	30456417	649
NVT6201	6,200 g	0.1 g	6.9 in × 9.1 in (174 mm × 230 mm)	30467961	653
NVT10201	10,200 g	0.1 g	6.9 in × 9.1 in (174 mm × 230 mm)	30642244	689
NVT2200	2,200 g	1 g	6.9 in × 9.1 in (174 mm × 230 mm)	30456418	490
NVT6200	6,200 g	1 g	6.9 in × 9.1 in (174 mm × 230 mm)	30456419	649
NVT12000	12,000 g	1 g	6.9 in × 9.1 in (174 mm × 230 mm)	30456420	701
NVT22000	22,000 g	1 g	6.9 in × 9.1 in (174 mm × 230 mm)	30456421	838

Accessories on next page

Check Weighing · Parts Counting · Percent Weighing · Weighing · Auto Shut-Off · Backlight · Battery Power · Level Indicator · Leveling Feet · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Security Bracket · Shipping Lock · Stability Indicator · Touchless Sensor

Specifications and Prices subject to change without notice.

NAVIGATOR™ ACCESSORIES

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Carrying Case NV NVT	30467963	149
Adaptor Kit 12V 0.5A EU-US-AU-UK-KR	30467987	55
Weigh below hook NV NVT	30628012	25

Accessories	Item Number	List Price (USD)
RS232 Kit TA NV NVT	83032107	227
USB Kit TA NV NVT	83032108	227
Ethernet Kit NV NVT	83032109	227

COMPASS™ CX

Energy-Efficient Portable Scale Suitable for Workplace and in-the-Field Weighing

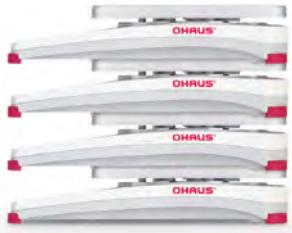
Display
Liquid Crystal Display (LCD) with backlight

Construction
ABS housing, stainless steel pan, transportation lock, slip-resistant feet

Design Features
Stability indicator, mechanical and software overload/underload protection, low battery indicator, auto shut-off

Operation
3 AA batteries (included) or AC adapter (not included)

LOW POWER CONSUMPTION



Save money over the lifetime of the balance. Alkaline batteries allow you to maximize operating time by up to 1,000 hours of continuous, energy-efficient weighing in the workplace or classroom.

Large backlit display increases readability in low-light conditions and makes it easier to view results from a distance.

Slim, space-saving design allows for stackable storage for up to four scales.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
CX221	220 g	0.1 g	5.6 in × 5 in (142 mm × 128 mm)	30428199	217
CX621	620 g	0.1 g	5.6 in × 5 in (142 mm × 128 mm)	30428200	225
CX1201	1,200 g	0.1 g	5.6 in × 5 in (142 mm × 128 mm)	30428201	238
CX2200	2,200 g	1 g	5.6 in × 5 in (142 mm × 128 mm)	30428202	217
CX5200	5,200 g	1 g	5.6 in × 5 in (142 mm × 128 mm)	30428203	256
CX221P	220 g	0.1 g	5.6 in × 5 in (142 mm × 128 mm)	30467746	233
CX2200P	2,200 g	1 g	5.6 in × 5 in (142 mm × 128 mm)	30467747	234
CX5200P	5,200 g	1 g	5.6 in × 5 in (142 mm × 128 mm)	30467761	256
CX5200F*	5,200 g	1 g	5.6 in × 5 in (142 mm × 128 mm)	30467762	294

*Carrying case included

Accessories	Item Number	List Price (USD)
Power Adapter 5V 1A US Scout CX	30330714	36
Power Adapter 5V 1A AU Scout CX	30333865	37
Power Adapter 5V 1A EU Scout CX	30333866	37
Power Adapter 5V 1A UK Scout CX	30333867	37

Accessories	Item Number	List Price (USD)
Pan SST CX	30428138	29
Carrying case CX CR	30467763	90
Bowl, 1050ml, CX CR	80850075	73

Specifications and Prices subject to change without notice.

COMPASS™ CR

Quality Portable Electronic Scales Suitable for Everyday Weighing.

Display
Liquid Crystal Display (LCD)

Construction
ABS housing and pan, transportation lock, slip-resistant feet

Design Features
Stability indicator, mechanical and software overload/underload protection, auto shut-off

Operation
3 AA batteries (included) or AC adapter (not included)

Intuitive two-button design makes for easy operation.

Slim, space-saving design allows for stackable storage.

Enlarged weighing platform can adequately handle large samples and a variety of objects.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
CR221	220 g	0.1 g	5.2 in × 5 in (132 mm × 125 mm)	30428204	156
CR621	620 g	0.1 g	5.2 in × 5 in (132 mm × 125 mm)	30428205	161
CR2200	2,200 g	1 g	5.2 in × 5 in (132 mm × 125 mm)	30428206	156
CR5200	5,200 g	1 g	5.2 in × 5 in (132 mm × 125 mm)	30428207	214

Accessories	Item Number	List Price (USD)
Carrying case CX CR	30467763	90
Adaptor Kit 12V 0.5A EU-US-AU-UK-KR	30467987	55

Accessories	Item Number	List Price (USD)
Bowl, 1050ml, CX CR	80850075	73

Weighing · Auto Shut-Off · Battery Power · Overload Protection · Shipping Lock · Stability Indicator · Stackable

PS SERIES

High Performance Portable Weighing in the Palm of Your Hand!

Display
Liquid crystal display (LCD)

Construction
ABS housing and protective sliding pan

Design Features
Mechanical and software overload/underload protection, auto shut-off

Operation
2 lithium batteries (included)

The one-piece combination pan and cover slides back when being used to weigh and forward when not in use to protect the buttons and display during storage and transportation.

One of the smallest portable balances on the market, PS can easily fit into a standard shirt pocket.

The "pop-out" design of the battery compartment provides simple and fast battery replacement.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
PS121	120 g	0.1 g	2.6 in × 2.5 in (66 mm × 63 mm)	80104060	100
PS251	250 g	0.1 g	2.6 in × 2.5 in (66 mm × 63 mm)	80104061	129

Weighing · Auto Shut-Off · Low Battery Indicator · Overload/ Underload Indicators · Stability Indicator

Specifications and Prices subject to change without notice.

YA GOLD SERIES

Portable Precision Weighing in a Compact Case

Display
Backlit liquid crystal display (LCD)

Construction
ABS housing, stainless steel pan, protective cover

Design Features
Mechanical and software overload/underload protection, auto shut-off

Operation
2 AAA batteries (included)

A hinged cover, sturdy plastic housing and stainless steel weighing pan protect the small balance from damage.

With an extremely fast stabilization time, your results will appear quickly on the blue backlit LCD display.

Powered by two 'AAA' batteries, a power-saving auto shut-off feature helps to conserve battery life.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
YA102	100 g	0.01 g	2.8 in × 2 in (70 mm × 50 mm)	80251910	150
YA302	300 g	0.05 g	2.8 in × 2 in (70 mm × 50 mm)	80251911	131
YA501	500 g	0.1 g	2.8 in × 2 in (70 mm × 50 mm)	80251912	94

Weighing | Auto Shut-Off | Backlight | Battery Power | Hinged Cover | Low Battery Indicator | Overload/ Underload Indicators

Moisture Analyzer Selection Guide

		MB120	MB92 (NEW)	MB62 (NEW)	MB32 (NEW)	MB23
Weighing Capacity		120 g	90 g	90 g	90 g	110 g
Readability		0.01% / 1 mg	0.01% / 1 mg	0.01% / 1 mg	0.01% / 1 mg	0.1% / 10 mg
Temperature Range		40°C – 230°C (1°C)	40°C – 200°C (1°C)	40°C – 200°C (1°C)	40°C – 180°C (1°C)	50°C – 160°C (5°C)
Smart Guide		●				
Heater	Carbon Fiber Heater		●	●	●	
	Halogen Heater	●				
	IR Heater					●
Heating Profiles	Standard	●	●	●	●	●
	Fast	●	●	●	●	
	Ramp	●	●	●		
	Step	●	●	●		
Shut-Off Criteria	Manual	●	●	●	●	●
	Timed	●	●	●	●	●
	Auto	●	●	●	●	●
	Auto (User Defined mg/s)	●	●			
	Auto (User Defined %/s)	●				
Features	User Management	●				
	Method Library	100	20	20	2	—
	Result Library	1000	200	100	—	—
	Screen	4.3" full color touchscreen	4.3" capacitive touch screen glass screen cover	120mm × 55mm LCD dot matrix 2nd line display	95mm × 45mm LCD dot matrix 2nd line display	Single line LCD
	Connectivity	RS-232, USB device, USB host	RS-232, USB device, USB host	RS-232, USB device	RS-232, USB device	RS-232
Page No.		45	46	47	48	49

Specifications and Prices subject to change without notice.

MB120

Faster, Smarter, More Efficient Moisture Analysis

Display
4.3" TFT color touchscreen display

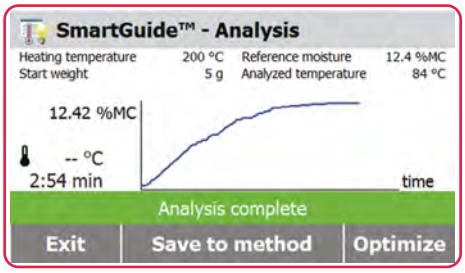
Communication
RS232 with GLP/GMP data output, USB Host and USB Device (included)

Construction
Metal base, ABS top housing, halogen heat source, stainless steel pan support, stainless steel pan handler, in-use cover

Design Features
Seven shut-off criteria (manual, timed, autofree %/s, autofree mg/s, A30, A60 and A90), four drying profiles (standard, fast, ramp and step), storage up to 100 methods and 1000 test results for all methods, user guide, 40°C to 230°C heating temperature range (1°C increments), 14 operational languages

Operation
Power cord (included)

SMART GUIDE™



Get started quickly with SmartGuide™. This revolutionary feature automatically analyzes a sample and creates a method, thereby removing the guesswork from the initial setup.

The MB120 has the capability to produce fast and accurate results due to features such as a halogen heating system, customizable shut-off criteria and four built in drying profiles.

The MB120 allows storage of up to 100 methods and 1,000 measurement results. Stored results can be exported, and methods can be shared across multiple devices.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB120	120 g	1 mg/0.01%	3.5 in (90 mm)	30241165	6,662

Accessories	Item Number	
Temp. calibration kit MB Series	11113857	801
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Handle Pan MB90 MB120	30246947	99
Scoop, Accessory, MB9x MB120	30284477	70
In-Use-Cover, Accessory, MB9x MB120	30284478	108
Interface Kit, RS232-USB	30304101	197

Accessories	Item Number	
Interface Kit, RS232-Ethernet	30304102	197
Cage, Sample, MB Series	80252477	143
Pan, Reusable, Set(3), 7mm, MB Series	80252478	119
Pan, Reusable, Set(3), 14mm, MB Series	80252479	124
Anti-Theft Device Lab Balance	80850043	314
Pan Aluminum Set MB Series	80850086	90
Filter Glass Fiber, Set(200) Series	80850087	141

MB92

High Performance Moisture Analysis with Advanced Features

Display
4.3" Capacitive touchscreen display

Communication
RS232, USB Host, USB Device (cables not included)

Construction
Carbon fiber heating source, enhanced durability, metal pan support, metal pan handler, in-use cover

Design Features
Upgraded load cell, 8 shut-off criteria including custom settings, 4 heating profiles, 40C to 200C heating range

Operation
Power cord (included)

Robust and durable with the new carbon heating technology and an upgraded full color capacitive touchscreen.

Multiple drying profiles, shut off criteria and methods offer great flexibility in method creation. Enhanced password protection ensures greater data security and integrity.

A full glass panel and tool-free heating chamber assembly makes cleaning and maintenance easy. Perfect for both the laboratory and the production floor.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB92	90 g	1 mg / 0.01%	3.5 in (90 mm)	30971930	4,900

Accessories	Item Number	
Pan Handler, MB32, MB62, MB92	30954234	97
In-Use-Cover, MB92	30954269	55
Temp. calibration kit MB Series	11113857	801
Scoop	30284477	70
SF40A Impact Printer	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Interface Kit, RS232-USB	30304101	197
Interface Kit, RS232-Ethernet	30304102	197

Accessories	Item Number	
Cage, Sample, MB Series	80252477	143
Reusable Pan, Set (3), 7mm	80252478	119
Reusable Pan, Set (3), 14mm	80252479	124
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Aluminum Pan (80)	80850086	90
Glass Fiber Pads (200)	80850087	141

Moisture Analysis · Percent Moisture · Percent Moisture Regain · Percent Solid · Statistics · Temperature · Weighing · Audible Alerts · Auto Shut-Off · Backlight · GLP Data Output · GMP/GLP · Hinged Cover · Level Indicator · Leveling Feet · Multi-Language · Security Bracket · Software Lockout · Stability Indicator · Time/Date

Specifications and Prices subject to change without notice.

MB62

Designed for Durability and Flexible Performance for a Variety of Applications

Display
5" LCD with dot matrix second line display

Communication
RS232, USB Device (cables not included)

Construction
Carbon fiber heating source, enhanced durability, metal pan support, metal pan handler, in-use cover

Design Features
Upgraded load cell, knob control, 7 shut-off criteria, 4 heating profiles, 40C to 200C heating range

Operation
Power cord (included)

Designed with durability and simplicity in mind, the wide 5-inch LCD display, knob control, and new carbon fiber heating technology guarantee a longer service life and reliable results.

Flexible method and sample management with 4 drying profiles, 7 shut off criteria and library storage for up to 20 methods and 100 results with sample ID for easy recall.

Always understand the status of your test with the status indication curve and multi-color status light.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB62	90 g	1 mg / 0.01%	3.5 in (90 mm)	30971929	4,200

Accessories	Item Number	
Pan Handler, MB32, MB62, MB92	30954234	97
In-Use-Cover, MB32, MB62	30954235	55
Temp. calibration kit MB Series	11113857	801
Scoop	30284477	70
SF40A Impact Printer	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Interface Kit, RS232-USB	30304101	197
Interface Kit, RS232-Ethernet	30304102	197

Accessories	Item Number	
Cage, Sample, MB Series	80252477	143
Reusable Pan, Set (3), 7mm	80252478	119
Reusable Pan, Set (3), 14mm	80252479	124
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Aluminum Pan (80)	80850086	90
Glass Fiber Pads (200)	80850087	141

Moisture Analysis · Percent Moisture · Percent Moisture Regain · Percent Solid · Statistics · Temperature · Weighing · Audible Alerts · Auto Shut-Off · Backlight · GLP Data Output · GMP/GLP · Hinged Cover · Level Indicator · Leveling Feet · Multi-Language · Security Bracket · Software Lockout · Stability Indicator · Time/Date

MB32

Perfect for Routine Moisture Testing

Display
LCD with dot matrix second line display

Communication
RS232, USB Device (cables not included)

Construction
Carbon fiber heating source, enhanced durability, metal pan support, metal pan handler, in-use cover

Design Features
Upgraded load cell, knob control, 5 shut-off criteria, 2 heating profiles, 40C to 180C heating range

Operation
Power cord (included)

An LCD with second line display, navigation knob, and intuitive operation makes for convenient and easy routine moisture testing.

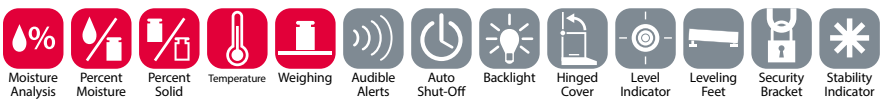
The new carbon fiber heating technology and upgraded loadcell shortens analysis time, saves power, and produces accurate and repeatable results.

Robust, slim design with a strong housing ensures MB32's durability even in harsh environments.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB32	90 g	1 mg / 0.01%	3.5 in (90 mm)	30971928	3,300

Accessories	Item Number	
Pan Handler, MB32, MB62, MB92	30954234	97
In-Use-Cover, MB32, MB62	30954235	55
Temp. calibration kit MB Series	11113857	801
Scoop	30284477	70
SF40A Impact Printer	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Interface Kit, RS232-USB	30304101	197
Interface Kit, RS232-Ethernet	30304102	197

Accessories	Item Number	
Cage, Sample, MB Series	80252477	143
Reusable Pan, Set (3), 7mm	80252478	119
Reusable Pan, Set (3), 14mm	80252479	124
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Aluminum Pan (80)	80850086	90
Glass Fiber Pads (200)	80850087	141



Specifications and Prices subject to change without notice.

MB23

Outstanding Performance, Flexible Configuration and Reliable Results

Display
Backlit liquid crystal display (LCD)

Communication
RS232 (included)

Construction
Infrared heat source, ABS housing, metal pan support, metal pan handler, in-use cover

Design Features
3 shut off criteria (manual, timed or auto), 1 standard heating profile, 50° to 160° C heating range (5° C increments)

Operation
Power cord (included)

Glass-less infrared heating increases efficiency for faster results.

User-friendly touch-button design for easy operation.

Compact design suits any workspace.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB23	110 g	10 mg/0.1%	3.5 in (90 mm)	83999801	3,916

Accessories	Item Number	
Temp. calibration kit MB Series	11113857	801
Printer, Impact, SF40A, AM	30064203	1,342
Bluetooth Impact Printer, SF40A/BT, AM	30944360	1,521
Interface Kit, RS232-USB	30304101	197
Interface Kit, RS232-Ethernet	30304102	197
In-Use-Cover, MB23 MB25 MB27	80252475	56
Holder Pan MB23 MB25 MB27	80252476	108

Accessories	Item Number	
Cage, Sample, MB Series	80252477	143
Pan, Reusable, Set(3), 7mm, MB Series	80252478	119
Cable RS232 IBM 9P Male-to-Female	80500525	262
Anti-Theft Device Lab Balance	80850043	314
Pan Aluminum Set MB Series	80850086	90
Filter Glass Fiber, Set(200) Series	80850087	141
Filter Glass Fiber, Set(200) Series	80850087	141

TRIPLE BEAM PRO™

Best-in-Class Mechanical Balance!

Display
Easy to-read deep-notched, tiered beams and dial plates

Construction
Metal base and beam, stainless steel pan

Design Features
Two notched and tiered beams, positive poise positioning, spring loaded zero adjust compensator, self-aligning beam design, magnetic dampening to minimize oscillation and speed weighing, security loop, included weight set and storage compartment

The unique, easy-grip carrying handle is ergonomically designed to allow for effortless movement around the classroom.

A convenient compartment provides a place to store the weight set when not in use, preventing the weights from becoming lost.

Prevent theft and accidental dropping by securing the balance to a desk or bench top with the security loop or Kensington-type lock (sold separately).

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
TP2611	2,610 g	0.1 g	5.8 in × 5.8 in (147 mm × 147 mm)	80621692	303

Accessories	Item Number	List Price (USD)
Kit, Rod and Clamp	80780011	101
Weight Set, 2x1kg, 1x500g	80780108	99

Accessories	Item Number	List Price (USD)
Anti-Theft Device, SP PA AV NV	80850000	122
Anti-Theft Device Lab Balance	80850043	314

Weighing

Specifications and Prices subject to change without notice.

TRIPLE BEAM™ 700 SERIES

The Standard by Which All Other Mechanical Balances Are Measured.

Display
Easy to-read deep-notched, tiered beams and dial plates

Construction
Metal base and beam, stainless steel pan

Design Features
Easy-to-read notched and tiered beams, self-aligning beam design, magnetic dampening to minimize oscillation and speed weighing, zero adjust compensator

Superior magnetic damping provides stable results three times faster than any other three-beam balance on the market.

Five weighing pans of different sizes and designs can accommodate materials for a variety of weighing applications.

A counterbalancing knob provides quick zeroing of the balance while a self-aligning beam helps ensure accurate results.

Model	Pan Type	Readability	Capacity	Tare Beam	Pan Size	Item Number	List Price (USD)
750-S0	Fixed Pan	0.1 g	610 g		2.38 in × 6 in (60.5 mm × 152 mm)	80000012	211
760-00	Fixed Pan	0.1 g	610 g	•	2.38 in × 6 in (60.5 mm × 152 mm)	80000013	394
710-00	Removable Pan	0.1 g	610 g		0.74 in × 6 in (18.9 mm × 152 mm)	80000011	383
710-T0	Removable Pan	0.1 g	610 g	•	0.74 in × 6 in (18.9 mm × 152 mm)	80000031	467
720-00	Polypropylene Scoop	0.1 g	610 g		12 in × 2.75 in × 6 in (30.5 mm × 70 mm × 152 mm)	80000032	448
720-S0	Stainless Steel Scoop	0.1 g	610 g		12 in × 1.7 in × 7.4 in (305 mm × 43 mm × 188 mm)	80000033	520
730-00	Animal Container	0.1 g	610 g		6 in × 9 in (152 mm × 229 mm)	80000034	562

Accessories	Item Number	List Price (USD)
Subject Box	80000053	146
Kit, Rod and Clamp	80780011	101
Scoop and Counter Weight, SST	80780015	177

Accessories	Item Number	List Price (USD)
Weight Set, 2x1kg, 1x500g	80780108	99
Anti-Theft Device, SP PA AV NV	80850000	122

Weighing

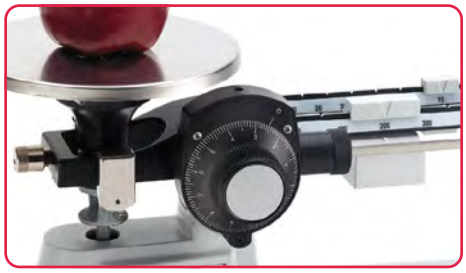
TRIPLE BEAM DIAL-O-GRAM™ 1600 SERIES

The Standard by Which All Others Are Measured!

Display
Easy to Read Deep Notched and Tiered Beams and Dial Plates

Construction
Metal Base and Beam, Stainless Steel Pan

Design Features
Counterbalancing knob for quick zeroing, positive poise positioning for repeatable results, self-aligning beam design, magnetic damping to minimize oscillation and speed weighing.



Superior magnetic damping provides three times faster stability reading than any other three-beam balance on the market.

Vernier dial convenience.

Counterbalancing knob for quick zeroing, self-aligning beam design.

Model	Readability	Capacity	Tare Beam	Pan Size	Item Number	List Price (USD)
1650-00	0.1 g	610 g	•	6 in (152 mm)	80000006	492
1610-00	0.1 g	610 g	•	6 in (152 mm)	80000036	568
1650-W0	0.1 g	2,610 g	•	6 in (152 mm)	80000037	568

Accessories	Item Number	List Price (USD)
Scoop, Flat Bottomed, SST, 0.6l	80250400	101
Kit, Rod and Clamp	80780011	101
Scoop and Counter Weight, SST	80780015	177

Accessories	Item Number	List Price (USD)
Weight Set, 2x1kg, 1x500g	80780108	99
Anti-Theft Device, SP PA AV NV	80850000	122

Weighing

Specifications and Prices subject to change without notice.

DIAL-O-GRAM™ AND CENT-O-GRAM™ 300 SERIES

Extremely Precise Mechanical Balance with High Readability.

Display
Easy to-read deep-notched, tiered beams and dial plates

Construction
Metal base and beam, stainless steel pan

Design Features
self-aligning beam design, magnetic damping to minimize oscillation and speed weighing, zero adjust compensator

With aluminum pressure castings for the base and beam assembly, agate bearings, steel knife-edges, and stainless steel pan, the Dial-O-Gram is built to the highest standard of quality.

The three-point base, special floating bearing principle and beam design eliminates the need for level adjustments.

The self-aligning beam ensures accurate results are garnered effortlessly.

Model	Capacity	Readability	Beams	Pan Size	Item Number	List Price (USD)
310-00	310 g	0.01 g	2 Beams with Dial	0.5 in × 3.5 in (13 mm × 89 mm)	80000009	554
311-00	311 g	0.01 g	4 Beams	0.5 in × 3.5 in (13 mm × 89 mm)	80000010	458

Accessories	Item Number	List Price (USD)
Anti-Theft Device, SP PA AV NV	80850000	122

Weighing

HARVARD TRIP™

Two Pan Balance Designed for Comparative Weighing.

Display
Deep notched and tiered beams

Construction
All-metal base and beam, stainless steel pan

Design Features
Weight set (2000g model, accessory sold separately), built-in sliding masses, magnetic damping, self-aligning beam design and floating agate bearings, counterbalancing knob for quick zeroing, hardened steel edges

The built-in sliding masses make weighing very simple and quick.

Magnetic damping minimizes oscillation and helps speed up weighing.

A counterbalancing knob provides quick zeroing of the balance while floating agate bearings helps ensure accurate results.

Model	Capacity	Readability	Beams	Pan Size	Item Number	List Price (USD)
1450-SD	2,000 g	0.1 g	1 Beam	6.2 in (152 mm)	80000003	512
1550-SD	2,000 g	0.1 g	2 Beams	6.2 in (152 mm)	80000004	547
1560-SD	2,000 g	0.1 g	2 Beams and Tare Beam	6.2 in (152 mm)	80000005	572

Accessories	Item Number	List Price (USD)
Kit, Rod and Clamp	80780011	101
Scoop and Counter Weight, SST	80780015	177

Accessories	Item Number	List Price (USD)
Anti-Theft Device, SP PA AV NV	80850000	122
Weight Set, 1kg-1g, ASTM 6, CYL	80850115	637

Weighing

Specifications and Prices subject to change without notice.

SCHOOL BALANCE

The Young Scientist's First Balance!

Display
Plastic pointer

Construction
ABS base, beam, and pans

Design Features
Zero adjust compensator

Large, washable pans provide optimal space for samples to be weighed.

18 piece, color coded stackable plastic mass set included.

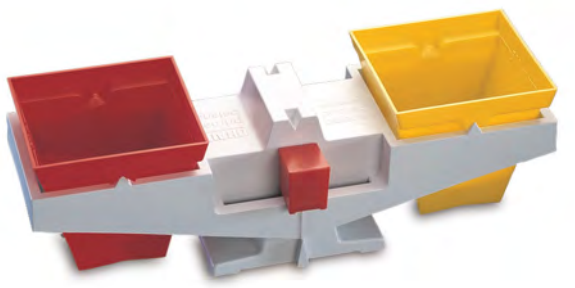
Front and rear pointers allow students to view results from both sides of the balance.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
SB1200	2,000 g	0.5 g	5.5 in × 5.5 in (140 mm × 140 mm)	80000029	92

Weighing

PRIMER™ BALANCE

The Scale for Budding Scientists!



Display
Plastic pointer

Construction
ABS base, beam, and pans

Design Features
Large, washable weighing pans, dual pointers, 18 piece stackable plastic mass set

An activity guide with 16 exercises is included with every Primer balance.

The easy-to-slide zero adjustment weight makes ensuring the balance is ready for weighing very simple.

Front and rear pointers allow students to view results from both sides of the balance.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
80410-00	2,000 g	1 g	4 in × 4 in (102 mm × 102 mm)	80000024	66

Weighing

SPRING SCALES

Producing Reproducible Results at Unbeatable Prices!

Display
Dial plates

Construction
ABS housing with metal face plate, pointer, spring and hook

Design Features
Large bright colored dial face, easy-to-read black graduations on a frosted aluminum background

Pull type spring scales feature an internal spring mechanism and offer a versatile and inexpensive way to display measurements in grams, ounces, pounds and Newton's.

Dial type spring scales offer a versatile and inexpensive weight determination in classrooms, laboratories, field studies and much more.

Demonstration spring scales offer a large faceplate for easy viewing and are ideal for all basic weighing applications.

Model	Capacity	Readability	Spring scale type	Item Number	List Price (USD)
8001-MA	9 oz / 250 g	0.25 oz / 10 g	Pull type	80000039	35
8002-MA	18 oz / 500 g	0.5 oz / 20 g	Pull type	80000041	35
8004-MA	72 oz / 20000 g	2 oz / 50 g	Pull type	80000044	35
8001-MN	250 g / 2.5 N	10 g / 0.1 N	Pull type	80000014	32
8002-MN	500 g / 5 N	20 g / 0.2 N	Pull type	80000015	32
8003-MN	1000 g / 10 N	25 g / 0.25 N	Pull type	80000016	32
8004-MN	2000 g / 20 N	50 g / 0.5 N	Pull type	80000017	32
8008-MN	5000 g / 50 N	100 g / 1 N	Pull type	80000018	32
8261-M0	100 g	1 g	Pull type	80000025	38
8262-M0	200 g	2 g	Pull type	80000026	38
8263-M0	500 g	5 g	Pull type	80000027	38
8264-M0	1000 g	10 g	Pull type	80000028	38
8265-M0	2000 g	20 g	Pull type	80000052	38
8002-PN	1.12 lb / 5 N	0.04 lb / 0.2 N	Pull type	80000042	38
8003-PN	2.25 lb / 10 N	0.05 lb / 0.25 N	Pull type	80000043	38
8004-PN	4.5 lb / 20 N	0.1 lb / 0.5 N	Pull type	80000045	38
8008-PN	11.25 lb / 50 N	0.25 lb / 1 N	Pull type	80000046	38
8011-MA	9 oz / 250 g	0.125 oz / 2 g	Dial type	80000047	53
8014-MA	72 oz / 2000 g	0.5 oz / 20 g	Dial type	80000049	53
8011-MN	250 g / 2.5 N	2 g / 0.02 N	Dial type	80000019	50
8012-MN	500 g / 5 N	5 g / 0.05 N	Dial type	80000020	50
8013-MN	1000 g / 10 N	10 g / 0.1 N	Dial type	80000021	53
8014-MN	2000 g / 20 N	20 g / 0.2 N	Dial type	80000022	50
8016-00	20 N	1/2 N	Dial type	80000023	100
8018-50	50 N	2 N	Dial type	80000051	110

Weighing

NOTES

Industrial Weighing

OHAUS offers a full line of products designed for industrial applications, including sophisticated, newly released software for our most powerful products. From shipping scales up to 5,000 lb floor scales, OHAUS has a product for use in every area of your facility.

	Compact Bench Scales								
	Ranger 7000	Ranger 4000	Ranger 3000	Valor 7000	Valor 4000	Valor 2000	Valor 3000	Valor 1000	Courier 1000
	R71	R41 / RC41	R31 / RC31	V71	V41	V22	V31	V12	C12
Capacity Range (lb)	6 to 150	6 to 60	3 to 60	3 to 60	3 to 30	3 to 60	0.4 to 13.2	5 to 60	20 to 165
Weighing Pan/ Base Size (approx.)	8 × 8" to 12 × 15"	9 × 12"	9 × 12"	9 × 12"	7.5 × 9.5"	7.5 × 9.5"	4.7Ø or 6 × 6"	7.5 × 9.6"	11 × 12"
lb, oz, lb:oz, kg, g	All weighing units[1]	All weighing units[1]	All weighing units[1]	All weighing units[1]	All weighing units[1]	All weighing units[1]	All weighing units[1]	All weighing units[1]	lb/kg only
Parts Counting	Yes	Yes	Yes						
Library Size (items)	2,500	RC41 - 30	RC31 - 30						
Checkweighing	Yes	Yes	Yes	Yes	Yes	XW only			
Percent Weighing	Yes	R41 only	R31 only	Yes	Yes		Yes		
Display Hold / Dynamic Weigh	Yes	Yes	Yes						Yes
Totalization / Accumulation	Yes	Yes	Yes	Yes	Yes				
Filling	Yes								
NTEP/Measurement Canada[2]	Yes	Yes	Yes	Yes	Yes		NTEP *	T models	
Display	Backlit graphic	R41—White LED RC41—Backlit LCD	Backlit LCD	Backlit LCD	Red LED	Red LED	Backlit LCD	Backlit LCD	LCD
Numeric Keypad	Alphanumeric	RC41/31—Numeric							
Washdown IP/ NEMA Rating					IPX8	IPX8	"W" IP65 models		
NSF Listed/ Certified			Yes	Yes	Yes	Yes	Yes	Yes	
RS232	Yes	Yes	Yes	Yes				Option T models	
USB	Host & Device	Option	Option	Option					
2nd RS232	Option	Option	Option	Option					
RS485/422									
Ethernet	Option	Option	Option	Option					
AC or DC Relays / Digital I/O	Option								
Wireless Connectivity	Option								
GLP/GMP w/Time/ Date	Yes								
Rechargeable Batteries	Option	Yes	Yes	Yes	Yes	Yes			
Disposable Batteries							Yes	Yes	Yes
Barcode Support	Yes								
Remote Scale Base Input	Option	Option	RC Option						
Remote Display	Option	Option							
Page No.	**94**	**95, 92**	**96, 93**	**97**	**98**	**100**	**99**	**101**	**91**

[1] **Some higher capacity models may not support all weighing units, check datasheets for more information.**
[2] **General spec but may vary based on model and weighing unit used.**
* certain models only

	Modular Scales								
	Defender 6000	Defender 5000	Defender 3000	Drum	Defender 5000 Floor	Defender 3000 Floor	Courier 7000	Courier 5000	Courier 3000
	D61	D52	D33	DFD25	DF52	DF33	C71	C52	C31
Capacity Range (lb)	5 to 250	5 to 1,000	30 to 1,200	500 to 2,500	2,500 to 5,000	2,500 to 5,000	30 to 250	12 to 400	70 to 400
Weighing Pan/ Base Size (approx.)	10×10" to 16×20"	10×10" to 24×32"	12×14" to 20×26"	30×30" or 3×3'	3×3', 4×4'	3×3', 4×4' or 5×5'	12×14" to 24×24"	13×13" to 24×35"	12×13" to 16×20.5"
lb, oz, lb:oz, kg, g	All weighing units[1]	All weighing units[1]	All weighing units[1]	lb/kg only	All weighing units[1]	All weighing units[1]	All weighing units[1]	All weighing units[1]	lb/kg only
Parts Counting	Yes	Yes	Yes	Yes	Yes	Yes			
Library Size	300	50,000			50,000				
Checkweighing	Yes	Yes	Yes		Yes	Yes			
Percent Weighing	Yes	Yes			Yes				
Display Hold / Dynamic Weigh	Yes	Yes		Yes	Yes		Yes	Yes	Display Hold
Shipping Protocols							Yes	UPS only	
Totalization / Accumulation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Filling	XW	Yes			Yes				
Peak Hold				Yes					
NTEP/Measurement Canada[2]	Yes	Yes	Yes		NTEP only	NTEP only	Yes		
Display	Backlit LCD	Backlit Dot Matrix	Backlit LCD	Backlit LCD	Backlit Dot Matrix	Backlit LCD	Backlit LCD		
Numeric Keypad	Numeric	Alphanumeric			Alphanumeric				
Washdown IP/ NEMA Rating	IP69K for K1, IP67 for W bases	"W" models IP67	"C1" models IP66		"C1" models IP67	"C1" models IP66			
NSF Listed/ Certified	K1 Base models								
RS232	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
USB	XW - Option	Option	Option	Yes / Option	Option	Option	Yes	Yes	
2nd RS232	XW - Option	Option			Option		Yes		
RS485/422	XW - Option	485 - Option			485 - Option				
Ethernet	XW - Option	Option	Option	Option	Option	Option	Option		
AC or DC Relays / Digital I/O	XW - Option	Option			Option				
Wireless Connectivity	XW - Option	Option			Option		Option		
GLP/GMP w/Time/ Date	Yes	Yes			Yes				
Rechargeable Batteries	XW option	Option	XW — Yes; P — Option		Option	XW — Yes; P — Option			
Disposable Batteries	P models		P models	Yes		P models	Yes	Yes	Yes
Barcode Support	XW models	Yes	Label Printer		Yes	Label Printer			
Remote Display		Option		Option	Option		Option		
Page No.	**69**	**74**	**84**	**62**	**66**	**64**	**88**	**89**	**90**

[1]Some higher capacity models may not support all weighing units, check datasheets for more information.
[2]General spec but may vary based on model and weighing unit used.
* certain models only

DEFENDER™ DRUM SCALES-I-DFD25P

Convenient Portability with Floor Scale Capacity

Display
Backlit liquid crystal display (LCD)

Communication
Easy access communication ports including RS232 interface (included) and USB-C

Construction
Painted steel platform with treads, ABS indicator, aluminum junction box, four alloy steel load cells with top height adjustment, front/back access ramps, optional USB Device or Ethernet

Design Features
Selectable environmental and auto-print settings, stability indicator, overload/underload indicators, auto-off, auto tare. Alloy steel feet with top height adjustment. Painted and stainless steel floor stands (available as accessories)

Operation
4 AA (LR6) Batteries (Not Included); AC Adapter (Included); USB Cable (Included)

Our Drum Scales come in 5 models with platform sizes ranging from 30 × 30 to 36 × 36 inch, and capacities ranging from 500 to 2,500lb, giving you the flexibility to choose what best suits your weighing needs.

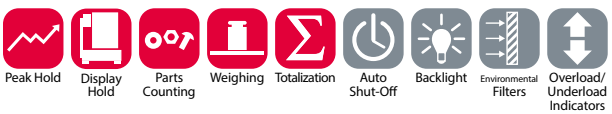
The OHAUS Drum Scales feature a platform constructed of mild steel with an epoxy paint finish, which means that the scale can stand up to heavy industrial use.

A low-profile design with front and back access ramps that make it easy to roll pallet jacks, dollies, carts and drums on to the platform. High-density polyurethane wheels provide convenient portability.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
DFD25P500E1S	500 lb (250 kg)	0.1 lb (0.05 kg)	30 × 30 in / 762 × 762 mm	30936455	1,250
DFD25P1000E1S	1,000 lb (500 kg)	0.2 lb (0.1 kg)	30 × 30 in / 762 × 762 mm	30936456	1,250
DFD25P2500E1S	2,500 lb (1,250 kg)	0.5 lb (0.2 kg)	30 × 30 in / 762 × 762 mm	30936457	1,250
DFD25P1000E1R	1,000 lb (500 kg)	0.2 lb (0.1 kg)	36 × 36 in / 914.4 × 914.4 mm	30936608	1,550
DFD25P2500E1R	2,500 lb (1,250 kg)	0.5 lb (0.2 kg)	36 × 36 in / 914.4 × 914.4 mm	30936609	1,550

Accessories	Item Number	List Price (USD)
Column Kit Painted Floor Scale	30531244	270
Column Kit Stainless Steel Floor Scale	30539553	343
Printer, Impact, SF40A, AM	30064203	1,342
Interface Kit, RS232-USB	30304101	197
Interface Kit, RS232-Ethernet	30304102	197

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
DB9 Adapter, Male-to-Male	30692384	9
Auxiliary Display, AD7-MD	30472063	179



Specifications and Prices subject to change without notice.

DEFENDER™ 3000 FLOOR SCALES-I-DF33

Floor Scales for Basic Industrial Applications

Display
7 Segment LCD with multicolor backlight

Communication
Standard RS232 and optional USB Device or Ethernet

Construction
ABS plastic (DF33P models) or 304 stainless steel (DF33XW models) indicator, 5mm / 0.196in. fixed top plate, black treaded painted steel platform, IP65 stainless steel junction box with side access, alloy steel load cells, two carbon steel eye bolts, available painted steel ramps

Design Features
Four load cell mounted feet with self-swiveling ball-in-cup design, painted and stainless steel floor stands (available as accessories)

Operation
Internal power supply with power cord (included), 6C (LR14) Batteries (DF33P models — not included) or Rechargeable Battery (DF33XW models — included)

EasyConnect™

Painted carbon steel, treaded decks with four alloy steel load cells, fixed top plate (5 mm / 0.196 in. thick) with structural bracing for stiff construction.

Platforms available in sizes of 3 × 3 ft, 4 × 4 ft and 5 × 5 ft, and capacities from 2,500lb to 5,000lb with NTEP certified 5,000e performance, allowing greater flexibility for your weighing needs.

Results are clearly shown on the large, bright backlit LCD display. In Checkweighing mode, display changes color (yellow/green/red) to alert users when within the target weight range.

Floor Scales with Plastic Indicator (can be powered with disposable batteries)

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-DF33P2500B1R	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	3' × 3' / 0.914 × 0.914 m	30837601	1,906
i-DF33P2500B1L	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4' × 4' / 1.219 × 1.219 m	30837603	2,163
i-DF33P5000B1L	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4' × 4' / 1.219 × 1.219 m	30837604	2,163
i-DF33P5000B1X	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	5' × 5' / 1.524 × 1.524 m	30716508	2,369

Floor Scales with Stainless Steel Indicator, Internal Rechargeable Battery

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-DF33XW2500B1R	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	3' × 3' / 0.914 × 0.914 m	30837691	2,009
i-DF33XW2500B1L	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4' × 4' / 1.219 × 1.219 m	30837692	2,266
i-DF33XW5000B1L	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4' × 4' / 1.219 × 1.219 m	30837693	2,266
i-DF33XW5000B1X	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	5' × 5' / 1.524 × 1.524 m	30716510	2,472

Accessories	Item Number	List Price (USD)
Foot Plate Kit, Painted Steel, for i-DFxxxB1x	72198344	79
Ramp Kit, 36", Painted Steel, for i-DFxxxB1R	30812889	475
Ramp Kit, 48", Painted Steel, for i-DFxxxB1L	80252565	775
Ramp Kit, 60", Painted Steel, for i-DFxxxB1X	80252566	881
Floor Scale Column Kit Painted	30531244	270
Floor Scale Column Kit Stainless Steel	30539553	343
Ethernet Kit i-DT33	30429666	227
USB Device Kit i-DT33	30699120	127

Accessories	Item Number	List Price (USD)
Dust Cover (5) i-DT33	30699121	64
Rechargeable Battery Kit i-DT33P	30699122	64
SF40A Printer	30064203	1,342
Thermal Printer STP-103	80251992	1,035
Zebra Label Printer ZD421T with RS232	30928908	927
Cable RS232 i-DT33P	80500525	262
Cable RS232 i-DT33XW	80500552	244
Auxiliary display AD7-RS	30472064	99

Check Weighing · Gross / Net / Tare · Parts Counting · Weighing · Totalization · Auto Shut-Off · Backlight · Battery Power (P Models) · Environmental Filters · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Rechargeable Battery (XW Models) · Software Lockout · Stability Indicator · NTEP Certified

DEFENDER™ 3000 WASHDOWN FLOOR SCALES-I-DF33

Floor Scales for Basic Industrial Applications

Display
7 Segment LCD with multicolor backlight

Communication
Standard RS232 and optional USB Device or Ethernet

Construction
304-grade stainless steel IP66 indicator, 5mm / 0.196in. fixed top plate, stainless steel platform, IP68 stainless steel junction box with side access, IP68 load cells, available stainless steel ramps

Design Features
Four load cell mounted feet with self-swiveling ball-in-cup design, painted and stainless steel floor stands (available as accessories)

Operation
Internal power supply with power cord (included) or Rechargeable Battery (included)

EasyConnect™

304 stainless steel, flat surface decks with 4 IP68 load cells, fixed top plate (5 mm / 0.196 in. thick) with structural bracing for stiff construction.

Platforms available in sizes of 3 × 3 or 4 × 4 ft, and capacities from 2,500lb to 5,000lb with NTEP certified 5,000e performance, allowing greater flexibility for your weighing needs.

Results are clearly shown on the large, bright backlit LCD display. In Checkweighing mode, display changes color (yellow/green/red) to alert users when within the target weight range.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-DF33XW2500C1R	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	3' × 3' / 0.914 × 0.914 m	30837602	4,290
i-DF33XW2500C1L	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4' × 4' / 1.219 × 1.219 m	30837605	4,867
i-DF33XW5000C1L	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4' × 4' / 1.219 × 1.219 m	30837606	4,867

Accessories	Item Number	List Price (USD)
Foot Plate Kit, Stainless Steel, for i-DFxxxC1x	72198345	105
Ramp Kit, 36", Stainless Steel, for i-DFxxxC1R	30812890	1,018
Ramp Kit, 48", Stainless Steel, for i-DFxxxC1L	30812891	986
Ramp Kit, 60", Stainless Steel, for i-DFxxxC1X	30812892	1,212
Floor Scale Column Kit Stainless Steel	30539553	343
Ethernet Kit i-DT33	30429666	227
USB Device Kit i-DT33	30699120	127

Accessories	Item Number	List Price (USD)
Dust Cover (5) i-DT33	30699121	64
SF40A Printer	30064203	1,342
Cable RS232 i-DT33XW	80500552	244
Thermal Printer STP-103	80251992	1,035
Cable RS232 i-DT33XW	80500552	244
Zebra Label Printer ZD421T with RS232	30928908	927

Check Weighing · Gross / Net / Tare · Parts Counting · Weighing · Totalization · Auto Shut-Off · Backlight · Environmental Filters · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · NEMA 4X IP66 · Overload Protection · Overload/ Underload Indicators · Rechargeable Battery · Software Lockout · Stability Indicator · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 5000 FLOOR SCALES-I-DF52

Floor Scales for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included); second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
ABS plastic (DF52P models) or 304 stainless steel (DF52XW models) indicator, 5mm / 0.196in. fixed top plate, black treaded painted steel platform, IP65 stainless steel junction box with side access, alloy steel load cells, two carbon steel eye bolts, available painted steel ramps

Design Features
Four load cell mounted feet with self-swiveling ball-in-cup design, painted and stainless steel floor stands (available as accessories)

Operation
Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)

EasyConnect™

Painted carbon steel, treaded decks with four alloy steel load cells, fixed top plate (5 mm / 0.196 in. thick) with structural bracing for stiff construction.

Platforms available in sizes of 3 × 3 or 4 × 4 ft, and capacities from 2,500lb to 5,000lb with NTEP certified 5,000e performance, allowing greater flexibility for your weighing needs.

Equipped with new TD52 series indicator featuring an easy-to-use keypad, large backlit display, and plain text on-screen prompts which guide you through operation.

Floor Scales with Plastic Indicator

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-DF52P2500B1R	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	3' × 3' / 0.914 × 0.914 m	30837696	2,343
i-DF52P2500B1L	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4' × 4' / 1.219 × 1.219 m	30837698	2,601
i-DF52P5000B1L	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4' × 4' / 1.219 × 1.219 m	30837699	2,601

Floor Scales with Stainless Steel Indicator

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-DF52XW2500B1R	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	3' × 3' / 0.914 × 0.914 m	30837706	2,524
i-DF52XW2500B1L	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4' × 4' / 1.219 × 1.219 m	30837707	2,781
i-DF52XW5000B1L	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4' × 4' / 1.219 × 1.219 m	30837708	2,781

Accessories	Item Number	List Price (USD)
Foot Plate Kit Painted Steel for i-DFxxxB1x	72198344	79
Ramp Kit 36" Painted Steel for i-DFxxxB1R	30812889	475
Ramp Kit 48" Painted Steel for i-DFxxxB1L	80252565	775
Ramp Kit 60" Painted Steel for i-DFxxxB1X	80252566	881
Battery Kit, Li-ion, TD52	30424405	271
USB Host for Dongle, TD52	30424406	191
WiFi/BT Dongle, OHAUS (Requires 30424406)	30412537	312
I/O with Relay (2 In/4 Out)	30097591	210
Light Tower, 3 Colors, 243mm, IP65 (Requires 30097591)	30424021	262
Analog Output Kit, TD52	30424403	227
Second RS232/RS485/USB Kit, TD52	30424404	227
Ethernet Kit, TD52	30429666	227

Accessories	Item Number	List Price (USD)
USB Host for Flash Drive	30572923	182
In-use Cover Kit, TD52P	30424022	30
In-use Cover Kit, TD52XW	30424023	38
Floor Scale Column Kit Painted	30531244	270
Floor Scale Column Kit SST	30539553	343
Printer Holder Kit, D52	30424025	85
Thermal Printer STP-103	80251992	1,035
SF40A Printer	30064203	1,342
Cable RS232 TD52P	80500525	262
Cable RS232 TD52XW	80500552	244
Zebra Label Printer ZD421T with RS232	30928908	927
Datalogic Barcode Scanner QD2131	30593703	259

Check Weighing · Display Hold · Dynamic Weighing · Filling · Gross / Net / Tare · Parts Counting · Weighing · Percent Weighing · Accumulation Totalization · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · GMP/GLP · Level Indicator · Leveling Feet · Low Battery Indicator · Multi-Language · Overload Protection · Overload/ Underload Indicators · Rechargeable Battery Option

Software Lockout · Stability Indicator · Time/Date · NTEP Certified

DEFENDER™ 5000 WASHDOWN FLOOR SCALES-I-DF52

Floor Scales for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included); second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
304-grade stainless steel IP68 indicator, 5mm / 0.196in. fixed top plate, stainless steel platform, IP68 stainless steel junction box with side access, IP68 load cells, available stainless steel ramps

Design Features
Four load cell mounted feet with self-swiveling ball-in-cup design, painted and stainless steel floor stands (available as accessories)

Operation
Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)

EasyConnect™

304 stainless steel, flat surface decks with 4 IP68 load cells, fixed top plate (5 mm / 0.196 in. thick) with structural bracing for stiff construction.

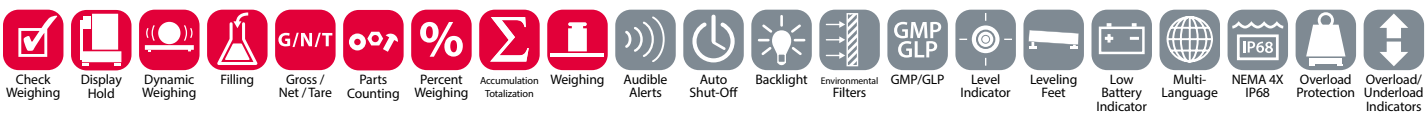
Platforms available in sizes of 3 × 3 or 4 × 4 ft, and capacities from 2,500lb to 5,000lb with NTEP certified 5,000e performance, allowing greater flexibility for your weighing needs.

Equipped with new TD52 series indicator featuring an easy-to-use keypad, large backlit display, and plain text on-screen prompts which guide you through operation.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-DF52XW2500C1R	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	3' × 3' / 0.914 × 0.914 m	30837697	5,274
i-DF52XW2500C1L	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4' × 4' / 1.219 × 1.219 m	30837700	5,850
i-DF52XW5000C1L	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4' × 4' / 1.219 × 1.219 m	30837701	5,850

Accessories	Item Number	List Price (USD)
Foot Plate Kit Stainless Steel for i-DFxxxC1x	72198345	105
Ramp Kit 36" Stainless Steel for i-DFxxxC1R	30812890	1,018
Ramp Kit 48" Stainless Steel for i-DFxxxC1L	30812891	986
Ramp Kit 60" Stainless Steel for i-DFxxxC1X	30812892	1,212
Battery Kit, Li-ion, TD52	30424405	271
USB Host for Dongle, TD52	30424406	191
WiFi/BT Dongle, OHAUS (Requires 30424406)	30412537	312
I/O with Relay (2 In/4 Out)	30097591	210
Light Tower, 3 Colors, 243mm, IP65 (Requires 30097591)	30424021	262
Analog Output Kit, TD52	30424403	227
Second RS232/RS485/USB Kit, TD52	30424404	227

Accessories	Item Number	List Price (USD)
Ethernet Kit, TD52	30429666	227
USB Host for Flash Drive	30572923	182
In-use Cover Kit, TD52P	30424022	30
In-use Cover Kit, TD52XW	30424023	38
Floor Scale Column Kit SST	30539553	343
Printer Holder Kit, D52	30424025	85
Thermal Printer STP-103	80251992	1,035
SF40A Printer	30064203	1,342
Cable RS232 TD52P	80500525	262
Cable RS232 TD52XW	80500552	244
Zebra Label Printer ZD421T with RS232	30928908	927
Datalogic Barcode Scanner QD2131	30593703	259



Specifications and Prices subject to change without notice.

DEFENDER™ 3000 FLOOR PLATFORMS

Platforms for Basic Industrial Applications

Construction
5mm / 0.196in. fixed top plate, black treaded painted steel platform, IP65 stainless steel junction box with side access, alloy steel load cells, two carbon steel eye bolts, available painted steel ramps

Design Features
Four load cell mounted feet with self-swiveling ball-in-cup design, painted and stainless steel floor stands (available as accessories)

EasyConnect™

Painted carbon steel, treaded decks with four alloy steel load cells, fixed top plate (5 mm / 0.196 in. thick) with structural bracing for stiff construction.

Platforms available in sizes of 3 × 3 ft, 4 × 4 ft and 5 × 5 ft, and capacities from 2,500 lb. to 5,000 lb. with NTEP certified 5,000e performance, allowing greater flexibility for your weighing needs.

Platforms are equipped with a 20ft EasyConnect™ cable which allows instant configuration with Defender indicators for quicker installation.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-DF2500B1R	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	3' × 3' / 0.914 × 0.914 m	30716491	1,494
i-DF2500B1L	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4' × 4' / 1.219 × 1.219 m	30716493	1,751
i-DF5000B1L	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4' × 4' / 1.219 × 1.219 m	30716494	1,751
i-DF2500B1X	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	5' × 5' / 1.524 × 1.524 m	30716497	1,957
i-DF5000B1X	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	5' × 5' / 1.524 × 1.524 m	30716498	1,957

Accessories	Item Number	List Price (USD)
Foot Plate Kit, Painted Steel, for i-DFxxxB1x	72198344	79
Ramp Kit, 36", Painted Steel, for i-DFxxxB1R	30812889	475
Ramp Kit, 48", Painted Steel, for i-DFxxxB1L	80252565	775

Accessories	Item Number	List Price (USD)
Ramp Kit, 60", Painted Steel, for i-DFxxxB1X	80252566	881
Floor Scale Column Kit Painted	30531244	270
Floor Scale Column Kit Stainless Steel	30539553	343

Level Indicator · Leveling Feet · NTEP Certified

DEFENDER™ 3000 WASHDOWN FLOOR PLATFORMS

Platforms for Basic Industrial Applications

Construction
5mm / 0.196in. fixed top plate, 304-grade stainless steel platform, IP68 stainless steel junction box with side access, IP68 load cells, available stainless steel ramps

Design Features
Four load cell mounted feet with self-swiveling ball-in-cup design, stainless steel floor stands (available as accessories)

EasyConnect™

304 stainless steel, flat surface decks with 4 IP68 load cells, fixed top plate (5 mm / 0.196 in. thick) with structural bracing for stiff construction.

Platforms available in sizes of 3 × 3 ft, 4 × 4 ft and 5 × 5 ft, and capacities from 2,500 lb. to 5,000 lb. with NTEP certified 5,000e performance, allowing greater flexibility for your weighing needs.

Platforms are equipped with a 20ft EasyConnect™ cable which allows instant configuration with Defender indicators for quicker installation.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-DF2500C1R	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	3' × 3' / 0.914 × 0.914 m	30716492	3,708
i-DF2500C1L	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4' × 4' / 1.219 × 1.219 m	30716495	4,352
i-DF5000C1L	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4' × 4' / 1.219 × 1.219 m	30716496	4,352
i-DF2500C1X	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	5' × 5' / 1.524 × 1.524 m	30716499	4,815
i-DF5000C1X	5,000 lb / 2,500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	5' × 5' / 1.524 × 1.524 m	30716500	4,815

Accessories	Item Number	List Price (USD)
Foot Plate Kit, Stainless Steel, for i-DFxxxC1x	72198345	105
Ramp Kit, 36", Stainless Steel, for i-DFxxxC1R	30812890	1,018
Ramp Kit, 48", Stainless Steel, for i-DFxxxC1L	30812891	986

Accessories	Item Number	List Price (USD)
Ramp Kit, 60", Stainless Steel, for i-DFxxxC1X	30812892	1,212
Floor Scale Column Kit Stainless Steel	30539553	343

Level Indicator · Leveling Feet · NEMA 4X IP68 · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 6000 WASHDOWN - METAL INDICATOR

Advanced IP68/IP69k Washdown Bench Scale

Display
6-digit, 7-segment white LED, 20 mm / 0.8 inch high digits, 3 color checkweigh bar matrix

Communication
Easy access communication ports including RS232 and USB host (included), second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
316 stainless steel platform and frame, hermetically-sealed, stainless steel load cell, IP68/IP69K 316 stainless steel housing indicator and mounting bracket, knife-resistant front panel

Design Features
150% overload capacity protection, bar matrix check light, customizable print templates, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, auto shut-off, auto tare, adjustable non-slip rubber feet

Operation
100-240 VAC / 50/60 Hz universal power supply, hardwired

EasyConnect

Defender 6000 stands up to harsh cleaning in processing and packaging environments with IP68 immersion/ IP69K washdown protection, 316 stainless steel base and hermetically-sealed load cell.

Durable Defender 6000 is NSF certified, supporting HACCP systems with a 316 stainless steel base and sturdy indicator providing corrosion protection in food, chemical processing, and packaging.

Versatile scales include fast weight display and multiple software modes to meet food, chemical processing, and packaging needs.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D61XWE5K1S6	10 lb (5 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	9.8 in × 9.8 in (250 mm × 250 mm)	30575563	2,240
D61XWE12K1R6	25 lb (12.5 kg)	0.002 lb (1 g)	0.005 lb (5 g)	11.8 in × 11.8 in (300 mm × 300 mm)	30575564	2,343
D61XWE25K1R6	50 lb (25 kg)	0.005 lb (2 g)	0.01 lb (5 g)	11.8 in × 11.8 in (300 mm × 300 mm)	30575565	2,343
D61XWE50K1L7	100 lb (50 kg)	0.01 lb (5 g)	0.02 lb (10 g)	19.7 in × 15.7 in (500 mm × 400 mm)	30575566	2,755
D61XWE150K1L7	300 lb (150 kg)	0.02 lb (10 g)	0.1 lb (50 g)	19.7 in × 15.7 in (500 mm × 400 mm)	30575567	2,755

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227
Cable Extension 9m/27 ft D52 / D61	30424409	227

Accessories	Item Number	List Price (USD)
Ethernet kit Defender Series	30429666	227
Sealing Kit External Power Bank	30572907	373
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Wheel Kit SST Defender Series	30616409	227
Printer, Thermal, STP-103, US	80251992	1,035
PCBA Kit, Alibi Memory, R71 T71	80500503	167
Cable RS232 XW Indicators	80500552	244

Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Auto Shut-Off · Backlight · Battery Power (Option) · Environmental Filters · GMP/GLP · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Overload Protection · Overload/Underload Indicators · Software Lockout · Stability Indicator · Time/Date

IP68 IP69K · Measurement Canada Approved · NSF Listed · NTEP Certified · USDA-AMS Accepted

DEFENDER™ 6000 WASHDOWN - PLASTIC INDICATOR

Advanced IP68/IP69K Washdown Bench Scale

Display
6-digit, 7-segment LCD display with white backlight, 45 mm / 1.8 inch high digits, 3 color checkweigh bar matrix

Communication
Easy access IR communication kit (available as an accessory); GLP/GMP data output with real-time clock

Construction
316 stainless steel platform and frame, hermetically-sealed stainless steel load cell, IP68/IP69K food grade polycarbonate housing indicator and 316 stainless steel mounting bracket or column

Design Features
150% overload capacity protection, 3-color check light bar, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator, auto shut-off, auto tare, adjustable rubber feet

Operation
6 D (LR20) Batteries (Included)

EasyConnect™

Defender 6000 stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection, 316 stainless steel base and hermetically-sealed load cell.

Durable Defender 6000 is NSF certified, supporting HACCP systems with a 316 stainless steel base and sturdy indicator providing corrosion protection in food, chemical processing, and packaging.

Versatile scales include fast weight display and multiple software modes to meet food, chemical processing, and packaging needs.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D61PW5K1S6	10 lb (5 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	9.8 in × 9.8 in (250 mm × 250 mm)	30575569	2,137
D61PW12K1R6	25 lb (12.5 kg)	0.002 lb (1 g)	0.005 lb (5 g)	11.8 in × 11.8 in (300 mm × 300 mm)	30575570	2,261
D61PW25K1R6	50 lb (25 kg)	0.005 lb (2 g)	0.01 lb (5 g)	11.8 in × 11.8 in (300 mm × 300 mm)	30575571	2,261
D61PW50K1L7	100 lb (50 kg)	0.01 lb (5 g)	0.02 lb (10 g)	19.7 in × 15.7 in (500 mm × 400 mm)	30575572	2,899
D61PW150K1L7	300 lb (150 kg)	0.02 lb (10 g)	0.1 lb (50 g)	19.7 in × 15.7 in (500 mm × 400 mm)	30575573	2,899
D61PW5K1S5*	10 lb (5 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	9.8 in × 9.8 in (250 mm × 250 mm)	30575568	2,199
D61PW12K1R5*	25 lb (12.5 kg)	0.002 lb (1 g)	0.005 lb (5 g)	11.8 in × 11.8 in (300 mm × 300 mm)	30575562	2,287
D61PW25K1R5*	50 lb (25 kg)	0.005 lb (2 g)	0.01 lb (5 g)	11.8 in × 11.8 in (300 mm × 300 mm)	30608733	2,287
D61PW50K1L5*	100 lb (50 kg)	0.01 lb (5 g)	0.02 lb (10 g)	19.7 in × 15.7 in (500 mm × 400 mm)	30608734	2,961
D61PW150K1L5*	300 lb (150 kg)	0.02 lb (10 g)	0.1 lb (50 g)	19.7 in × 15.7 in (500 mm × 400 mm)	30608735	2,961

* Models ending in 5 have a Front Mount indicator

Accessories	Item Number	List Price (USD)
Cable Extension 9m/27 ft D52 / D61	30424409	227
IR Communication Kit	30572910	103

Accessories	Item Number	List Price (USD)
Wheel Kit SST Defender Series	30616409	227

Check Weighing, Display Hold, Dynamic Weighing, Parts Counting, Percent Weighing, Weighing, Accumulation, Auto Shut-Off, Backlight, Battery Power, Environmental Filters, GMP/GLP, LED Check Weighing Indicator, Level Indicator, Leveling Feet, IP68 IP69K, Overload Protection, Overload/Underload Indicators, Software Lockout, Stability Indicator, Time/Date

Measurement Canada Approved, NSF Listed, NTEP Certified, USDA-AMS Accepted

Specifications and Prices subject to change without notice.

DEFENDER™ 6000 HYBRID - METAL INDICATOR

Washdown Bench Scale for Standard Industrial Applications

Display
6-digit, 7-segment white LED, 20 mm / 0.8 inch high digits, 3 color checkweigh bar matrix

Communication
Easy access communication ports including RS232 and USB host (included), second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
304 stainless steel platform and frame, IP68/IP69K 316 stainless steel housing indicator and mounting bracket, knife-resistant front panel, IP67 load cell

Design Features
150% overload capacity protection, bar matrix check light, customizable print templates, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, auto shut-off, auto tare, adjustable non-slip rubber feet

Operation
100-240 VAC / 50/60 Hz universal power supply, hardwired

EasyConnect™

Defender 6000 indicator, constructed of 316 stainless steel stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection.

White LED displays clear results for fast processing. The indicator's configurable color bar matrix allows for detailed package weight checking to ensure compliance.

Durably constructed with a 304 stainless steel platform, frame, IP67 loadcell, Defender 6000 hybrid meets NTEP/Measurement Canada approvals.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D61XWE2WQS6	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in × 10 in (254 mm × 254 mm)	30631706	2,096
D61XWE5WQS6	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in × 10 in (254 mm × 254 mm)	30631707	2,096
D61XWE12WQS6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in × 10 in (254 mm × 254 mm)	30631718	2,096
D61XWE12WQR6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30631719	2,261
D61XWE25WQR6	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30631720	2,261
D61XWE50WQR6	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30631721	2,261
D61XWE25WQL7	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in × 18 in (457 mm × 457 mm)	30631722	3,105
D61XWE50WQL7	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30631723	3,105
D61XWE125WQL7	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in × 18 in (457 mm × 457 mm)	30631724	3,105

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227
Cable Extension 9m/27 ft D52 / D61	30424409	227

Accessories	Item Number	List Price (USD)
Ethernet kit Defender Series	30429666	227
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Wheel Kit SST Defender Series	30616409	227
Printer, Thermal, STP-103, US	80251992	1,035
PCBA Kit, Alibi Memory, R71 T71	80500503	167
Cable RS232 XW Indicators	80500552	244
Sealing Kit External Power Bank	30572907	373

Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Battery Power (Option) · Environmental Filters · GMP/GLP · LED Check Weighing Indicator · NEMA 4X IP67 · Level Indicator · Leveling Feet · Overload Protection · Overload/Underload Indicators · Software Lockout

Stability Indicator · Time/Date · Measurement Canada Approved · NTEP Certified

DEFENDER™ 6000 HYBRID - PLASTIC INDICATOR

Washdown Bench Scale for Standard Industrial Applications

Display
6-digit, 7-segment LCD display with white backlight, 45 mm / 1.8 inch high digits, 3 color checkweigh bar matrix

Communication
Easy access IR communication kit (available as an accessory); GLP/GMP data output with real-time clock

Construction
321 stainless steel platform and frame, IP68/IP69K polycarbonate housing indicator and 316 stainless steel mounting bracket for D61PW-5 models, 304 stainless steel columns for D61PW-6 or 7 models, IP67 load cell

Design Features
150% overload capacity protection, 3-color check light bar, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator, auto shut-off, auto tare, adjustable rubber feet

Operation
6 D (LR20) batteries (included)

EasyConnect™

Defender 6000 indicator constructed of polycarbonate stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection.

Large, bright backlit LCD clearly displays results for fast processing. The color bar can be used for quick checking of package weights for fast go/no-go alert.

Durably constructed with a 304 stainless steel platform, frame, IP67 loadcell, Defender 6000 hybrid meets NTEP/Measurement Canada approvals.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D61PW2WQS6	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in × 10 in (254 mm × 254 mm)	30626679	1,828
D61PW5WQS6	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in × 10 in (254 mm × 254 mm)	30626680	1,828
D61PW12WQS6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in × 10 in (254 mm × 254 mm)	30626681	1,828
D61PW12WQR6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30626682	1,993
D61PW25WQR6	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30626683	1,993
D61PW50WQR6	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30626684	1,993
D61PW25WQL7	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in × 18 in (457 mm × 457 mm)	30631703	2,817
D61PW50WQL7	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30631704	2,817
D61PW125WQL7	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in × 18 in (457 mm × 457 mm)	30631705	2,817
D61PW2WQS5*	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in × 10 in (254 mm × 254 mm)	30631725	2,009
D61PW5WQS5*	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in × 10 in (254 mm × 254 mm)	30631726	2,009
D61PW12WQS5*	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in × 10 in (254 mm × 254 mm)	30631727	2,009
D61PW12WQR5*	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30631728	2,163
D61PW25WQR5*	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30631729	2,163
D61PW50WQR5*	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30631730	2,163
D61PW25WQL5*	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in × 18 in (457 mm × 457 mm)	30572969	2,704
D61PW50WQL5*	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30572970	2,704
D61PW125WQL5*	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in × 18 in (457 mm × 457 mm)	30572971	2,704

* Models ending in 5 have a Front Mount indicator

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Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 6000 HYBRID - PLASTIC INDICATOR ACCESSORIES

Accessories	Item Number	List Price (USD)
Cable Extension 9m/27 ft D52 / D61	30424409	227
IR Communication Kit	30572910	103

Accessories	Item Number	List Price (USD)
Wheel Kit SST Defender Series	30616409	227

DEFENDER™ 5000 WASHDOWN

Multifunctional Stainless Steel Washdown Bench Scale for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
304-grade stainless steel platform and frame, stainless steel IP68 indicator, IP67 stainless steel load cell (single range), non-slip adjustable rubber feet

Design Features
Resolution up to 12,500d, 150% overload capacity, checkweighing display and beep, menu lock switch, selectable display languages, selectable filter, stability indicator, overload/underload indicators, selectable display controls, auto print and tare

Operation
Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)

EasyConnect™

User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durably constructed of a stainless steel platform, frame & IP68 indicator; IP67 stainless steel loadcell (NTEP/MC/OIML/EC Type single range).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52XW2WQS6	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in × 10 in (254 mm × 254 mm)	30461673	2,086
D52XW5WQS6	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in × 10 in (254 mm × 254 mm)	30461674	2,086
D52XW12WQS6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in × 10 in (254 mm × 254 mm)	30461675	2,086
D52XW12WQR6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30461676	2,256
D52XW25WQR6	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30461677	2,256
D52XW50WQR6	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30461678	2,256
D52XW25WQL7	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in × 18 in (457 mm × 457 mm)	30461679	3,183
D52XW50WQL7	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30461680	3,183
D52XW125WQL7	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in × 18 in (457 mm × 457 mm)	30461681	3,183
D52XW50WTX7	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 18 in (610 mm × 457 mm)	30461682	3,507
D52XW125WTX7	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30461683	3,507
D52XW250WTX7	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30461684	3,507
D52XW50WQV8	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 24 in (610 mm × 610 mm)	30461685	4,063
D52XW125WQV8	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30461686	4,115
D52XW250WQV8	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30461687	4,218
D52XW500WQV8	1,000 lb (500 kg)	0.02 lb (20 g)	0.2 lb (100 g)	24 in × 24 in (610 mm × 610 mm)	30461688	4,218

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Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · GMP/GLP · Level Indicator · Leveling Feet · Low Battery Indicator · Multi-Language · NEMA 4X IP67 · Overload Protection · Overload/Underload Indicators · Rechargeable Battery (Option)

Software Lockout · Stability Indicator · Time/Date · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 5000 WASHDOWN ACCESSORIES

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Micro SD Card 8G	30303533	77
Wheel Kit, Defender Series	30372146	182
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
In-Use-Cover, TD52XW	30424023	38
Holder Kit Printer SST	30424025	85
Wall Mount Kit, SST, TD52XW	30424026	115
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227

Accessories	Item Number	List Price (USD)
Rechargeable battery Li-ion TD52	30424405	271
USB Host Interface for Dongle TD52	30424406	191
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227
In-Use-Cover, Set(10), TD52XW	30469949	299
USB host interface for flash drive	30572923	182
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 XW Indicators	80500552	244
Software, Winwedge	80850080	723

DEFENDER™ 5000 WASHDOWN LOW PROFILE

Multifunctional Stainless Steel Washdown Bench Scale for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
304-grade stainless steel platform and frame, stainless steel IP68 indicator, IP67 stainless steel load cell (single range), non-slip adjustable rubber feet

Design Features
Resolution up to 12,500d, 150% overload capacity, checkweighing display and beep, menu lock switch, selectable display languages, selectable filter, stability indicator, overload/underload indicators, selectable display controls, auto print and tare

Operation
Internal power supply with power cord (included) or rechargeable battery (option)

EasyConnect™

User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durably constructed of a stainless steel platform, frame & IP68 indicator; IP67 stainless steel loadcell (NTEP/MC/OIML/EC Type single range).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52XW2WQS5	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in × 10 in (254 mm × 254 mm)	30461661	2,137
D52XW5WQS5	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in × 10 in (254 mm × 254 mm)	30461662	2,137
D52XW12WQS5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in × 10 in (254 mm × 254 mm)	30461663	2,137
D52XW12WQR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30461664	2,312
D52XW25WQR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30461665	2,312
D52XW50WQR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30461464	2,312
D52XW25WQL5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in × 18 in (457 mm × 457 mm)	30461465	2,920
D52XW50WQL5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30461466	2,920
D52XW125WQL5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in × 18 in (457 mm × 457 mm)	30461467	2,920
D52XW50WTX5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 18 in (610 mm × 457 mm)	30461668	3,414
D52XW125WTX5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30461669	3,414
D52XW250WTX5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30461670	3,414
D52XW50WQV5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 24 in (610 mm × 610 mm)	30461671	3,909
D52XW125WQV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30461672	3,909

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Micro SD Card 8G	30303533	77
Wheel Kit, Defender Series	30372146	182
Gland M16 D52	30379716	30

Accessories	Item Number	List Price (USD)
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
In-Use-Cover, TD52XW	30424023	38
Holder Kit Printer SST	30424025	85
Wall Mount Kit, SST, TD52XW	30424026	115

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Software Lockout, Stability Indicator, Time/Date, Measurement Canada Approved, NTEP Certified

Specifications and Prices subject to change without notice.

Defender™ 5000 Washdown Low Profile Accessories

Accessories	Item Number	List Price (USD)
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227
Rechargeable battery Li-ion TD52	30424405	271
USB Host Interface for Dongle TD52	30424406	191
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227

Accessories	Item Number	List Price (USD)
In-Use-Cover, Set(10), TD52XW	30469949	299
USB host interface for flash drive	30572923	182
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 XW Indicators	80500552	244

DEFENDER™ 5000

Multifunctional Bench Scale for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
ABS plastic (TD52P) or stainless steel (TD52XW) indicator, 304-grade stainless steel platform with sand gray powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet

Design Features
User-configurable resolution up to 25,000d, 150% overload capacity protection, checkweighing symbols with selectable operation and audible signal settings, menu lock switch, multiple selectable operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable adjust contrast settings, auto-dim display, auto-off, brightness adjustment, screensaver, auto tare

Operation
Internal power supply with power cord (included) or rechargeable battery (option)

EasyConnect™

User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durable construction with a stainless steel platform, sand gray powder-coated steel frame & aluminum load cell. Defender meets NTEP/Measurement Canada or OIML/EC type approvals (depending on region).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52XW12RQR1	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in × 12 in (305 mm × 305 mm)	30461689	2,137
D52XW25RQR1	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30461690	2,137
D52XW50RQR1	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30461691	2,137
D52XW12RTR1	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in × 12 in (355 mm × 305 mm)	30461692	2,137
D52XW25RTR1	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30461693	2,137
D52XW50RTR1	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30461694	2,137
D52XW50RQL2	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30461695	2,565
D52XW125RQL2	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in × 18 in (457 mm × 457 mm)	30461696	2,565
D52XW50RTX2	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 18 in (610 mm × 457 mm)	30461697	2,704
D52XW125RTX2	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 18 in (610 mm × 457 mm)	30461698	2,704
D52XW250RTX2	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30461699	2,704
D52XW50RQV3	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 24 in (610 mm × 610 mm)	30461700	2,920
D52XW125RQV3	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 24 in (610 mm × 610 mm)	30461701	2,920
D52XW250RQV3	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30461702	2,920
D52XW500RQV3	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	24 in × 24 in (610 mm × 610 mm)	30461703	2,920
D52XW125RTV3	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30461704	3,631
D52XW250RTV3	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30461705	3,631
D52XW500RTV3	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30461706	3,631
D52P12RQR1	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in × 12 in (305 mm × 305 mm)	30461630	1,916
D52P25RQR1	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30461631	1,916

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Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · GMP/GLP · Level Indicator · Leveling Feet · Low Battery Indicator · Multi-Language · Overload Protection · Overload/Underload Indicators · Rechargeable Battery (Option) · Software Lockout

Stability Indicator · Time/Date · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 5000

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52P50RQR1	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30461632	1,916
D52P12RTR1	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in × 12 in (355 mm × 305 mm)	30461633	1,916
D52P25RTR1	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30461634	1,916
D52P50RTR1	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30461635	1,916
D52P50RQL2	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30461636	2,338
D52P125RQL2	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in × 18 in (457 mm × 457 mm)	30461637	2,338
D52P50RTX2	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 18 in (610 mm × 457 mm)	30461638	2,467
D52P125RTX2	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 18 in (610 mm × 457 mm)	30461639	2,467
D52P250RTX2	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30461640	2,467
D52P50RQV3	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 24 in (610 mm × 610 mm)	30461641	2,833
D52P125RQV3	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 24 in (610 mm × 610 mm)	30461642	2,833
D52P250RQV3	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30461643	2,833
D52P500RQV3	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	24 in × 24 in (610 mm × 610 mm)	30461644	2,833
D52P125RTV3	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30461645	3,394
D52P250RTV3	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30461646	3,394
D52P500RTV3	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30461647	3,394

Accessories	Item Number	List Price (USD)
Cable, RS232, 1.5m, R71 to balance	30057595	69
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Micro SD Card 8G	30303533	77
Wheel Kit, Defender Series	30372146	182
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
In-Use-Cover, TD52P	30424022	30
In-Use-Cover, TD52XW	30424023	38
Holder Kit Printer SST	30424025	85
Wall Mount Kit, SST, TD52XW	30424026	115
Wall Mount Kit, CS, TD52P	30424027	85
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227

Accessories	Item Number	List Price (USD)
Rechargeable battery Li-ion TD52	30424405	271
USB Host Interface for Dongle TD52	30424406	191
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227
In-Use-Cover, Set(10), TD52P	30469948	227
In-Use-Cover, Set(10), TD52XW	30469949	299
Auxiliary display AD7-RS	30472064	99
USB host interface for flash drive	30572923	182
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 IBM 9P Male-to-Female	80500525	262
Cable RS232 XW Indicators	80500552	244
Software, Winwedge	80850080	723

DEFENDER™ 5000 LOW PROFILE - METAL INDICATOR

Multifunctional Bench Scale for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
ABS plastic (TD52P) or stainless steel (TD52XW) indicator, 304-grade stainless steel platform with sand gray powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet

Design Features
User-configurable resolution up to 25,000d, 150% overload capacity protection, checkweighing symbols with selectable operation and audible signal settings

Operation
Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)

EasyConnect™

User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durable construction with a stainless steel platform, sand gray powder-coated steel frame & aluminum load cell. Defender meets NTEP/ Measurement Canada or OIML/EC type approvals (depending on region).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52XW12RQR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in × 12 in (305 mm × 305 mm)	30467608	2,029
D52XW25RQR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30467609	2,029
D52XW50RQR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30467610	2,029
D52XW12RTR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in × 12 in (355 mm × 305 mm)	30467611	2,106
D52XW25RTR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30467612	2,106
D52XW50RTR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30467613	2,106
D52XW50RQL5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30467614	2,421
D52XW125RQL5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in × 18 in (457 mm × 457 mm)	30467615	2,421
D52XW50RTX5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 18 in (610 mm × 457 mm)	30467616	2,565
D52XW125RTX5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 18 in (610 mm × 457 mm)	30467617	2,565
D52XW250RTX5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30467618	2,565
D52XW50RQV5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 24 in (610 mm × 610 mm)	30467619	2,699
D52XW125RQV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 24 in (610 mm × 610 mm)	30467620	2,699
D52XW250RQV5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30470990	2,699
D52XW125RTV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30467621	3,198

Accessories on next page

Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · GMP/GLP · Level Indicator · Leveling Feet · Low Battery Indicator · Multi-Language · Overload Protection · Overload/Underload Indicators · Rechargeable Battery (Option) · Software Lockout

Stability Indicator · Time/Date · Measurement Canada Approved · NTEP Certified

DEFENDER™ 5000 LOW PROFILE ACCESSORIES

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Micro SD Card 8G	30303533	77
Wheel Kit, Defender Series	30372146	182
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
In-Use-Cover, TD52XW	30424023	38
Holder Kit Printer SST	30424025	85
Wall Mount Kit, SST, TD52XW	30424026	115
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227

Accessories	Item Number	List Price (USD)
Rechargeable battery Li-ion TD52	30424405	271
USB Host Interface for Dongle TD52	30424406	191
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227
In-Use-Cover, Set(10), TD52XW	30469949	299
Auxiliary display AD7-RS	30472064	99
USB host interface for flash drive	30572923	182
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 XW Indicators	80500552	244
Software, Winwedge	80850080	723

DEFENDER™ 5000 LOW PROFILE - PLASTIC INDICATOR

Multifunctional Bench Scale for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
ABS plastic (TD52P) or stainless steel (TD52XW) indicator, 304-grade stainless steel platform with sand gray powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet

Design Features
User-configurable resolution up to 25,000d, 150% overload capacity protection, checkweighing symbols with selectable operation and audible signal settings

Operation
Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)

EasyConnect™

User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durable construction with a stainless steel platform, sand gray powder-coated steel frame & aluminum load cell. Defender meets NTEP/ Measurement Canada or OIML/EC type approvals (depending on region).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52P12RQR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in × 12 in (305 mm × 305 mm)	30461648	1,766
D52P25RQR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30461649	1,766
D52P50RQR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30461650	1,766
D52P12RTR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in × 12 in (355 mm × 305 mm)	30461651	1,839
D52P25RTR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30461652	1,839
D52P50RTR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30461653	1,839
D52P50RQL5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30461654	2,163
D52P125RQL5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in × 18 in (457 mm × 457 mm)	30461655	2,163
D52P50RTX5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 18 in (610 mm × 457 mm)	30461656	2,261
D52P125RTX5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 18 in (610 mm × 457 mm)	30461657	2,261
D52P250RTX5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30461658	2,261
D52P50RQV5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 24 in (610 mm × 610 mm)	30461659	2,415
D52P125RQV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 24 in (610 mm × 610 mm)	30461660	2,415
D52P250RQV5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30467606	2,415
D52P125RTV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30467607	3,188

Accessories on next page

Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · GMP/GLP · Level Indicator · Leveling Feet · Low Battery Indicator · Multi-Language · Overload Protection · Overload/ Underload Indicators · Rechargeable Battery (Option) · Software Lockout

Stability Indicator · Time/Date · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 5000 LOW PROFILE ACCESSORIES

Accessories	Item Number	List Price (USD)
Cable, RS232, 1.5m, R71 to balance	30057595	69
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Micro SD Card 8G	30303533	77
Wheel Kit, Defender Series	30372146	182
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
In-Use-Cover, TD52P	30424022	30
Holder Kit Printer SST	30424025	85
Wall Mount Kit, CS, TD52P	30424027	85
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227

Accessories	Item Number	List Price (USD)
Rechargeable battery Li-ion TD52	30424405	271
USB Host Interface for Dongle TD52	30424406	191
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227
In-Use-Cover, Set(10), TD52P	30469948	227
Auxiliary display AD7-RS	30472064	99
USB host interface for flash drive	30572923	182
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 IBM 9P Male-to-Female	80500525	262
Software, Winwedge	80850080	723

DEFENDER™ 3000 WASHDOWN - I-D33

Stainless Steel Bench Scales for Basic Industrial Washdown Applications

Display
7 Segment LCD with multicolor backlight

Communication
Standard RS232 and optional USB Device or Ethernet

Construction
304-grade stainless steel platform and frame, stainless steel IP66 indicator, IP67 load cell, non-slip adjustable rubber feet

Design Features
150% overload protection

Operation
Internal power supply with power cord (included) or rechargeable battery (included)

Results are clearly shown using the large, bright backlit LCD display. In Checkweighing mode, the display changes color (yellow/green/red) to alert when it is within the target weight range.

This tough industrial scale features a 304-stainless steel platform and frame, IP67 load cell. Indicator features an IP66 washdown protected 304-stainless steel housing with mounting bracket.

Features software for Parts Counting, Checkweighing, and Totalization. Includes RS232 with optional USB Device or Ethernet for printing or data connectivity.

Model	Maximum Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D33XW15C1R6	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30685180	1,849
D33XW15C1R5*	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30685209	1,777
D33XW30C1R6	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30685181	1,849
D33XW30C1R5*	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30685210	1,803
D33XW75C1R6	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	14 in × 12 in (355 mm × 305 mm)	30685182	1,849
D33XW75C1R5*	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	14 in × 12 in (355 mm × 305 mm)	30685211	1,803
D33XW75C1L7	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685191	2,086
D33XW75C1L5*	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685216	2,034
D33XW150C1L7	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685192	2,086
D33XW150C1L5*	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685217	2,034
D33XW150C1X7	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685197	2,570
D33XW150C1X5*	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685222	2,524
D33XW300C1X7	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685198	2,570
D33XW300C1X5*	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685223	2,524

* Models ending in 5 have a Front Mount indicator

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Wheel Kit, Defender Series	30372146	182
Ethernet kit Defender Series	30429666	227
Zebra Label Printer ZD421T with RS232	30928908	927

Accessories	Item Number	List Price (USD)
Wheel Kit SST Defender Series	30616409	227
USB Device Interface Kit i-DT33	30699120	127
Dust Cover Set(5) i-DT33	30699121	64
Cable RS232 XW Indicators	80500552	244

Check Weighing · Parts Counting · Totalization · Weighing · Auto Shut-Off · Backlight · Environmental Filters · LED Check Weighing Indicator · Level Indicator · Leveling Feet · NEMA 4X IP66 · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Rechargeable Battery · Software Lockout · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 3000 HYBRID - HD33

Bench Scales for Basic Industrial Applications

Display
7 Segment LCD with multicolor backlight

Communication
Standard RS232 and optional USB Device or Ethernet

Construction
Stainless steel indicator, 304-stainless steel platform, powder-coated steel tubular frame, aluminum load cell, non-slip adjustable rubber feet

Design Features
150% overload protection

Operation
Internal power supply with power cord (included) or rechargeable battery (included)

Results are clearly shown using the large bright backlit LCD display. Display changes color (yellow/green/red) in Checkweighing mode to alert when within the target weight range.

This industrial scale features a 304 stainless steel platform, powder-coated steel tubular frame, and aluminum load cell. Indicator features a stainless steel housing and mounting bracket.

Features software for Parts Counting, Checkweighing, and Totalization. Includes RS232 with optional USB Device or Ethernet for printing or data connectivity.

Model	Maximum Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D33XW15B1R1	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30685177	1,133
D33XW15B1R5*	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30685206	1,082
D33XW30B1R1	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30685178	1,133
D33XW30B1R5*	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30685207	1,082
D33XW75B1R1	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	14 in × 12 in (355 mm × 305 mm)	30685179	1,133
D33XW75B1R5*	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	14 in × 12 in (355 mm × 305 mm)	30685208	1,082
D33XW75B1L2	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685185	1,334
D33XW75B1L5*	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685214	1,288
D33XW150B1L2	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685190	1,334
D33XW150B1L5*	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685215	1,288
D33XW150B1X2	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685195	1,437
D33XW150B1X5*	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685220	1,391
D33XW300B1X2	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685196	1,437
D33XW300B1X5*	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685221	1,391
D33XW300B1V3	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30685201	1,540
D33XW600B1V3	1,200 lb (600 kg)	0.2 lb (100 g)	0.5 lb (200 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30685202	1,540

* Models ending in 5 have a Front Mount indicator

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Wheel Kit, Defender Series	30372146	182
Ethernet kit Defender Series	30429666	227
Zebra Label Printer ZD421T with RS232	30928908	927

Accessories	Item Number	List Price (USD)
Wheel Kit SST Defender Series	30616409	227
USB Device Interface Kit i-DT33	30699120	127
Dust Cover Set(5) i-DT33	30699121	64
Cable RS232 XW Indicators	80500552	244

Check Weighing · Parts Counting · Totalization · Weighing · Auto Shut-Off · Backlight · Environmental Filters · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Rechargeable Battery · Software Lockout · Measurement Canada Approved · NTEP Certified

DEFENDER™ 3000 - I-D33

Bench Scales for Basic Industrial Applications

Display
7 Segment LCD with multicolor backlight

Communication
Standard RS232 and optional USB Device or Ethernet

Construction
ABS plastic indicator, 304-stainless steel platform, powder-coated steel tubular frame, aluminum load cell, non-slip adjustable rubber feet

Design Features
150% overload protection

Operation
Internal power supply with power cord (included), 6C (LR14) Batteries (not included) or Rechargeable Battery (option)

Results are clearly shown using the large, bright backlit LCD display. In Checkweighing mode, the display changes color (yellow/green/red) to alert when it is within the target weight range.

This tough industrial scale features a 304-stainless steel platform, powder-coated steel tubular frame, and aluminum load cell. Indicator features a durable ABS housing and steel mounting bracket.

Features software for Parts Counting, Checkweighing, and Totalization. Includes RS232 with optional USB Device or Ethernet for printing or data connectivity.

Model	Maximum Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D33P15B1R1	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30685174	1,015
D33P15B1R5*	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30685203	865
D33P30B1R1	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30685175	1,015
D33P30B1R5*	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30685204	865
D33P75B1R1	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	14 in × 12 in (355 mm × 305 mm)	30685176	1,015
D33P75B1R5*	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	14 in × 12 in (355 mm × 305 mm)	30685205	865
D33P75B1L2	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685183	1,231
D33P75B1L5*	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685212	999
D33P150B1L2	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685184	1,231
D33P150B1L5*	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30685213	999
D33P150B1X2	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685193	1,334
D33P150B1X5*	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685218	1,288
D33P300B1X2	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685194	1,334
D33P300B1X5*	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30685219	1,288
D33P300B1V3	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30685199	1,437
D33P600B1V3	1,200 lb (600 kg)	0.2 lb (100 g)	0.5 lb (200 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30685200	1,437

* Models ending in 5 have a Front Mount indicator

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Wheel Kit, Defender Series	30372146	182
Ethernet kit Defender Series	30429666	227
Zebra Label Printer ZD421T with RS232	30928908	927
Wheel Kit SST Defender Series	30616409	227

Accessories	Item Number	List Price (USD)
USB Device Interface Kit i-DT33	30699120	127
Dust Cover Set(5) i-DT33	30699121	64
Rechargeable battery Kit i-DT33P	30699122	64
Cable RS232 IBM 9P Male-to-Female	80500525	262

Check Weighing · Parts Counting · Totalization · Weighing · Auto Shut-Off · Backlight · Environmental Filters · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Battery Power · Software Lockout · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 3000 FIELD TEST

Portable Precision Ready for the Field

Display
7 Segment LCD with multicolor backlight

Communication
Standard RS232 and optional USB Device or Ethernet

Construction
ABS plastic indicator and case, powder-coated steel base

Design Features
Flexible coiled cable (extendable up to 9 ft.), 125% overload protection, selectable span calibration points, auto-zero tracking, battery-saving auto-off, Geo Code geographical gravity calibration adjustment, and software menu lockouts.

Operation
Internal power supply with power cord (included), 6C (LR14) batteries (not included) or rechargeable battery (optional)

A capacity of 150 lb with a readability of 0.05 lb and the powder-coated steel base in a case means that the Digital Field Test Scale provides precise, clear measurements, no matter where you're working.

The Field Test Scale comes packaged in a durable plastic carrying case with latches and carrying handle, ensuring maximum portability for use anywhere on the job—without limiting you to the lab.

The backlit LCD display allows for easy reading of results, even in low-light conditions. Can be powered using "C" cell batteries for up to 150 hours—optional internal rechargeable battery available.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
D33P75SD	150 lb (75 kg)	0.05 lb (0.02 kg)	12.44 in × 11 in (316 mm × 280 mm)	30728938	464

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Ethernet kit Defender Series	30429666	227
Zebra Label Printer ZD421T with RS232	30928908	927
USB Device Interface Kit i-DT33	30699120	127

Accessories	Item Number	List Price (USD)
Dust Cover Set(5) i-DT33	30699121	64
Rechargeable battery Kit i-DT33P	30699122	64
Cable RS232 IBM 9P Male-to-Female	80500525	262
DB9 Adapter, Male-to-Male	30692384	9

Check Weighing · Parts Counting · Totalization · Weighing · Auto Shut-Off · Backlight · Environmental Filters · LED Check Weighing Indicator · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Battery Power · Software Lockout

COURIER™ 7000

Precise Standard Scales for Dedicated Shipping Applications

Display
6-digit, 7-segment LCD display with white backlight, 1.1 in./28 mm-high digits

Communication
Easy access communication ports including standard RS232 and USB type C Ethernet or 2nd RS232 or WiFi/Bluetooth (available as accessories sold separately)

Construction
ABS indicator, 304-stainless steel platform, powder-coated frame, aluminum load cell, non-slip adjustable rubber feet

Design Features
150% overload protection

Operation
Standard AC adapter with USB type C cable detachable (included) or 4 AA batteries (not included)

Designed to withstand constant use from offices to distribution centers. Fast setup with connection to shipping systems like UPS and FedEx. "GeoCode" application for local calibration adjustment.

Display Hold retains weight data and presents it on a large, easily accessible backlit display. Its Weight Alert mode alerts users to packages that may be too heavy in relation to defined values.

Courier 7000 can run on USB type-C or disposable battery power. Optional Ethernet, second RS232, Bluetooth/WiFi, remote display, ball top and roller top for material handling efficiency are available.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
i-C71M15R	30 lb / 15kg	0.01 lb / 0.005 kg	0.01 lb / 0.005 kg	12 × 14 in / 305 × 355 mm platform	30745875	644
i-C71M75R	150 lb / 75 kg	0.05 lb / 0.02 kg	0.05 lb / 0.05 kg	12 × 14 in / 305 × 355 mm platform	30745876	644
i-C71M50L	100 lb / 50 kg	0.02 lb / 0.01 kg	0.02 lb / 0.01 kg	18 × 18 in / 457 × 457 mm	30745877	1,045
i-C71M125L	250 lb / 125 kg	0.05 lb / 0.02 kg	0.05 lb / 0.05 kg	18 × 18 in / 457 × 457 mm	30745878	1,045
i-C71M125X	250 lb / 125 kg	0.05 lb / 0.02 kg	0.05 lb / 0.05 kg	24 × 24 in / 610 × 610 mm	30745879	1,231

Accessories	Item Number	List Price (USD)
2nd RS232 Kit for Courier 7000	30745880	124
Ethernet Kit for Courier 7000	30745882	221
Wifi-BT Kit for Courier 7000 (USB Host + Dongle)	30745881	490
Auxiliary display AD7-MD for Courier 7000	30472063	179
Remote Column Kit for Courier 7000 or 5000, Painted Steel 13 in / 330 mm	30800931	77
Ball Top for Courier 7000 12 × 14 in / 305 × 355 mm	30819625	180

Accessories	Item Number	List Price (USD)
Ball Top for Courier 7000 18 × 18 in / 458 × 458 mm	30819627	263
Ball Top for Courier 7000 24 × 24 in / 611 × 611 mm	30819648	366
Roller Top for Courier 7000 12x14 in / 305 × 355 mm	30819626	258
Roller Top for Courier 7000 18 × 18 in / 458 × 458 mm	30819649	294
Roller Top for Courier 7000 24 × 24 in / 611 × 611 mm	30819650	489
Thermal Printer STP-103	80251992	1,035

Display Hold · Totalization · Weighing · Auto Shut-Off · Auto Standby · Backlight · Battery Power · Environmental Filters · Level Indicator · Leveling Feet · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Software Lockout · Stability Indicator · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

COURIER™ 5000

Low-Profile Scales Ideal for General Shipping and Animal Weighing Applications

Display
6-digit, 7-segment LCD display with white backlight, 1.1 in./28 mm-high digits

Communication
Standard USB type C

Construction
ABS indicator, 304 stainless steel platform, powder-coated frame

Design Features
150% overload protection

Operation
Standard AC adapter or USB type C cable (included) or 3 AA Batteries (not included)

Easy-to-use scales for general shipping use with painted steel base. Stainless steel pan holds up to daily use and is easy to keep sanitary. Adjustable display for mounting to adapt to your workspace.

The Dynamic Weighing/Display Hold application is ideal for large boxes and packages as it retains weight data on the display. It's also ideal for animals in veterinary applications.

AC adapter power included. Simple USB type C for data and power connection – includes UPS software protocol string. Can also run using disposable battery power.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
i-C52M6R	12 lb / 6 kg	0.005 lb / 0.002 kg	12.6 × 13 in / 319 × 329 mm	30745897	304
i-C52M15R	30lb / 15kg	0.01 lb / 0.005 kg	12.6 × 13 in / 319 × 329 mm	30951011	304
i-C52M30R	60 lb / 30 kg	0.02 lb / 0.01 kg	12.6 × 13 in / 319 × 329 mm	30745898	304
i-C52M50R	100 lb / 50 kg	0.05 lb / 0.02 kg	12.6 × 13 in / 319 × 329 mm	30745796	304
i-C52M50L	100 lb / 50 kg	0.05 lb / 0.02 kg	15.7 × 20.5 in / 400 × 520 mm	30745797	361
i-C52M100L	200 lb / 100 kg	0.1 lb / 0.05 kg	15.7 × 20.5 in / 400 × 520 mm	30745948	361
i-C52M200L	400 lb / 200 kg	0.2 lb / 0.1 kg	15.7 × 20.5 in / 400 × 520 mm	30745949	361
i-C52M200X	400 lb / 200 kg	0.2 lb / 0.1 kg	23.6 × 35.4 in / 600 × 900 mm	30745950	567

Accessories	Item Number	List Price (USD)
Remote Column Kit for 5000, Painted Steel 13 in / 330 mm	30800931	77
Remote Column Kit for 5000, Painted Steel 38.6 in / 980 mm	30795819	149

Accessories	Item Number	List Price (USD)
Cable base indicator 29 ft / 9m	30809920	26
Rubber Mat Kit Antiskid 23.6 × 35.4 in / 600 × 900 mm	30548975	77

Dynamic Weighing · Totalization · Weighing · Auto Shut-Off · Auto Standby · Backlight · Battery Power · Environmental Filters · Leveling Feet L, X Models · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Software Lockout · Stability Indicator

COURIER™ 3000

User-Friendly Basic Low-Profile Scales for General Shipping and Veterinary Applications

Display
6-digit, 7-segment LCD display with white backlight, 1.1 in./28 mm-high digits

Construction
ABS indicator, powder-coated steel platform and frame

Design Features
150% overload protection

Operation
AC Adapter (included) or 3 AA Batteries (not included)

Ideal for general shipping jobs or veterinary applications. Low-profile design with 1.5 mm-thick painted steel platform to withstand rigorous daily use. Coiled cable ensures flexible display mounting.

The Courier 3000's Display Hold key (for use with large boxes and packages) retains weight on the large 1.1 in./28 mm-high backlit display until cleared.

AC adapter power included and disposable battery power (not included) for portable use.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
i-C31M35R	70 lb / 35 kg	0.05 lb / 0.02 kg	12.6 × 13 in / 319 × 329 mm	30809866	180
i-C31M75R	150 lb / 75 kg	0.1 lb / 0.05 kg	12.6 × 13 in / 319 × 329 mm	30809867	180
i-C31M200R	400 lb / 200 kg	0.2 lb / 0.1 kg	12.6 × 13 in / 319 × 329 mm	30809908	180
i-C31M75L	150 lb / 75 kg	0.1 lb / 0.05 kg	15.7 × 20.5 in / 400 × 520 mm	30809909	304
i-C31M200L	400 lb / 200 kg	0.2 lb / 0.1 kg	15.7 × 20.5 in / 400 × 520 mm	30809910	304

Accessories	Item Number	List Price (USD)
Cable base indicator 29 ft / 9m	30809920	26

Display Hold · Weighing · Auto Shut-Off · Auto Standby · Backlight · Battery Power · Leveling Feet L Models · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Stability Indicator

Specifications and Prices subject to change without notice.

COURIER™ 1000

Compact Portable Shipping Scales for General Shipping Applications

Display
4-digit, 7-Segment LCD, 0.8 in./20 mm-high digits

Construction
ABS housing and platform, stainless steel platform (accessory sold separately), transportation handles

Design Features
150% overload protection

Operation
AC adapter (included) or 3 C (LR14) batteries (not included)

Its ultra-compact ABS plastic design combines light weight and durability. Courier scales are exceptionally easy to transport thanks to their integrated handles.

Large 0.8 inch/20 mm-high display works with Dynamic Weighing mode to store data and ensure it is easily accessible when weighing packages. It is also ideal for weighing small animals in veterinary use.

Battery powered (batteries not included) for use in the office or shop. AC adapter power included.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
i-C12P9	20 lb / 9 kg	0.01 lb / 0.005 kg	11 × 12.4 in / 280 × 316 mm	30820355	191
i-C12P20	44 lb / 20 kg	0.02 lb / 0.01 kg	11 × 12.4 in / 280 × 316 mm	30820356	191
i-C12P75	165 lb / 75 kg	0.1 lb / 0.05 kg	11 × 12.4 in / 280 × 316 mm	30820357	191

Accessories	Item Number	List Price (USD)
Pan, SST, C11P	80251248	75

Display Hold · Dynamic Weighing · Weighing · Auto Shut-Off · Battery Power · Low Battery Indicator · Overload Protection · Stability Indicator

RANGER™ COUNT 4000

Top-of-the-Line Counting Scales for Even the Toughest Industrial Weighing Conditions

Display
3 window backlit liquid crystal display (LCD), 3 color checkweighing LEDs

Communication
Easy access communication port including standard RS232 (included) and second RS232, USB or Ethernet (accessories sold separately)

Construction
Rugged Cast Aluminum Housing, Stainless Steel Platform

Design Features
Cast Aluminum Housing, stainless steel platform, sealed front panel, menu lockswitch, up front level indicator, adjustable leveling feet, selectable environmental and auto-print settings, stability indicator, overload and underload indicators, low battery indicator, auto shut-off, auto tare, rechargeable battery with 100 hours between charges.

Operation
AC power (included) or rechargeable battery (included)

Shown with optional 2nd base kit & platform

Sturdy metal housing and slip-resistant rubber feet provide the protection, stability and long product life needed for tough industrial weighing.

Accurate weighing and counting performance is assured with 1:1,500,000 internal counting resolution and auto-optimization software that reduces errors.

Easy-to-operate with SmarText™ software, a centrally located count display and dedicated Sample and Tare keys.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
RC41M3	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30236779	1,334
RC41M6	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30236940	1,334
RC41M15	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30236941	1,334
RC41M30	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30236942	1,334

Accessories	Item Number	List Price (USD)
PCBA Kit 2nd Platform RC31 R41 RC41	30037446	210
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	210
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	210
USB Kit R31 RC31 R41 RC41 V71	30037449	210
Printer, Impact, SF40A, AM	30064203	1,342
In Use Cover R41 RC41 5PCS	30656205	49

Accessories	Item Number	List Price (USD)
Auxiliary display AD7-RS	30472064	99
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 IBM 9P Male-to-Female	80500525	262
Software, Winwedge	80850080	723
Carrying Case	30795772	165

Check Weighing · Gross / Net / Tare · Parts Counting · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · External Analog Base Input (Option) · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Rechargeable Battery · Stability Indicator · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

RANGER™ COUNT 3000

Reliable Counting Scales to Ensure Accurate Results

Display
3 window backlit liquid crystal display (LCD), 3 color checkweighing LEDs

Communication
Easy access communication port including standard RS232 (included) and second RS232, USB or Ethernet (accessories sold separately)

Construction
ABS housing, stainless steel platform, numeric keypad, menu lock switch, up front level indicator, transportation handle

Design Features
30 item library, 210 hours of battery life, 3 LED checkweighing lights with selectable operation and audible signal settings, auto tare, selectable environmental and auto-print settings, auto shut-off, optional 2nd scale input

Operation
AC power (included) or rechargeable battery (included)

Accurate weighing and counting are assured with high-resolution, 30-item library function, and auto-optimization software that reduces errors.

Easy to use in multi-step counting operations. Counting performance is assured with 1:1,500,000 internal counting resolution and auto-optimization software that reduces errors.

Eliminate waiting time and increase control of your operation with accurate one-second results.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
RC31P1502	3 lb (1.5 kg)	0.0001 lb (0.05 g)	0.001 lb (0.5 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031787	1,107
RC31P3	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031788	1,107
RC31P6	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031789	1,107
RC31P15	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031790	1,107
RC31P30	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031791	1,107

Accessories	Item Number	List Price (USD)
PCBA Kit 2nd Platform RC31 R41 RC41	30037446	210
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	210
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	210
USB Kit R31 RC31 R41 RC41 V71	30037449	210
Hook R21 RC21 RC31 RC41 V71	30037450	150
In Use Cover R21 RC21 R31 RC31 5PCS	30656204	49

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 IBM 9P Male-to-Female	80500525	262
Software, Winwedge	80850080	723
Carrying Case	30795772	165

Check Weighing · Gross / Net / Tare · Parts Counting · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · External Analog Base Input (Option) · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload Protection · Overload/Underload Indicators · Rechargeable Battery · Stability Indicator · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

RANGER™ 7000

Top-of-the-Line Compact Scales for Even the Most Complex Industrial Applications

Display
4.3" (109 mm) Full-color WQVGA graphic display with user-controlled brightness

Communication
Easy access communication port including standard USB and RS232 (included) and an optional third port of RS232 or Ethernet or Discrete IO (accessories sold separately). GLP/GMP Data Output with Real Time Clock. Data Transfer Function.

Construction
Modular design, die-cast housing, removable stainless steel platform, integral weigh below hook, menu lock switch, level indicator

Design Features
Checkweighing lights with selectable operation and audible signal settings, several selectable operating languages, selectable environmental and autoprint settings, stability indicator, overload/underload indicators, selectable brightness settings, auto-dim, auto-sleep, auto tare, chain tare

Operation
AC power (included) or rechargeable battery (accessory sold separately)

Simplify complex applications and minimize the need for manual calculations with 10 advanced application modes, peripheral device control and an optional kit for a second scale platform.

The most precise scale in its class with one-second stabilization time, up to 75,000d or 350,000d display resolution and legal-for-trade certifications.

Extremely durable scale designed to thrive in rugged industrial environments. Features IP54-rated metal housing and sealed metal terminal.

Model	InCal™	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
R71MD3	-	6 lb (3 kg)	0.0001 lb (0.05 g)	0.001 lb (0.5 g)	11 in × 11 in (280 mm × 280 mm)	30070289	2,529
R71MD6	-	15 lb (6 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	11 in × 11 in (280 mm × 280 mm)	30070310	2,529
R71MD15	-	30 lb (15 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	12.2 in × 14.8 in (311 mm × 377 mm)	30070311	2,529
R71MD35	-	70 lb (35 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	12.2 in × 14.8 in (311 mm × 377 mm)	30070312	2,529
R71MD60	-	150 lb (60 kg)	0.002 lb (1 g)	0.02 lb (10 g)	12.2 in × 14.8 in (311 mm × 377 mm)	30212873	2,529
R71MHD3	•	6 lb (3 kg)	0.00002 lb (0.01 g)	0.0002 lb (0.1 g)	8.3 in × 8.3 in (210 mm × 210 mm)	30088840	4,012
R71MHD6	•	15 lb (6 kg)	0.00005 lb (0.02 g)	0.0005 lb (0.2 g)	8.3 in × 8.3 in (210 mm × 210 mm)	30088841	4,455
R71MHD15	•	30 lb (15 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	12.2 in × 14.8 in (311 mm × 377 mm)	30088842	5,892
R71MHD35	•	70 lb (35 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	12.2 in × 14.8 in (311 mm × 377 mm)	30088843	7,102

Accessories	Item Number	List Price (USD)
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	210
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	210
BATTERY,pack,Li-ion,R,14.8V,2600mAh	30041295	523
Cable, RS232, 1.5m, R71 to balance	30057595	69
Printer, Impact, SF40A, AM	30064203	1,342
Column Kit, Painted, R71	30095408	210
PCBA Kit, 2nd Platform, R71	30097590	211
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Cable, Extension, 9m, R71	30101495	149

Accessories	Item Number	List Price (USD)
Accessory, In Use Cover, R71	30135320	64
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
PCBA Kit, Alibi Memory, R71 T71	80500503	167
Cable RS232 IBM 9P Male-to-Female	80500525	262
Software, Winwedge	80850080	723
Auxiliary display AD7-RS	30472064	99

Check Weighing · Density Determination · Differential Weighing · Display Hold · Dynamic Weighing · Filling · Formulation · Gross / Net / Tare · Parts Counting · Percent Weighing · Statistics · Totalization · Weighing · Accumulation · Audible Alerts · Environmental Filters · External Analog Base Input · GLP Data Output · GMP/GLP · Internal Calibration · LED Check Weighing Indicator

Level Indicator · Leveling Feet · Overload/Underload Indicators · Rechargeable Battery · Stability Indicator · Time/Date · Weigh Below Hook · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

RANGER™ 4000

Durable Compact Scales for the Toughest Industrial Weighing Environments

Display
Light-emitting diode display (LED), 3 color checkweighing LEDs

Communication
Easy access communication port including standard RS232 (included) and second RS232, USB or Ethernet (accessories sold separately)

Construction
Rugged Cast Aluminum Housing, Stainless Steel Platform

Design Features
Cast Aluminum Housing, stainless steel platform, integral weigh-below hook, sealed front panel, menu lock switch, up front level indicator, adjustable leveling feet, selectable environmental and auto-print settings, stability indicator, overload and underload indicators, low battery indicator, auto shut-off, auto tare

Operation
AC power (included) or rechargeable battery (included)

Sturdy metal housing and slip-resistant rubber feet provide the protection, stability and long product life needed for tough industrial weighing.

The most user-friendly scale on the market features Smart Text™ for easy operation and setup to ensure efficiency in the workplace. Includes rechargeable battery with 100 hours between charges.

With the largest display in its class, checkweighing LED indicators and backlit LCD display, the Ranger 4000 can function in almost any industrial environment.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
R41ME3	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30236775	1,267
R41ME6	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30236776	1,267
R41ME15	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30236777	1,267
R41ME30	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30236778	1,267

Accessories	Item Number	List Price (USD)
PCBA Kit 2nd Platform RC31 R41 RC41	30037446	210
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	210
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	210
USB Kit R31 RC31 R41 RC41 V71	30037449	210
Printer, Impact, SF40A, AM	30064203	1,342
In Use Cover R41 RC41 5PCS	30656205	49

Accessories	Item Number	List Price (USD)
Auxiliary display AD7-RS	30472064	99
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 IBM 9P Male-to-Female	80500525	262
Software, Winwedge	80850080	723
Carrying Case	30795772	165

Check Weighing · Display Hold · Dynamic Weighing · Gross / Net / Tare · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · External Analog Base Input (Option) · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload/ Underload Indicators · Rechargeable Battery · Stability Indicator · Weigh Below Hook

Measurement Canada Approved · NTEP Certified

RANGER™ 3000

Multi-Purpose Compact Bench Scales for Industrial Weighing Applications

Display
Backlit liquid crystal display (LCD), 3 color checkweighing LEDs

Communication
Easy access communication port including standard RS232 (included) and second RS232, USB or Ethernet (accessories sold separately)

Construction
ABS housing, stainless steel platform, menu lock switch, up-front level indicator, integral weigh-below hook, transportation handle

Design Features
210 hours of battery life, 3 LED checkweighing lights with selectable operation and audible signal settings, selectable environmental and auto-print settings, auto shut-off, auto tare

Operation
AC power (included) or rechargeable battery (included)

With the largest display in its class, checkweighing LED indicators and backlit LCD display, the Ranger 3000 can function in tough industrial environments.

User-friendly scale with easy setup to ensure efficiency in the workplace.

Eliminate waiting time and increase control of your operation with accurate one-second results.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
R31P1502	3 lb (1.5 kg)	0.0001 lb (0.05 g)	0.001 lb (0.5 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031707	886
R31P3	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031708	886
R31P6	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031709	886
R31P15	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031710	886
R31P30	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031711	886

Accessories	Item Number	List Price (USD)
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	210
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	210
USB Kit R31 RC31 R41 RC41 V71	30037449	210
In Use Cover R21 RC21 R31 RC31 5PCS	30656204	49
Printer, Impact, SF40A, AM	30064203	1,342

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 IBM 9P Male-to-Female	80500525	262
Software, Winwedge	80850080	723
Carrying Case	30795772	165

Check Weighing · Display Hold · Dynamic Weighing · Parts Counting · Percent Weighing · Weighing · Accumulation · Auto Shut-Off · Backlight · Environmental Filters · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload/Underload Indicators · Rechargeable Battery · Stability Indicator · Weigh Below Hook · Measurement Canada Approved · NSF Listed · NTEP Certified

VALOR™ 7000

Improve Productivity & Handle Demanding Applications With This Adaptable Multi-Functional Scale

Display
Dual backlit Liquid Crystal Display (LCD), 3 color checkweigh LEDs

Communication
RS232 (included); USB, Ethernet, or second RS232 (accessories sold separately)

Construction
ABS housing, stainless steel platform, touchless sensor, transportation handle, menu lock switch, up front level indicator

Design Features
210 hours of battery life, 3 LED checkweighing lights with selectable operation and audible signal settings, selectable environmental and auto-print settings, auto shut-off, auto tare

Operation
AC power (included) or rechargeable battery (included)

Food-safe Valor 7000 is NSF-certified, USDA-AMS accepted, and supports HACCP-certified systems -- suitable for food applications in dry areas.

Large displays with backlight allow for easy viewing of results. Easy access communication ports for fast and useful data transfer and storage.

Valor 7000 produces repeatable and accurate results within less than one second to virtually eliminate your wait time and improve productivity.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
V71P1502T	3 lb (1.5 kg)	0.0001 lb (0.05 g)	0.001 lb (0.5 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031827	926
V71P3T	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031828	926
V71P6T	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031829	926
V71P15T	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031830	926
V71P30T	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in × 11.8 in (225 mm × 300 mm)	30031831	926

Accessories	Item Number	List Price (USD)
In-Use-Cover, V71	30037445	55
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	210
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	210
USB Kit R31 RC31 R41 RC41 V71	30037449	210
Hook R21 RC21 RC31 RC41 V71	30037450	150
In-Use-Cover, Set(10), V71	30037469	107

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 IBM 9P Male-to-Female	80500525	262
Software, Winwedge	80850080	723
Carrying Case	30795772	165

Check Weighing · Percent Weighing · Weighing · Accumulation · Auto Shut-Off · Backlight · Environmental Filters · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload/Underload Indicators · Rechargeable Battery · Stability Indicator · Weigh Below Hook · Measurement Canada Approved · NSF Listed · NTEP Certified · USDA-AMS Accepted

VALOR™ 4000

High-Performance, Legal-for-Trade Food Scale Perfect for Harsh, Wet Workplace Conditions

Display
Dual light emitting diode (LED) displays, checkweighing LEDs on XW models

Construction
ABS housing with stainless steel platform (PW), stainless steel housing and platform (XW), illuminated up-front level indicator, rear touchless sensor

Design Features
Auto-close power jack cover, menu and mode setup navigation prompts on keys, transportation handle

Operation
AC adapter (included) or rechargeable battery (included)

Food-safe Valor 4000 is NSF-certified, USDA-AMS accepted, and supports HACCP-certified systems, making it suitable demanding food processing applications.

Increase productivity with its touchless Tare sensor, half-second stabilization time, checkweighing mode and LEDs, and percent weighing mode.

Unique knife-resistant keypad and IPX8 protection ensures durability and safe operation in wet conditions.

Model	Capacity	Readability	Certified Readability	Top Housing	Platform Size	Item Number	List Price (USD)
V41XWE1501T	3 lb (1.5 kg)	0.0005 lb (0.2 g)	0.001 lb (0.5 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30035444	793
V41XWE3T	6 lb (3 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30035445	793
V41XWE6T	15 lb (6 kg)	0.002 lb (1 g)	0.005 lb (2 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30035446	793
V41XWE15T	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30035447	793
V41PWE1501T	3 lb (1.5 kg)	0.0005 lb (0.2 g)	0.001 lb (0.5 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30035434	675
V41PWE3T	6 lb (3 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30035435	675
V41PWE6T	15 lb (6 kg)	0.002 lb (1 g)	0.005 lb (2 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30035436	675
V41PWE15T	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30035437	675

Accessories	Item Number	List Price (USD)
Large Pan, 11.8x8.8 in, 300x225mm V22 V41	30251753	82

Accessories	Item Number	List Price (USD)
In-Use Cover Set 10 V22PW V41PW	30572906	201

Check Weighing · Percent Weighing · Weighing · Accumulation · Backlight · Environmental Filters · IPX8 · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Overload/Underload Indicators · Rechargeable Battery · Stability Indicator · Measurement Canada Approved · NSF Listed · NTEP Certified · USDA-AMS Accepted

Specifications and Prices subject to change without notice.

VALOR™ 3000

Rugged, Full Stainless Steel Design in a High Performance, Portable Scale

Display
Backlit liquid crystal display (LCD)

Construction
Stainless steel housing and platform, up-front level indicator, load cell lock

Design Features
Selectable environmental settings, auto tare, auto shut-off, selectable power-up unit, optional food accessories

Operation
AC adapter (included) or 4 C (LR14) batteries (not included)

The stainless steel Valor 3000 Xtreme is NSF Certified and supports HACCP-Certified systems helping to ensure the integrity and safety of all food products weighed on the scale.

The compact Valor 3000 Xtreme requires minimal counter space and offers resolutions up to 40,000d and 0.01g, providing precise measurements in demanding environments.

With software for general weighing, percent weighing and specific gravity, the Valor 3000 can be used for a variety of food weighing and measurement needs.

Model	Protection Rating	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
V31XH202	-	0.44 lb (200 g)	0.00005 lb (0.01 g)		4.7 in (120 mm)	83998130	1,025
V31XH402	-	0.88 lb (400 g)	0.00005 lb (0.01 g)		4.7 in (120 mm)	83998178	1,427
V31X501	-	1.1 lb (500 g)	0.0005 lb (0.1 g)		4.7 in (120 mm)	83998176	793
V31XH2	-	4.4 lb (2 kg)	0.0005 lb (0.1 g)		6.2 in × 5.8 in (158 mm × 146 mm)	83998131	1,025
V31XH4	-	8.8 lb (4 kg)	0.0005 lb (0.1 g)		6.2 in × 5.8 in (158 mm × 146 mm)	83998177	1,427
V31X3	-	6.6 lb (3 kg)	0.005 lb (1 g)		6.2 in × 5.8 in (158 mm × 146 mm)	83998132	695
V31X3N	-	6.6 lb (3 kg)	0.002 lb (0.5 g)	0.005 lb (1 g)	6.2 in × 5.8 in (158 mm × 146 mm)	83999992	798
V31X6	-	13.22 lb (6 kg)	0.005 lb (1 g)		6.2 in × 5.8 in (158 mm × 146 mm)	83998133	695
V31X6N	-	13.22 lb (6 kg)	0.005 lb (1 g)	0.005 lb (2 g)	6.2 in × 5.8 in (158 mm × 146 mm)	83999996	798
V31XW301	IP65; NEMA 4X	0.66 lb (300 g)	0.0005 lb (0.1 g)		6.2 in × 5.8 in (158 mm × 146 mm)	83998134	798
V31XW3	IP65; NEMA 4X	6.6 lb (3 kg)	0.002 lb (0.5 g)	0.005 lb (1 g)	6.2 in × 5.8 in (158 mm × 146 mm)	83998135	798
V31XW6	IP65; NEMA 4X	13.22 lb (6 kg)	0.005 lb (1 g)	0.005 lb (2 g)	6.2 in × 5.8 in (158 mm × 146 mm)	83998136	798

Accessories	Item Number	List Price (USD)
Pan, SST, Sandwich, V31	80251147	117
Holder, SST, French Fries, V31	80251148	117

Accessories	Item Number	List Price (USD)
Holder, SST, Ice Cream Cone, V31	80251149	117
Carrying Case, V31	80251216	179

Percent Weighing · Specific Gravity · Weighing · Auto Shut-Off · Backlight · Battery Power · Environmental Filters · Level Indicator · Leveling Feet · NEMA 4X IP65 · Overload Protection · Stability Indicator · NSF Listed · NTEP Certified · USDA-AMS Accepted

VALOR™ 2000

High-Performance Food Scale Suitable for Harsh, Wet Workplace Conditions

Display
Dual light emitting diode (LED) displays, checkweighing LEDs on XW models

Construction
ABS housing with stainless steel platform (PW), stainless steel housing and platform (XW), up-front level indicator

Design Features
Auto-close power jack cover, transportation handle

Operation
AC adapter (included) or rechargeable battery (included)

The sturdy polycarbonate keypad offers protection from knives and other sharp instruments used in food preparation, processing and portioning applications.

A unique IPX8 flow-thru design ensures that the NSF-certified Valor 2000 will drain moisture in the scale when used in wet conditions.

Stabilization time is less than a half-second. Large front and rear LED displays allow for easy viewing so two operators can share one scale.

Model	Capacity	Readability	Top Housing	Platform Size	Item Number	List Price (USD)
V22XWE1501T	3 lb (1.5 kg)	0.0005 lb (0.2 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30035439	716
V22XWE3T	6 lb (3 kg)	0.001 lb (0.5 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30035440	716
V22XWE6T	15 lb (6 kg)	0.002 lb (1 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30035441	716
V22XWE15T	30 lb (15 kg)	0.005 lb (2 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30035442	716
V22XWE30T	60 lb (30 kg)	0.01 lb (5 g)	Stainless Steel	7.5 in × 9.5 in (190 mm × 242 mm)	30251705	716
V22PWE1501T	3 lb (1.5 kg)	0.0005 lb (0.2 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30035682	628
V22PWE3T	6 lb (3 kg)	0.001 lb (0.5 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30035683	628
V22PWE6T	15 lb (6 kg)	0.002 lb (1 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30035684	628
V22PWE15T	30 lb (15 kg)	0.005 lb (2 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30035685	628
V22PWE30T	60 lb (30 kg)	0.01 lb (5 g)	Plastic	7.5 in × 9.5 in (190 mm × 242 mm)	30251704	628

Accessories	Item Number	List Price (USD)
Large Pan, 11.8x8.8 in, 300x225mm V22 V41	30251753	82

Accessories	Item Number	List Price (USD)
In-Use Cover Set 10 V22PW V41PW	30572906	201

Check Weighing · Weighing · Auto Shut-Off · IPX8 · LED Check Weighing Indicator · Level Indicator · Leveling Feet · Low Battery Indicator · Rechargeable Battery · Stability Indicator · NSF Listed · USDA-AMS Accepted

Specifications and Prices subject to change without notice.

VALOR™ 1000 - V12P

Reliable Food-Safe Scale for Dry Environments

Display
LCD display with white backlight (dual display for T models)

Communication
Optional RS232 for T models only

Construction
ABS housing, plastic or stainless steel pan, carry handles

Design Features
External digital calibration software, integrated level bubble and adjustable feet, selectable weighing units

Operation
D-cell alkaline battery or power adapter

T Models

NSF-certified and USDA AMS-accepted design supports HACCP systems, making Valor 1000 perfect for food preparation tasks. Stainless steel pans and plastic in-use covers available for extra protection.

Save money on batteries. Energy-efficient design operates for up to one year or up to 1,500 hours.

Pioneer features a second line display for additional information or guidance, a static removal bar for convenient grounding, and USB connectivity.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
V12P3	6 lb (3 kg)	0.001 lb (0.5 g)	-	9.65 in × 7.48 in (245 mm × 190 mm)	30539390	283
V12P6	15 lb (6 kg)	0.002 lb (1 g)	-	9.65 in × 7.48 in (245 mm × 190 mm)	30539391	283
V12P15	30 lb (15 kg)	0.005 lb (2 g)	-	9.65 in × 7.48 in (245 mm × 190 mm)	30539392	283
V12P30	60 lb (30 kg)	0.01 lb (5 g)	-	9.65 in × 7.48 in (245 mm × 190 mm)	30539393	283
V12P2T	5 lb (2 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	9.65 in × 7.48 in (245 mm × 190 mm)	30554442	283
V12P5T	10 lb (5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	9.65 in × 7.48 in (245 mm × 190 mm)	30554443	283
V12P10T	20 lb (10 kg)	0.002 lb (1 g)	0.01 lb (5 g)	9.65 in × 7.48 in (245 mm × 190 mm)	30554444	283
V12P20T	50 lb (20 kg)	0.005 lb (2 g)	0.02 lb (10 g)	9.65 in × 7.48 in (245 mm × 190 mm)	30554445	283

Accessories	Item Number	List Price (USD)
RS232 Cable 1.5m V12P for T models	30559103	37
In use cover 1 pcs V12P	30559105	15

Accessories	Item Number	List Price (USD)
In use cover 10 pcs V12P	30559106	136
Stainless Steel Platform, 11.8x8.9 in, 300x225 mm	30559107	69

Weighing · Auto Shut-Off · Battery Power · Low Battery Indicator · Overload/ Underload Indicators · Stability Indicator · Measurement Canada Approved · NSF Listed · NTEP Certified · USDA-AMS Accepted

I-DT61XW

Advanced IP68/IP69K Washdown Indicator

Display
6-digit, 7-segment white LED, 20 mm / 0.8 inch high digits, 3 color checkweigh bar matrix

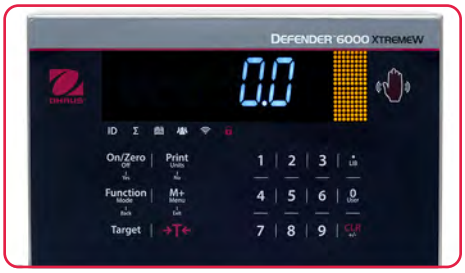
Communication
Easy access communication ports including RS232 and USB Host; second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog output (available as accessories); GLP/GMP data output with real-time clock

Construction
IP68/IP69K 316 stainless steel housing indicator and mounting bracket, knife-resistant front panel

Design Features
3-color check light bar, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator, auto shut-off, auto tare, Includes connection for EasyConnect bases -- connect to any EasyConnect base for instant configuration. Terminal block in housing provided for non-EasyConnect bases.

Operation
100-240 VAC / 50/60 Hz universal power supply, hardwired

EasyConnect™



Defender 6000 indicator, constructed of 316 stainless steel, stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection.

White LED displays clear results for fast processing. The indicator's configurable color bar matrix allows for detailed package weight checking to ensure compliance.

With knife-proof numeric touch keypad, indicator is suitable in harsh processing environments.

Model	Resolution	Certified Resolution	Protection Rating	Item Number	List Price (USD)
DT61XWE	75,000	10,000	IP69K/IP68	30575584	1,128

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227
Cable Extension 9m/27 ft D52 / D61	30424409	227

Accessories	Item Number	List Price (USD)
Ethernet kit Defender Series	30429666	227
Sealing Kit External Power Bank	30572907	373
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
PCBA Kit, Alibi Memory, R71 T71	80500503	167
Cable RS232 XW Indicators	80500552	244

Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Backlight · Environmental Filters · GMP/GLP · LED Check Weighing Indicator · IP68 IP69K · Level Indicator · Overload Protection · Overload/Underload Indicators · Rechargeable Battery (Option) · Software Lockout · Stability Indicator

Measurement Canada Approved · NSF Listed · NTEP Certified · USDA-AMS Accepted

Specifications and Prices subject to change without notice.

I-DT61PW

Advanced IP68/IP69K Washdown Indicator

Display
6-digit, 7-segment LCD display with white backlight, 45 mm / 1.8 inch mm high digits

Communication
Easy access IR communication kit (available as an accessory); GLP/GMP data output with real-time clock

Construction
IP68/IP69K food grade polycarbonate housing and 316 stainless steel mounting bracket

Design Features
3-color check light bar, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator, auto shut-off, auto tare, Includes connection for EasyConnect bases -- connect to any EasyConnect base for instant configuration. Terminal block in housing provided for non-EasyConnect bases.

Operation
6 D (LR20) Batteries (Included)

EasyConnect™

Defender 6000 indicator, constructed of polycarbonate, stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection.

Large, bright backlit LCD clearly displays results for fast processing. The color bar can be used for quick checking of package weights for fast go/no-go alert.

Indicator operates for up to 1,600 hours on one set of batteries for months of use. Battery-powered design eliminates the need for a main connection for increased flexibility.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
DT61PW	75,000	10,000	1600 Hours with Disposable Batteries	IP69K; IP68	30575583	823
DT61PW Front Mount	75,000	10,000	1600 Hours with Disposable Batteries	IP69K; IP68	30575585	823

Accessories	Item Number	List Price (USD)
Gland M16 D52	30379716	30
Cable Extension 9m/27 ft D52 / D61	30424409	227

Accessories	Item Number	List Price (USD)
IR Communication Kit	30572910	103

Check Weighing · Display Hold · Dynamic Weighing · Parts Counting · Percent Weighing · Weighing · Accumulation · Auto Shut-Off · Backlight · Battery Power · Environmental Filters · GMP/GLP · LED Check Weighing Indicator · Level Indicator · IP68 IP69K · Low Battery Indicator · Overload Protection · Overload/Underload Indicators · Software Lockout · Stability Indicator · Measurement Canada Approved

NSF Listed · NTEP Certified · USDA-AMS Accepted

TD52XW

Multifunctional Indicator for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included), second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
IP68/NEMA 4X stainless steel housing and mounting bracket

Design Features
Check weighing symbols with selectable operation and audible signal settings, menu lock switch, multiple operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable adjust contrast settings, auto-dim, auto-off, auto tare, screensaver, Includes connection for EasyConnect bases -- connect to any EasyConnect base for instant configuration. Terminal block in housing provided for non-EasyConnect bases.

Operation
Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)

EasyConnect™

See results clearly on the large backlit display. The alphanumeric keypad & function keys allow for a simplified user experience. On-screen prompts and soft keys will guide you through the operation.

Results can be stored in the Micro SD card. Data output via built-in RS232 or optional interfaces including RS232/RS485/USB device, Ethernet & Bluetooth/WiFi. Analog Output & Discrete I/O with relays.

Features common industrial modes & supports a 50,000 item library & 1,000 user profiles which can be downloaded/uploaded for easy set-up (with SD Card). GMP/GLP with time/date for result traceability.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
TD52XW	75,000	10,000	20 Hours with Rechargeable Battery	IP68	30424079	1,118

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Micro SD Card 8G	30303533	77
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
In-Use-Cover, TD52XW	30424023	38
Wall Mount Kit, SST, TD52XW	30424026	115
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227
Rechargeable battery Li-ion TD52	30424405	271
USB Host Interface for Dongle TD52	30424406	191

Accessories	Item Number	List Price (USD)
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227
Auxiliary display AD7-RS	30472064	99
Sealing cover for D52 LC connector	30538022	89
LC cable adaptor for TD52 indicator	30548596	35
USB host interface for flash drive	30572923	182
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 XW Indicators	80500552	244
Software, Winwedge	80850080	723

Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Auto Standby · Backlight · Environmental Filters · GMP/GLP · LED Check Weighing Indicator · Low Battery Indicator · Multi-Language · NEMA 4X IP68 · Overload/Underload Indicators · Rechargeable Battery Option · Software Lockout

Stability Indicator · Time/Date · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

TD52P

Multifunctional Indicator for Standard Industrial Applications

Display
Backlit Liquid Crystal Display (LCD), 256 × 80 pixels

Communication
Easy access communication ports including RS232 and Micro SD slot (included), second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction
ABS plastic housing, painted steel mounting bracket.

Design Features
Check weighing symbols with selectable operation and audible signal settings, menu lock switch, multiple operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable adjust contrast settings, auto-dim, auto-off, auto tare, screensaver, Includes connection for EasyConnect bases -- connect to any EasyConnect base for instant configuration. Terminal block in housing provided for non-EasyConnect bases.

Operation
Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)

EasyConnect™

See results clearly on the large backlit display. The alphanumeric keypad & function keys allow for a simplified user experience. On-screen prompts and soft keys will guide you through the operation.

Results can be stored in the Micro SD card. Data output via built-in RS232 or optional interfaces including RS232/RS485/USB device, Ethernet & Bluetooth/WiFi. Analog Output & Discrete I/O with relays.

Features common industrial modes & supports a 50,000 item library & 1,000 user profiles which can be downloaded/uploaded for easy set-up (with SD Card). GMP/GLP with time/date for result traceability.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
TD52P	75,000	10,000	20 Hours with Rechargeable Battery	-	30424078	912

Accessories	Item Number	List Price (USD)
Cable, RS232, 1.5m, R71 to balance	30057595	69
Printer, Impact, SF40A, AM	30064203	1,342
Discrete I/O Kit, R71 TD52 DT61XW	30097591	210
Micro SD Card 8G	30303533	77
Gland M16 D52	30379716	30
Wireless Dongle MTICWD-200	30412537	312
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	262
In-Use-Cover, TD52P	30424022	30
Wall Mount Kit, CS, TD52P	30424027	85
Analog Output Kit, TD52 DT61XW	30424403	227
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	227
Rechargeable battery Li-ion TD52	30424405	271
USB Host Interface for Dongle TD52	30424406	191

Accessories	Item Number	List Price (USD)
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227
In-Use-Cover, Set(10), TD52P	30469948	227
In-Use-Cover, Set(10), TD52XW	30469949	299
Auxiliary display AD7-RS	30472064	99
Sealing cover for D52 LC connector	30538022	89
LC cable adaptor for TD52 indicator	30548596	35
USB host interface for flash drive	30572923	182
Datalogic Barcode Scanner QD2131	30593703	259
Zebra Label Printer ZD421T with RS232	30928908	927
Printer, Thermal, STP-103, US	80251992	1,035
Cable RS232 IBM 9P Male-to-Female	80500525	262
Software, Winwedge	80850080	723

Check Weighing · Display Hold · Dynamic Weighing · Filling · Parts Counting · Percent Weighing · Weighing · Accumulation · Audible Alerts · Auto Shut-Off · Auto Standby · Backlight · Environmental Filters · GMP/GLP · LED Check Weighing Indicator · Low Battery Indicator · Multi-Language · Overload/Underload Indicators · Rechargeable Battery · Software Lockout Option · Stability Indicator

Time/Date · Measurement Canada Approved · NTEP Certified

T72XW

Advanced Performance Stainless Steel Indicator with External Device Control Capabilities

Display
Transflective graphic LCD with white backlight, 240 × 96 pixels

Communication
Easy access communication port including RS232 (included), USB, Ethernet and second RS232 or RS485 (accessories sold separately). GLP/GMP data output with real-time clock.

Construction
IP66/NEMA 4X stainless steel housing and mounting bracket

Design Features
Checkweighing lights with selectable operation and audible signal settings, sealed front panel, 5 operating languages (English, Spanish, French, German and Italian), selectable environmental and auto-print settings, stability and overload/underload indicators

Operation
AC power (included)

With a 50,000 displayed resolution and the ability to support up to 10 load cells, T72XW was designed for heavy-duty industrial applications such as vehicle weighing.

Two option slots are available to enable a wide range of connectivity interfaces. Control external devices using the discrete I/O interface and transfer data through the serial, USB or Ethernet ports.

T72XW is very easy to set up and navigate - featuring a vivid graphic display with on-screen prompts and an alphanumeric keypad with designated keys for common functions such as Tare & ID information.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
T72XW	75,000	10,000	-	IP66	30126959	1,185

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Ethernet Kit, T72XW	30132163	210
USB with I/O Kit, T72XW	30132164	235
COM2 Kit, T72XW	30132165	210

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable, ST103-CKW55 TxxXW	80252584	294
Cable RS232 XW Indicators	80500552	244
Software, Winwedge	80850080	723

Check Weighing · Dynamic Weighing · Parts Counting · Totalization · Truck Weighing · Weighing · Audible Alerts · Auto Shut-Off · Auto Standby · Backlight · Environmental Filters · GMP/GLP · Multi-Language · NEMA 4X IP66 · Overload/Underload Indicators · Software Lockout · Stability Indicator · Time/Date · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

i-DT33XW

Stainless Steel Washdown Indicator for Basic Industrial Applications

Display
7 Segment LCD with multicolor backlight

Communication
Standard RS232 and optional USB Device or Ethernet

Construction
IP66 stainless steel housing and mounting bracket

Operation
Internal power supply with power cord (included) or rechargeable battery (included)

EasyConnect™
Item 30678630

Results are clearly shown using the large, bright backlit LCD display. In Checkweighing mode, the display changes color (yellow/green/red) to alert when it is within the target weight range.

Features software for Parts Counting, Checkweighing, and Totalization. Includes RS232 with optional USB Device or Ethernet for printing or data connectivity.

Indicator features an IP66 protected 304-stainless steel housing with bracket. Display resolution up to 1:30,000; OIML approved resolution 1:10,000; NTEP and Measurement Canada approved to 1:6,000.

Model	Battery Life	Protection Rating	Item Number	List Price (USD)
DT33XW EZ	100 Hours with Rechargeable Battery	IP66	30678638	541
DT33XW	100 Hours with Rechargeable Battery	IP66	30659311	541

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227
Zebra Label Printer ZD421T with RS232	30928908	927

Accessories	Item Number	List Price (USD)
USB Device Interface Kit i-DT33	30699120	127
Dust Cover Set(5) i-DT33	30699121	64
Cable RS232 XW Indicators	80500552	244
Auxiliary display AD7-RS	30472064	99

Check Weighing · Parts Counting · Totalization · Weighing · Auto Shut-Off · Backlight · Battery Power · Environmental Filters · LED Check Weighing Indicator · Level Indicator · NEMA 4X IP66 · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Software Lockout · Stability Indicator · Measurement Canada Approved · NTEP Certified

i-DT33P

ABS Plastic Indicator for Basic Industrial Applications

Display
7 Segment LCD with multicolor backlight

Communication
Standard RS232 and optional USB Device or Ethernet

Construction
ABS housing and powder-coated steel mounting bracket

Operation
Internal power supply with power cord (included), 6C (LR14) Batteries (not included) or Rechargeable Battery option

EasyConnect™
Item 30648433

Results are clearly shown using the large, bright backlit LCD display. In Checkweighing mode, the display changes color (yellow/green/red) to alert when it is within the target weight range.

Features software for Parts Counting, Checkweighing, and Totalization. Includes RS232 with optional USB Device or Ethernet for printing or data connectivity.

Indicator features a durable ABS housing and steel mounting bracket. Display resolution up to 1:30,000; OIML approved resolution 1:10,000; NTEP and Measurement Canada approved to 1:6,000.

Model	Battery Life	Protection Rating	Item Number	List Price (USD)
DT33P EZ	100 Hours with Rechargeable Battery; 360 Hours with Disposable Batteries	Not applicable	30648433	422
DT33P	100 Hours with Rechargeable Battery; 360 Hours with Disposable Batteries	Not applicable	30659310	422

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1,342
Cable Extension 9m/27 ft D52 / D61	30424409	227
Ethernet kit Defender Series	30429666	227
Zebra Label Printer ZD421T with RS232	30928908	927
USB Device Interface Kit i-DT33	30699120	127

Accessories	Item Number	List Price (USD)
Dust Cover Set(5) i-DT33	30699121	64
Rechargeable battery Kit i-DT33P	30699122	64
Cable RS232 IBM 9P Male-to-Female	80500525	262
Auxiliary display AD7-RS	30472064	99

Check Weighing · Parts Counting · Totalization · Weighing · Auto Shut-Off · Backlight · Battery Power · Environmental Filters · LED Check Weighing Indicator · Level Indicator · Low Battery Indicator · Overload Protection · Overload/ Underload Indicators · Software Lockout · Stability Indicator · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

i-DT25P

Indicator For Basic Industrial Applications

Display
Backlit liquid crystal display (LCD)

Communication
USB Device (Type-C), RS232, Mini DIN (for Auxiliary Display only)

Construction
ABS construction

Design Features
Selectable environmental and auto-print settings, stability indicator, overload/underload indicators, auto-off, auto tare

Operation
4 AA (LR6) Batteries (Not Included); AC Adapter (Included); USB Cable (Included)

Features software for most common industrial weighing modes such as Parts Counting, Totalization, Dynamic Weighing/Display Hold and Peak Hold, eliminating the need for complicated manual calculations.

Indicator features an ABS housing and powder coated steel bracket for desk or wall mounting. Display resolution up to 1: 30,000; OIML approved resolution 1: 6,000, NTEP/ Measurement Canada certified resolution 1: 10,000.

Flexible operation with the included AC power adapter, USB type-C port or disposable battery power. Includes RS232 and USB Device for data communication.

Model	Resolution	Certified Resolution	Protection Rating	Item Number	List Price (USD)
i-DT25P	30,000	10,000	-	30745987	325

Accessories	Item Number	List Price (USD)
Column Kit Painted Floor Scale	30531244	270
Column Kit Stainless Steel Floor Scale	30539553	343
Printer, Impact, SF40A, AM	30064203	1,342
Interface Kit, RS232-USB	30304101	197
Interface Kit, RS232-Ethernet	30304102	197

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	1,035
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	262
Cable RS232 IBM 9P Male-to-Female	80500525	262
DB9 Adapter, Male-to-Male	30692384	9
Auxiliary Display, AD7-MD	30472063	179

Peak Hold · Display Hold · Parts Counting · Weighing · Accumulation · Auto Shut-Off · Backlight · Environmental Filters · LED Check Weighing Indicator · Overload/Underload Indicators · Stability Indicator · Measurement Canada Approved · NTEP Certified

DEFENDER™ 6000 WASHDOWN BASE

Advanced IP68/IP69K Washdown Base

Construction

316 stainless steel platform and frame, hermetically-sealed stainless steel load cell, non-slip adjustable rubber feet, level indicator

Design Features

150% overload capacity protection, open design to minimize build-up and support easy cleaning, Includes EasyConnect system with base capacity, readability and factory calibration programmed in module. Connect to any EasyConnect indicator for instant configuration. Can also easily be wired into non-EasyConnect indicators.

EasyConnect™

Defender 6000 stands up to harsh cleaning in processing and packaging environments with IP68 immersion/ IP69K washdown protection, 316 stainless steel construction and hermetically-sealed load cell.

The Defender 6000 bases are equipped with an EasyConnect cable, which allows instant configuration with Defender 5000 and 6000 indicators, speeding installation.

Durable Defender 6000 is NSF certified, supporting HACCP systems with a 316 stainless steel base providing corrosion protection in food, chemical processing, and packaging.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D5K1S	10 lb (5 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	9.8 in × 9.8 in (250 mm × 250 mm)	30575603	1,334
D12K1R	25 lb (12.5 kg)	0.002 lb (1 g)	0.005 lb (5 g)	11.8 in × 11.8 in (300 mm × 300 mm)	30575604	1,427
D25K1R	50 lb (25 kg)	0.005 lb (2 g)	0.01 lb (5 g)	11.8 in × 11.8 in (300 mm × 300 mm)	30575605	1,427
D50K1L	100 lb (50 kg)	0.01 lb (5 g)	0.02 lb (10 g)	19.7 in × 15.7 in (500 mm × 400 mm)	30575606	1,803
D150K1L	300 lb (150 kg)	0.02 lb (10 g)	0.1 lb (50 g)	19.7 in × 15.7 in (500 mm × 400 mm)	30575607	1,803

Accessories	Item Number	List Price (USD)
Cable Extension 9m/27 ft D52 / D61	30424409	227
Cable Kit Extension for base	30429931	70
Column Kit Column Kit 10.2 in/260mm high, 316 stainless steel D61	30572908	204

Accessories	Item Number	List Price (USD)
Column Kit Column Kit 26.4 in/670mm high, 316 stainless steel D61	30572909	245
Wheel Kit SST Defender Series	30616409	227
Mounting Set Front SST DT61	30626654	192

Level Indicator · Leveling Feet · IP68 IP69K · Measurement Canada Approved · NSF Listed · NTEP Certified · USDA-AMS Accepted

Specifications and Prices subject to change without notice.

DEFENDER™ 5000 STAINLESS STEEL BASE

Durable Bases for the Most Demanding of Industrial Applications

Construction

304-grade stainless steel platform, stainless steel frame, IP67 load cell, non-slip adjustable rubber feet, level indicator

Design Features

150% capacity overload protection. Includes EasyConnect system with base capacity, readability and factory calibration programmed in module. Connect to any EasyConnect indicator for instant configuration. Can also easily be wired into non-EasyConnect indicators.

EasyConnect™

The W series features a stainless steel platform, frame and IP67 load cell to withstand harsh industrial environments.

The Defender 5000 bases are equipped with an EasyConnect cable, which allows instant configuration with Defender TD52 or i-DT61 indicators, speeding up installation.

Defender 5000 bases are NTEP-certified and Measurement Canada approved. These bases also carry OIML and EC Type approvals, which make them ideal for legal-for-trade use.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D2WQS	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in × 10 in (254 mm × 254 mm)	30419628	1,107
D5WQS	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in × 10 in (254 mm × 254 mm)	30419629	1,107
D12WQS	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in × 10 in (254 mm × 254 mm)	30419630	1,107
D12WQR	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30419634	1,179
D25WQR	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30419635	1,179
D50WQR	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30419636	1,179
D25WQL	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in × 18 in (457 mm × 457 mm)	30419642	1,869
D50WQL	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30419643	1,869
D125WQL	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in × 18 in (457 mm × 457 mm)	30419644	1,869
D50WTX	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 18 in (610 mm × 457 mm)	30419648	2,178
D125WTX	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30419649	2,178
D250WTX	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30419650	2,178
D50WQV	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 24 in (610 mm × 610 mm)	30419655	2,590
D125WQV	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30419656	2,590
D250WQV	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30419657	2,755
D500WQV	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	24 in × 24 in (610 mm × 610 mm)	30419658	2,755

Accessories	Item Number	List Price (USD)
Wheel Kit, Defender Series	30372146	182
Mounting Set Front SST D52	30424024	150
Holder Kit Printer SST	30424025	85
Cable Extension 9m/27 ft D52 / D61	30424409	227
Column Kit 13.9 in / 35 cm Painted Steel D52xx	30424410	100
Column Kit 26.9 in / 68 cm Painted Steel D52xx	30424411	129
Column Kit 38.8 in / 98 cm Painted Steel D52xx	30424412	145

Accessories	Item Number	List Price (USD)
Column Kit 13.9 in / 35 cm 304 Stainless Steel D52xx	30424413	218
Column Kit 26.9 in / 68 cm 304 Stainless Steel D52xx	30424414	277
Column Kit 38.8 in / 98 cm 304 Stainless Steel D52xx	30424415	299
Cable Kit Extension for base	30429931	70

Level Indicator · Leveling Feet · NEMA 4X IP67 · Measurement Canada Approved · NTEP Certified

DEFENDER™ 5000 BASE

Durable Bases for the Most Demanding of Industrial Applications

Construction

304-grade stainless steel platform, sand grey powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet, level indicator

Design Features

150% capacity overload protection. Includes EasyConnect system with base capacity, readability and factory calibration programmed in module. Connect to any EasyConnect indicator for instant configuration. Can also easily be wired into non-EasyConnect indicators.

EasyConnect™

The R Series features a stainless steel platform, powder-coated steel frame and an aluminum load cell to withstand harsh industrial environments.

The Defender 5000 bases are equipped with an EasyConnect cable, which allows instant configuration with Defender 5000 (TD52) or 6000 indicators, speeding up installation.

Defender 5000 bases are NTEP-certified and Measurement Canada approved. These bases also carry OIML and EC Type approvals, which make them ideal for legal-for-trade use.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D12RQR	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in × 12 in (305 mm × 305 mm)	30419631	973
D25RQR	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in × 12 in (305 mm × 305 mm)	30419632	973
D50RQR	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in × 12 in (305 mm × 305 mm)	30419633	973
D12RTR	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in × 12 in (355 mm × 305 mm)	30419637	1,107
D25RTR	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30419638	1,107
D50RTR	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30419639	1,107
D50RQL	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in × 18 in (457 mm × 457 mm)	30419640	1,391
D125RQL	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in × 18 in (457 mm × 457 mm)	30419641	1,391
D50RTX	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 18 in (610 mm × 457 mm)	30419645	1,457
D125RTX	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 18 in (610 mm × 457 mm)	30419646	1,457
D250RTX	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 18 in (610 mm × 457 mm)	30419647	1,457
D50RQV	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in × 24 in (610 mm × 610 mm)	30419651	1,643
D125RQV	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in × 24 in (610 mm × 610 mm)	30419652	1,643
D250RQV	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in × 24 in (610 mm × 610 mm)	30419653	1,643
D500RQV	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	24 in × 24 in (610 mm × 610 mm)	30419654	1,643
D125RTV	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30419659	2,178
D250RTV	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30419660	2,178
D500RTV	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30419661	2,178

Accessories	Item Number	List Price (USD)
Wheel Kit, Defender Series	30372146	182
Mounting Set Front SST D52	30424024	150
Holder Kit Printer SST	30424025	85
Cable Extension 9m/27 ft D52 / D61	30424409	227
Column Kit 13.9 in / 35 cm Painted Steel D52xx	30424410	100
Column Kit 26.9 in / 68 cm Painted Steel D52xx	30424411	129
Column Kit 38.8 in / 98 cm Painted Steel D52xx	30424412	145

Accessories	Item Number	List Price (USD)
Column Kit 13.9 in / 35 cm 304 Stainless Steel D52xx	30424413	218
Column Kit 26.9 in / 68 cm 304 Stainless Steel D52xx	30424414	277
Column Kit 38.8 in / 98 cm 304 Stainless Steel D52xx	30424415	299
Cable Kit Extension for base	30429931	70

Level Indicator · Leveling Feet · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

DEFENDER™ 3000 STAINLESS STEEL BASES

Bench Scale Bases for Basic Industrial Washdown Applications

Construction

304-grade stainless steel platform, stainless steel tubular frame, IP67 stainless steel load cell

EasyConnect™

This tough industrial scale features a 304-stainless steel platform, frame and IP67 load cell.

Capacities from15 kg/30 lb to 300 kg/600 lb, with platforms from 305 × 355 mm/12 × 14 inch to 500 × 650 mm/19.7 × 25.6 inch.

Default resolution up to 7,500d; OIML, NTEP certified and Measurement Canada approved to 3,000e for legal-for-trade performance.

Model	Maximum Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D15C1R	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30683697	922
D30C1R	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30683698	922
D75C1R	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	14 in × 12 in (355 mm × 305 mm)	30683699	922
D75C1L	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30683702	1,633
D150C1L	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30683703	1,633
D150C1X	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30683706	2,271
D300C1X	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30683707	2,271

Accessories	Item Number	List Price (USD)
Wheel Kit, Defender Series	30372146	182
Column Kit 13.9 in / 35 cm Painted Steel D52xx	30424410	100
Column Kit 26.9 in / 68 cm Painted Steel D52xx	30424411	129
Column Kit 38.8 in / 98 cm Painted Steel D52xx	30424412	145
Column Kit 13.9 in / 35 cm 304 Stainless Steel D52xx	30424413	218
Column Kit 26.9 in / 68 cm 304 Stainless Steel D52xx	30424414	277

Accessories	Item Number	List Price (USD)
Wheel Kit SST Defender Series	30616409	227
Column Kit 13 in / 330 mm SST i-DT33	30696595	238
Column Kit 26.8 in / 680 mm SST i-DT33	30696596	316
Column Kit 13 in / 330 mm CS i-DT33	30696597	106
Column Kit 26.8 in / 680 mm CS i-DT33	30696598	127
Column Kit 38.8 in / 980 mm CS i-DT33	30696599	148
Carrying Handle Kit i-DT33	30696600	132

Level Indicator · Leveling Feet · NEMA 4X IP67 · Measurement Canada Approved · NTEP Certified

DEFENDER™ 3000 BASES

Bench Scale Bases for Basic Industrial Applications

Construction

304-grade stainless steel platform, powder-coated steel tubular frame, aluminum load cell.

EasyConnect™

This tough industrial scale features a 304-stainless steel platform, powder-coated steel tubular frame and column, aluminum load cell.

Capacities from15 kg/30 lb to 600 kg/1,200 lb, with platforms from 305 × 355 mm/12 × 14 inch to 600 × 800 mm/23.6 × 31.5 inch.

Default resolution up to 7,500d; OIML, NTEP certified and Measurement Canada approved to 3,000e for legal-for-trade performance.

Model	Maximum Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D15B1R	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in × 12 in (355 mm × 305 mm)	30683694	845
D30B1R	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in × 12 in (355 mm × 305 mm)	30683695	845
D75B1R	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	14 in × 12 in (355 mm × 305 mm)	30683696	845
D75B1L	150 lb (75 kg)	0.02 lb (10 g)	0.05 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30683700	870
D150B1L	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in × 16.5 in (550 mm × 420 mm)	30683701	870
D150B1X	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30683704	973
D300B1X	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in × 19.7 in (650 mm × 500 mm)	30683705	973
D300B1V	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30683708	1,318
D600B1V	1,200 lb (600 kg)	0.2 lb (100 g)	0.5 lb (200 g)	31.5 in × 23.6 in (800 mm × 600 mm)	30683709	1,318

Accessories	Item Number	List Price (USD)
Wheel Kit, Defender Series	30372146	182
Column Kit 13.9 in / 35 cm Painted Steel D52xx	30424410	100
Column Kit 26.9 in / 68 cm Painted Steel D52xx	30424411	129
Column Kit 38.8 in / 98 cm Painted Steel D52xx	30424412	145
Column Kit 13.9 in / 35 cm 304 Stainless Steel D52xx	30424413	218

Accessories	Item Number	List Price (USD)
Column Kit 26.9 in / 68 cm 304 Stainless Steel D52xx	30424414	277
Wheel Kit SST Defender Series	30616409	227
Column Kit 13 in / 330 mm SST i-DT33	30696595	238
Column Kit 26.8 in / 680 mm SST i-DT33	30696596	316
Column Kit 13 in / 330 mm CS i-DT33	30696597	106
Column Kit 26.8 in / 680 mm CS i-DT33	30696598	127
Column Kit 38.6 in / 980 mm CS i-DT33	30696599	148
Carrying Handle Kit SST i-DT33	30696600	132

Level Indicator · Leveling Feet · Measurement Canada Approved · NTEP Certified

Specifications and Prices subject to change without notice.

Weights & Weight Sets

OHAUS' portfolio now includes the Troemner library of weights, backed by exclusive construction and more than 100 years of expertise. With a wide selection of weight classes backed by both ASTM and OIML, OHAUS weights offer a comprehensive range of 1mg to 5,000 lb, and are available with certifications.

Weights by TROEMNER

Our weights and weight sets are backed by the world's leading supplier of precision weights and mass standards. Since 1838, Troemner has enhanced its reputation as being the premier precision weight company by having industry recognized metrologists and highly trained calibrators on staff. Troemner's production of precision weights involves using the finest materials and equipment available in a state-of-the-art facility. For these important reasons, Troemner is capable of providing unmatched measurements and metrological analysis, to provide our customers with the precision weights they need.

Only the finest raw materials are selected in order to manufacture high quality weights. Troemner is the only supplier that has a special stainless steel blend called Troemner Alloy 8, which possesses closely controlled density (8.03 g/cm3), extremely low magnetic properties, good stability and resistance to corrosion.

Weight Selector Guide

Troemner UltraClass - For analytical and microbalances with readability as low as 1 g. These are the most precise two-piece weights available, with weight tolerances 40 to 50% better than ANSI/ASTM Class 1. Ultra Class weights combine high precision with the advantage of two-piece construction (1 g and larger) to avoid costly issues associated with one-piece weights.

ANSI/ASTM Class 1 - Can be used as a reference standard in calibrating other weights and is appropriate for calibrating high-precision analytical balances with a readability as low as 0.1 mg to 0.01 mg.

ANSI/ASTM Class 4 - For calibration of semi-analytical balances and for student use.

ANSI/ASTM Class 6 - This class meets the specifications of OIML R 111 Class M2.

OIML Class E1 - Used as a primary reference for calibrating other reference standards and weights where the stability of the environment and careful handling are assured. Class E1 weights have no method of adjustment and are not suitable for general laboratory use. The uncertainty is guaranteed to be 1/3 the tolerance.

OIML Class E2 - Can be used as a reference standard in calibrating other weights and is appropriate for calibrating high-precision analytical balances with a readability as low as 0.1 mg to 0.01 mg.

OIML Class F1 - Appropriate for calibrating high-precision top loading balances with a readability as low as 0.01 g to 0.001 g.

OIML Class F2 - For calibration of semi-analytical balances and for student use.

NIST Class F - Primarily used to test commercial weighing devices by state and local weights and measures officials, device installers, and service technicians.

UltraClass IND Weights Without Certificate

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390183	122
300 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390182	122
200 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390181	122
100 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390180	122
50 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390179	122
30 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390178	122
20 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390177	122
10 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390176	122
5 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390175	122
3 mg	0.005 mg	UltraClass	No Certificate	Flat	3003-H14 Aluminum	30390174	122
2 mg	0.005 mg	UltraClass	No Certificate	Flat	3003-H14 Aluminum	30390173	122
1 mg	0.005 mg	UltraClass	No Certificate	Flat	3003-H14 Aluminum	30390172	122

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	63 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390204	13,699
30 kg	38 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390203	9,280
25 kg	31 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390202	7,363
20 kg	25 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390201	3,978
10 kg	13 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390200	3,410
5 kg	6 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390199	1,847
3 kg	3.8 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390198	1,601
2 kg	2.5 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390197	1,248
1 kg	1.3 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390196	788
500 g	0.6 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390195	386
300 g	0.38 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390194	283
200 g	0.25 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390193	265
100 g	0.13 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390192	164
50 g	0.06 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390191	153
30 g	0.037 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390190	146
20 g	0.037 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390189	138
10 g	0.025 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390188	138
5 g	0.017 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390187	138
3 g	0.017 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390186	138
2 g	0.017 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390185	124
1 g	0.017 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8	30390184	124

Weights by TROEMNER

UltraClass IND Weights with Traceable Certificate

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
1 mg	0.005 mg	UltraClass	Traceable	Flat	3003-H14 Aluminum	30390270	164
500 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390215	164
300 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390214	164
200 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390213	164
100 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390212	164
50 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390211	164
30 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390210	164
20 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390209	164
10 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390208	164
5 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390207	164
3 mg	0.005 mg	UltraClass	Traceable	Flat	3003-H14 Aluminum	30390206	164
2 mg	0.005 mg	UltraClass	Traceable	Flat	3003-H14 Aluminum	30390205	164

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	63 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390236	14,656
30 kg	38 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390235	9,334
25 kg	31 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390234	7,447
20 kg	25 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390233	4,186
10 kg	13 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390232	3,596
5 kg	6 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390231	1,935
3 kg	3.8 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390230	1,684
2 kg	2.5 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390229	1,349
1 kg	1.3 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390228	896
500 g	0.6 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390227	442
300 g	0.38 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390226	363
200 g	0.25 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390225	324
100 g	0.13 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390224	221
50 g	0.06 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390223	216
30 g	0.037 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390222	207
20 g	0.037 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390221	200
10 g	0.025 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390220	200
5 g	0.017 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390219	200
3 g	0.017 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390218	200
2 g	0.017 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390217	185
1 g	0.017 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8	30390216	185

Weights by TROEMNER

Specifications and Prices subject to change without notice.

UltraClass IND Weights with NVLAP Certificate

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390248	193
300 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390247	193
200 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390246	193
100 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390245	193
50 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390244	193
30 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390243	193
20 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390242	193
10 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390241	193
5 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390240	193
3 mg	0.005 mg	UltraClass	NVLAP	Flat	3003-H14 Aluminum	30390239	193
2 mg	0.005 mg	UltraClass	NVLAP	Flat	3003-H14 Aluminum	30390238	193
1 mg	0.005 mg	UltraClass	NVLAP	Flat	3003-H14 Aluminum	30390237	193

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	63 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390269	14,906
30 kg	38 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390268	10,249
25 kg	31 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390267	7,531
20 kg	25 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390266	4,306
10 kg	13 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390265	4,049
5 kg	6 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390264	2,169
3 kg	3.8 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390263	1,797
2 kg	2.5 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390262	1,457
1 kg	1.3 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390261	1,008
500 g	0.6 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390260	497
300 g	0.38 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390259	418
200 g	0.25 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390258	407
100 g	0.13 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390257	265
50 g	0.06 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390256	239
30 g	0.037 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390255	239
20 g	0.037 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390254	221
10 g	0.025 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390253	210
5 g	0.017 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390252	210
3 g	0.017 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390251	210
2 g	0.017 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390250	210
1 g	0.017 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8	30390249	210

Weights by TROEMNER

ULTRACLASS EB WEIGHTS WITHOUT CERTIFICATE

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	38 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390301	3,364
25 kg	31 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390300	#N/A
24 kg	28 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390299	#N/A
20 kg	25 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390298	2,378
16 kg	18 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390297	2,211
10 kg	13 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390296	1,600
8 kg	9.5 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390295	#N/A
5 kg	6 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390294	1,171
4 kg	4.9 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390292	#N/A

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	6 mg	UltraClass	No Certificate	Cylindrical	303 Stainless Steel	30390293	749
4 kg	4.9 mg	UltraClass	No Certificate	Cylindrical	303 Stainless Steel	30390291	631
3 kg	3.8 mg	UltraClass	No Certificate	Cylindrical	303 Stainless Steel	30390290	494
2 kg	2.5 mg	UltraClass	No Certificate	Cylindrical	303 Stainless Steel	30390289	332
1,500 g	1.9 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390288	320
1,000 g	1.3 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390287	283
600 g	0.95 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390286	255
500 g	0.6 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390285	237
400 g	0.49 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390284	227
300 g	0.38 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390283	193
200 g	0.25 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390282	167
160 g	0.19 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390281	175
150 g	0.19 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390280	175
100 g	0.13 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390279	139
80 g	0.095 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390278	151
70 g	0.095 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390277	151
60 g	0.095 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390276	141
50 g	0.06 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390275	115
40 g	0.049 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390274	119
30 g	0.037 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390273	110
20 g	0.037 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390272	110
10 g	0.025 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390271	110

Weights by TROEMNER

Specifications and Prices subject to change without notice.

UltraClass EB Weights with Traceable Certificate

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	38 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390332	3,525
25 kg	31 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390331	2,961
24 kg	28 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390330	2,717
20 kg	25 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390329	2,432
16 kg	18 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390328	2,271
10 kg	13 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390327	1,694
8 kg	9.5 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390326	1,499
5 kg	6 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390325	1,207
4 kg	4.9 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390323	1,106

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	6 mg	UltraClass	Traceable	Cylindrical	303 Stainless Steel	30390324	821
4 kg	4.9 mg	UltraClass	Traceable	Cylindrical	303 Stainless Steel	30390322	737
3 kg	3.8 mg	UltraClass	Traceable	Cylindrical	303 Stainless Steel	30390321	613
2 kg	2.5 mg	UltraClass	Traceable	Cylindrical	303 Stainless Steel	30390320	416
1,500 g	1.9 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390319	416
1,000 g	1.3 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390318	328
600 g	0.95 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390317	324
500 g	0.6 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390316	294
400 g	0.49 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390315	281
300 g	0.38 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390314	253
200 g	0.25 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390313	241
160 g	0.19 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390312	228
150 g	0.19 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390311	228
100 g	0.13 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390310	175
80 g	0.095 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390309	191
70 g	0.095 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390308	191
60 g	0.095 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390307	191
50 g	0.06 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390306	156
40 g	0.049 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390305	161
30 g	0.037 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390304	156
20 g	0.037 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390303	156
10 g	0.025 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390302	156

Weights by TROEMNER

UltraClass EB Weights with NVLAP Certificate

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	38 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390363	3,883
25 kg	31 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390362	3,091
24 kg	28 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390361	2,829
20 kg	25 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390360	2,575
16 kg	18 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390359	2,290
10 kg	13 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390358	1,855
8 kg	9.5 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390357	1,557
5 kg	6 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390356	1,278
4 kg	4.9 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390354	1,248

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	6 mg	UltraClass	NVLAP	Cylindrical	303 Stainless Steel	30390355	886
4 kg	4.9 mg	UltraClass	NVLAP	Cylindrical	303 Stainless Steel	30390353	863
3 kg	3.8 mg	UltraClass	NVLAP	Cylindrical	303 Stainless Steel	30390352	744
2 kg	2.5 mg	UltraClass	NVLAP	Cylindrical	303 Stainless Steel	30390351	495
1,500 g	1.9 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390350	546
1,000 g	1.3 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390349	404
600 g	0.95 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390348	426
500 g	0.6 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390347	377
400 g	0.49 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390346	361
300 g	0.38 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390345	345
200 g	0.25 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390344	316
160 g	0.19 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390343	361
150 g	0.19 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390342	361
100 g	0.13 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390341	242
80 g	0.095 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390340	232
70 g	0.095 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390339	232
60 g	0.095 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390338	232
50 g	0.06 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390337	232
40 g	0.049 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390336	232
30 g	0.037 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390335	232
20 g	0.037 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390334	232
10 g	0.025 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390333	232

Weights by TROEMNER

Specifications and Prices subject to change without notice.

ULTRACLASS WEIGHT SETS WITHOUT CERTIFICATE

Reference Calibration Weight Sets and Mass Standards Adjusted to Troemner UltraClass Tolerances

Weights by TROEMNER

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	UltraClass	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390097	35,234
50 kg - 1 mg	UltraClass	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390096	35,879
30 kg - 1 g	UltraClass	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390095	24,605
30 kg - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390094	25,787
25 kg - 1 g	UltraClass	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390093	24,185
25 kg - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390092	24,927
20 kg - 1 g	UltraClass	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390091	15,694
20 kg - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390090	16,111
10 kg - 1 g	UltraClass	-	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390089	12,266
10 kg - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390088	12,910
5 kg - 1 g	UltraClass	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390087	8,384
5 kg - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390086	9,239
(2) 2 kg - 1 g	UltraClass	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390011	6,664
(2) 2 kg - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390010	7,316
2 kg - 1 g	UltraClass	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390085	5,596
2 kg - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390084	6,456
1 kg - 1 g	UltraClass	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390083	4,139
1 kg - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390082	5,058
500 g - 1 g	UltraClass	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390081	2,801
500 g - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390080	3,654
(2) 200 g - 1 g	UltraClass	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390009	1,583
(2) 200 g - 1 mg	UltraClass	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390008	2,240
200 g - 1 g	UltraClass	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390079	1,440
200 g - 1 mg	UltraClass	-	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390078	2,049
100 g - 1 g	UltraClass	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390077	1,201
100 g - 100 mg	UltraClass	-	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390076	1,464
100 g - 10 mg	UltraClass	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30390075	1,767
100 g - 5 mg	UltraClass	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390074	1,840
100 g - 1 mg	UltraClass	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390073	1,912
50 g - 1 g	UltraClass	-	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390072	1,284
50 g - 100 mg	UltraClass	-	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390071	1,415
50 g - 10 mg	UltraClass	-	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30390070	1,679
50 g - 5 mg	UltraClass	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390069	1,775
50 g - 1 mg	UltraClass	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390068	2,019
20 g - 1 g	UltraClass	-	10 g; 20 g; (2) 2 g; 1 g; 5 g	30390067	1,088
20 g - 100 mg	UltraClass	-	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30390066	1,357
20 g - 10 mg	UltraClass	-	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30390065	1,588

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Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
20 g - 5 mg	UltraClass	-	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30390064	1,703
20 g - 1 mg	UltraClass	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390063	1,954
500 mg - 10 mg	UltraClass	-	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30390062	784
500 mg - 1 mg	UltraClass	-	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390061	1,166

Weights by TROEMNER

UltraClass Weight Sets with Traceable Certificate

Reference Calibration Weight Sets and Mass Standards Adjusted to Troemner UltraClass Tolerances

Weights by TROEMNER

Traceable

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	UltraClass	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390134	37,908
50 kg - 1 mg	UltraClass	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390133	39,403
30 kg - 1 g	UltraClass	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390132	27,017
30 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390131	28,163
25 kg - 1 g	UltraClass	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390130	24,676
25 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390129	25,619
20 kg - 1 g	UltraClass	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390128	17,581
20 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390127	18,644
10 kg - 1 g	UltraClass	Traceable	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390126	12,708
10 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390125	13,999
5 kg - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390124	9,329
5 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390123	10,647
(2) 2 kg - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390015	7,734
(2) 2 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390014	9,013
2 kg - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390122	6,151
2 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390121	7,311
1 kg - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390120	4,791
1 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390119	6,091
500 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390118	3,500
500 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390117	4,772
(2) 200 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390013	1,917
(2) 200 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390012	3,230
200 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390116	1,679
200 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390115	2,957
100 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390114	1,439
100 g - 100 mg	UltraClass	Traceable	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390113	1,804
100 g - 10 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30390112	2,282
100 g - 5 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390111	2,366
100 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390110	2,539
50 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390109	1,471
50 g - 100 mg	UltraClass	Traceable	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390108	1,811
50 g - 10 mg	UltraClass	Traceable	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30390107	2,245
50 g - 5 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390106	2,377
50 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390105	2,569
20 g - 1 g	UltraClass	Traceable	10 g; 20 g; (2) 2 g; 1 g; 5 g	30390104	1,273
20 g - 100 mg	UltraClass	Traceable	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30390103	1,541
20 g - 10 mg	UltraClass	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30390102	2,091
20 g - 5 mg	UltraClass	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30390101	1,954

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Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
20 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390100	2,425
500 mg - 10 mg	UltraClass	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30390099	1,220
500 mg - 1 mg	UltraClass	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390098	1,440

Weights by TROEMNER

ULTRACLASS WEIGHT SETS WITH NVLAP CERTIFICATE

Reference Calibration Weight Sets and Mass Standards Adjusted to Troemner UltraClass Tolerances

Weights by TROEMNER

NVLAP

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	UltraClass	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390171	38,579
50 kg - 1 mg	UltraClass	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390170	39,939
30 kg - 1 g	UltraClass	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390169	27,542
30 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390168	29,239
25 kg - 1 g	UltraClass	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390167	25,154
25 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390166	26,586
20 kg - 1 g	UltraClass	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390165	17,976
20 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390164	19,647
10 kg - 1 g	UltraClass	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390163	13,400
10 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390162	14,978
5 kg - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390161	10,249
5 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390160	11,664
(2) 2 kg - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390019	8,248
(2) 2 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390018	9,920
2 kg - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390159	6,588
2 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390158	8,230
1 kg - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390157	5,340
1 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390156	6,988
500 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390155	3,954
500 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390154	5,637
(2) 200 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390017	2,454
(2) 200 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390016	4,378
200 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390153	2,222
200 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390152	3,906
100 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390151	1,942
100 g - 100 mg	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390150	2,533
100 g - 10 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30390149	3,113
100 g - 5 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390148	2,945
100 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390147	3,584
50 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390146	1,864
50 g - 100 mg	UltraClass	NVLAP	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390145	2,372
50 g - 10 mg	UltraClass	NVLAP	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30390144	2,945
50 g - 5 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390143	2,860
50 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390142	3,417
20 g - 1 g	UltraClass	NVLAP	10 g; 20 g; (2) 2 g; 1 g; 5 g	30390141	1,451
20 g - 100 mg	UltraClass	NVLAP	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30390140	2,126
20 g - 10 mg	UltraClass	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30390139	2,556

Continued on next page

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
20 g - 5 mg	UltraClass	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30390138	2,658
20 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390137	3,058
500 mg - 10 mg	UltraClass	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30390136	1,619
500 mg - 1 mg	UltraClass	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390135	2,013

Weights by TROEMNER

CAL-PAKS

Reference Calibration Weight Sets and Mass Standards Adjusted to Troemner UltraClass Tolerances

NVLAP

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
2 g - 1 mg	UltraClass	NVLAP	200 mg; 2 g; 1 mg	30391799	565
5 g - 1 mg	UltraClass	NVLAP	5 g; 500 mg; 1 mg	30391798	564

1

Set Capacity	Weight Set Range	ASTM Class	Density at 20°C	Item Number	List Price (USD)
55.2 g	50 g - 200mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30390007	539
57 g	50 g - 2 g	1	8.03 g/cm3	30391795	539
110.02 g	100 g - 20 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391794	539
110.2 g	100 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391793	539
112 g	100 g - 2 g	1	8.03 g/cm3	30391792	558
220.2 g	200 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391791	639
222 g	200 g - 2 g	1	8.03 g/cm3	30391790	639
550.02 g	500 g - 20 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391789	806
550.2 g	500 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391788	806
552 g	500 g - 2 g	1	8.03 g/cm3	30391787	806
1,102 g	1 kg - 2 g	1	8.03 g/cm3	30391786	981
1,120 g	1 kg - 20 g	1	8.03 g/cm3	30391785	1,176
2,202 g	2 kg - 2 g	1	2 kg is 7.95 g/cm3; 1 kg and below are 8.03 g/cm3	30391784	1,428
2,220 g	2 kg - 20 g	1	2 kg is 7.95 g/cm3; 1 kg and below are 8.03 g/cm3	30391783	1,840
5,502 g	5 kg - 2 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390005	#N/A
5,502 g	5 kg, 500 g, 2g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390006	1,929
5,520 g	5 kg - 20 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390004	#N/A
5,520 g	5 kg, 500 g, 20 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30391782	2,138
5,202 g	5 kg, 200 g, 2 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390002	#N/A
5,202 g	5 kg, 200 g, 2 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390003	2,108
5,220 g	5 kg - 20 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390000	#N/A
5,220 g	5 kg, 200 g, 20g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390001	2,031
22.02 g	20 g - 20 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391797	555
22.2 g	20 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391796	555

Weights by TROEMNER

Class I NIST Weights without Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	125 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391425	13,259
30 kg	75 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391424	8,439
25 kg	62 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391423	6,683
20 kg	50 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391422	4,551
10 kg	25 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391421	3,118
5 kg	12 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391420	1,690
3 kg	7.5 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391419	1,446
2 kg	5 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391418	1,140
1 kg	2.5 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	30391417	723
500 g	1.2 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	30391416	339
300 g	0.75 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	30391415	260
200 g	0.5 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	80781143	251
100 g	0.25 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	80781141	156
50 g	0.12 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	80781139	147
30 g	0.074 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	30391411	139
20 g	0.074 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	80781135	133
10 g	0.05 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	80781133	133
5 g	0.034 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	80781131	133
3 g	0.034 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	30391407	121
2 g	0.034 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	80781127	121
1 g	0.034 mg	1	No Certificate	Cylindrical	Troemner Alloy 8	80781125	111

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781123	110
300 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	30391403	110
200 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781119	110
100 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781117	110
50 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781115	110
30 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	30391399	110
20 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781111	110
10 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781109	110
5 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781107	110
3 mg	0.01 mg	1	No Certificate	Flat	3003-H14 Aluminum	30391395	110
2 mg	0.01 mg	1	No Certificate	Flat	3003-H14 Aluminum	80781103	110
1 mg	0.01 mg	1	No Certificate	Flat	3003-H14 Aluminum	80781101	110

Weights by TROEMNER

Specifications and Prices subject to change without notice.

Class I NIST Weights with Traceable Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	125 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391607	14,356
30 kg	75 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391606	9,102
25 kg	62 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391605	6,748
20 kg	50 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391604	4,731
10 kg	25 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391603	3,196
5 kg	12 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391602	1,847
3 kg	7.5 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391601	1,660
2 kg	5 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391600	1,255
1 kg	2.5 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391599	849
500 g	1.2 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391598	412
300 g	0.75 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391597	347
200 g	0.5 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391596	321
100 g	0.25 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391595	215
50 g	0.12 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391594	208
30 g	0.074 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391593	201
20 g	0.074 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391592	196
10 g	0.05 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391591	196
5 g	0.034 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391590	196
3 g	0.034 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391589	180
2 g	0.034 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391588	180
1 g	0.034 mg	1	Traceable	Cylindrical	Troemner Alloy 8	30391587	167

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391586	153
300 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391585	153
200 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391584	153
100 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391583	153
50 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391582	153
30 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391581	153
20 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391580	153
10 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391579	153
5 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391578	153
3 mg	0.01 mg	1	Traceable	Flat	3003-H14 Aluminum	30391577	153
2 mg	0.01 mg	1	Traceable	Flat	3003-H14 Aluminum	30391576	153
1 mg	0.01 mg	1	Traceable	Flat	3003-H14 Aluminum	30391575	153

Weights by TROEMNER

Class I NIST Weights with NVLAP Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	125 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391458	14,608
30 kg	75 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391457	9,771
25 kg	62 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391456	6,999
20 kg	50 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391455	4,790
10 kg	25 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391454	3,267
5 kg	12 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391453	2,050
3 kg	7.5 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391452	1,690
2 kg	5 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391451	1,344
1 kg	2.5 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	30391450	938
500 g	1.2 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	30391449	482
300 g	0.75 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	30391448	402
200 g	0.5 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	80781144	389
100 g	0.25 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	80781142	231
50 g	0.12 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	80781140	222
30 g	0.074 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	30391444	216
20 g	0.074 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	80781136	214
10 g	0.05 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	80781134	212
5 g	0.034 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	80781132	208
3 g	0.034 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	30391440	196
2 g	0.034 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	80781128	196
1 g	0.034 mg	1	NVLAP	Cylindrical	Troemner Alloy 8	80781126	180

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781124	174
300 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	30391436	174
200 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781120	174
100 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781118	174
50 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781116	174
30 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	30391432	174
20 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781112	174
10 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781110	174
5 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781108	174
3 mg	0.01 mg	1	NVLAP	Flat	3003-H14 Aluminum	30391428	174
2 mg	0.01 mg	1	NVLAP	Flat	3003-H14 Aluminum	80781104	174
1 mg	0.01 mg	1	NVLAP	Flat	3003-H14 Aluminum	80781102	174

Weights by TROEMNER

Specifications and Prices subject to change without notice.

Class 4 IND Weights Without Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	1 g	4	No Certificate	Cylindrical	316 Stainless Steel	30391295	12,768
30 kg	600 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391294	7,961
25 kg	500 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391293	6,033
20 kg	400 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391292	3,322
10 kg	200 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391291	2,103
5 kg	100 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391290	1,552
3 kg	60 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391289	1,278
2 kg	40 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391288	1,004
1 kg	20 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	30391287	640
500 g	10 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	30391286	297
300 g	6 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	30391285	210
200 g	4 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	30391284	185
100 g	2 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	80780063	125
50 g	1.2 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	80780075	125
30 g	0.9 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	30391281	106
20 g	0.7 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	80780068	106
10 g	0.5 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	80780062	98
5 g	0.36 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	80780074	77
3 g	0.3 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	30391277	77
2 g	0.26 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	80780067	77
1 g	0.2 mg	4	No Certificate	Cylindrical	Troemner Alloy 8	80780061	77

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.16 mg	4	No Certificate	Flat	304 Stainless Steel	80780073	49
300 mg	0.14 mg	4	No Certificate	Flat	304 Stainless Steel	30391273	49
200 mg	0.12 mg	4	No Certificate	Flat	304 Stainless Steel	80780066	49
100 mg	0.1 mg	4	No Certificate	Flat	304 Stainless Steel	80780060	49
50 mg	0.085 mg	4	No Certificate	Flat	304 Stainless Steel	80780072	49
30 mg	0.075 mg	4	No Certificate	Flat	304 Stainless Steel	30391269	49
20 mg	0.07 mg	4	No Certificate	Flat	304 Stainless Steel	80780065	49
10 mg	0.06 mg	4	No Certificate	Flat	304 Stainless Steel	80780059	49
5 mg	0.055 mg	4	No Certificate	Flat	304 Stainless Steel	80780071	49
3 mg	0.052 mg	4	No Certificate	Flat	3003-H14 Aluminum	30391265	49
2 mg	0.05 mg	4	No Certificate	Flat	3003-H14 Aluminum	80780064	49
1 mg	0.05 mg	4	No Certificate	Flat	3003-H14 Aluminum	80780058	49

Weights by TROEMNER

Class 4 IND Weights with Traceable Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	1 g	4	Traceable	Cylindrical	316 Stainless Steel	30391108	12,780
30 kg	600 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391107	8,033
25 kg	500 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391106	6,151
20 kg	400 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391105	3,380
10 kg	200 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391104	2,138
5 kg	100 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391103	1,643
3 kg	60 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391102	1,344
2 kg	40 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391101	1,159
1 kg	20 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391100	712
500 g	10 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391099	307
300 g	6 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391098	242
200 g	4 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391097	226
100 g	2 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391096	163
50 g	1.2 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391095	153
30 g	0.9 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391094	153
20 g	0.7 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391093	139
10 g	0.5 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391092	139
5 g	0.36 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391091	119
3 g	0.3 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391090	114
2 g	0.26 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391089	114
1 g	0.2 mg	4	Traceable	Cylindrical	Troemner Alloy 8	30391088	114

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.16 mg	4	Traceable	Flat	304 Stainless Steel	30391087	98
300 mg	0.14 mg	4	Traceable	Flat	304 Stainless Steel	30391086	98
200 mg	0.12 mg	4	Traceable	Flat	304 Stainless Steel	30391085	98
100 mg	0.1 mg	4	Traceable	Flat	304 Stainless Steel	30391084	98
50 mg	0.085 mg	4	Traceable	Flat	304 Stainless Steel	30391083	98
30 mg	0.075 mg	4	Traceable	Flat	304 Stainless Steel	30391082	98
20 mg	0.07 mg	4	Traceable	Flat	304 Stainless Steel	30391081	98
10 mg	0.06 mg	4	Traceable	Flat	304 Stainless Steel	30391080	98
5 mg	0.055 mg	4	Traceable	Flat	304 Stainless Steel	30391079	98
3 mg	0.052 mg	4	Traceable	Flat	3003-H14 Aluminum	30391078	98
2 mg	0.05 mg	4	Traceable	Flat	3003-H14 Aluminum	30391077	98
1 mg	0.05 mg	4	Traceable	Flat	3003-H14 Aluminum	30391076	98

Weights by TROEMNER

Specifications and Prices subject to change without notice.

Class 4 IND Weights with NVLAP Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	1 g	4	NVLAP	Cylindrical	316 Stainless Steel	30391328	12,947
30 kg	600 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391327	8,241
25 kg	500 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391326	6,350
20 kg	400 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391325	3,602
10 kg	200 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391324	2,652
5 kg	100 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391323	1,815
3 kg	60 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391322	1,440
2 kg	40 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391321	1,212
1 kg	20 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	30391320	770
500 g	10 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	30391319	407
300 g	6 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	30391318	320
200 g	4 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	30391317	297
100 g	2 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	80850287	195
50 g	1.2 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	80850297	192
30 g	0.9 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	30391314	194
20 g	0.7 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	80850292	180
10 g	0.5 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	80850286	176
5 g	0.36 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	80850296	170
3 g	0.3 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	30391310	170
2 g	0.26 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	80850291	171
1 g	0.2 mg	4	NVLAP	Cylindrical	Troemner Alloy 8	80850285	161

Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.16 mg	4	NVLAP	Flat	304 Stainless Steel	80850295	138
300 mg	0.14 mg	4	NVLAP	Flat	304 Stainless Steel	30391306	142
200 mg	0.12 mg	4	NVLAP	Flat	304 Stainless Steel	80850290	142
100 mg	0.1 mg	4	NVLAP	Flat	304 Stainless Steel	80850284	142
50 mg	0.085 mg	4	NVLAP	Flat	304 Stainless Steel	80850294	142
30 mg	0.075 mg	4	NVLAP	Flat	304 Stainless Steel	30391302	142
20 mg	0.07 mg	4	NVLAP	Flat	304 Stainless Steel	80850289	142
10 mg	0.06 mg	4	NVLAP	Flat	304 Stainless Steel	80850283	142
5 mg	0.055 mg	4	NVLAP	Flat	304 Stainless Steel	80850293	142
3 mg	0.052 mg	4	NVLAP	Flat	3003-H14 Aluminum	30391298	142
2 mg	0.05 mg	4	NVLAP	Flat	3003-H14 Aluminum	80850288	142
1 mg	0.05 mg	4	NVLAP	Flat	3003-H14 Aluminum	80850282	142

Weights by TROEMNER

Class 1 EB Weights Without Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	75 mg	1	No Certificate	Grip Handle	303 Stainless Steel	80781007	2,843
25 kg	62 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391488	2,426
24 kg	56 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391487	2,355
20 kg	50 mg	1	No Certificate	Grip Handle	303 Stainless Steel	80781005	2,034
16 kg	37.5 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391485	1,886
10 kg	25 mg	1	No Certificate	Grip Handle	303 Stainless Steel	80781003	1,350
8 kg	18.5 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391483	1,315
5 kg	12 mg	1	No Certificate	Grip Handle	303 Stainless Steel	80781001	986
4 kg	9.75 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391480	928

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	12 mg	1	No Certificate	Cylindrical	303 Stainless Steel	30391481	897
4 kg	9.75 mg	1	No Certificate	Cylindrical	303 Stainless Steel	80780027	785
3 kg	7.5 mg	1	No Certificate	Cylindrical	303 Stainless Steel	30391478	465
2 kg	5 mg	1	No Certificate	Cylindrical	303 Stainless Steel	80780024	283
1,500 g	3.75 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391476	259
1,000 g	2.5 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780021	250
600 g	1.85 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391474	246
500 g	1.2 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780029	195
400 g	0.975 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780026	192
300 g	0.75 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391471	177
200 g	0.5 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780023	171
160 g	0.375 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391469	166
150 g	0.375 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391468	148
100 g	0.25 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780020	143
80 g	0.185 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391466	137
70 g	0.185 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391465	133
60 g	0.185 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391464	126
50 g	0.12 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780028	123
40 g	0.097 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780025	123
30 g	0.074 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391461	123
20 g	0.074 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780022	123
10 g	0.05 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391459	123

Weights by TROEMNER

Specifications and Prices subject to change without notice.

Class 1 EB Weights with Traceable Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	75 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391520	3,145
25 kg	62 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391519	2,575
24 kg	56 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391518	2,521
20 kg	50 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391517	2,194
16 kg	37.5 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391516	1,992
10 kg	25 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391515	1,510
8 kg	18.5 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391514	1,433
5 kg	12 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391513	1,077
4 kg	9.75 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391511	982

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	12 mg	1	Traceable	Cylindrical	303 Stainless Steel	30391512	1,004
4 kg	9.75 mg	1	Traceable	Cylindrical	303 Stainless Steel	30391510	904
3 kg	7.5 mg	1	Traceable	Cylindrical	303 Stainless Steel	30391509	582
2 kg	5 mg	1	Traceable	Cylindrical	303 Stainless Steel	30391508	388
1,500 g	3.75 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391507	380
1,000 g	2.5 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391506	365
600 g	1.85 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391505	325
500 g	1.2 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391504	287
400 g	0.975 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391503	274
300 g	0.75 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391502	258
200 g	0.5 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391501	250
160 g	0.375 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391500	247
150 g	0.375 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391499	230
100 g	0.25 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391498	195
80 g	0.185 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391497	191
70 g	0.185 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391496	187
60 g	0.185 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391495	184
50 g	0.12 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391494	179
40 g	0.097 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391493	179
30 g	0.074 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391492	179
20 g	0.074 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391491	179
10 g	0.05 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391490	179

Weights by TROEMNER

Class 1 EB Weights with NVLAP Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	75 mg	1	NVLAP	Grip Handle	303 Stainless Steel	80781008	3,270
25 kg	62 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391537	2,615
24 kg	56 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391536	2,514
20 kg	50 mg	1	NVLAP	Grip Handle	303 Stainless Steel	80781006	2,211
16 kg	37.5 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391535	2,022
10 kg	25 mg	1	NVLAP	Grip Handle	303 Stainless Steel	80781004	1,557
8 kg	18.5 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391534	1,474
5 kg	12 mg	1	NVLAP	Grip Handle	303 Stainless Steel	80781002	1,202
4 kg	9.75 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391532	1,141

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	12 mg	1	NVLAP	Cylindrical	303 Stainless Steel	30391533	1,095
4 kg	9.75 mg	1	NVLAP	Cylindrical	303 Stainless Steel	80850275	987
3 kg	7.5 mg	1	NVLAP	Cylindrical	303 Stainless Steel	30391531	679
2 kg	5 mg	1	NVLAP	Cylindrical	303 Stainless Steel	80850272	493
1,500 g	3.75 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391530	482
1,000 g	2.5 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850269	446
600 g	1.85 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391529	420
500 g	1.2 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850277	374
400 g	0.975 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850274	365
300 g	0.75 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391528	352
200 g	0.5 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850271	344
160 g	0.375 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391527	341
150 g	0.375 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391526	318
100 g	0.25 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850268	220
80 g	0.185 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391525	220
70 g	0.185 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391524	220
60 g	0.185 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391523	220
50 g	0.12 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850276	220
40 g	0.097 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850273	220
30 g	0.074 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391522	220
20 g	0.074 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850270	220
10 g	0.05 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391521	220

Weights by TROEMNER

Specifications and Prices subject to change without notice.

Class 4 EB Weights Without Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	600 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391139	1,956
25 kg	500 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391138	1,754
24 kg	450 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391137	1,666
20 kg	400 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391136	1,421
16 kg	300 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391135	1,249
10 kg	200 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391134	957
8 kg	150 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391133	939
5 kg	100 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391132	654
4 kg	80 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391130	608

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	100 mg	4	No Certificate	Cylindrical	303 Stainless Steel	30391131	624
4 kg	80 mg	4	No Certificate	Cylindrical	303 Stainless Steel	30391129	613
3 kg	60 mg	4	No Certificate	Cylindrical	303 Stainless Steel	30391128	380
2 kg	40 mg	4	No Certificate	Cylindrical	303 Stainless Steel	80780145	241
1,500 g	30 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391126	239
1,000 g	20 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780143	227
600 g	15 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391124	212
500 g	10 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780141	165
400 g	8 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780139	165
300 g	6 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780137	148
200 g	4 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780135	145
160 g	3 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391119	139
150 g	3 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391118	126
100 g	2 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780133	123
80 g	1.6 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391116	119
70 g	1.6 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391115	114
60 g	1.6 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391114	112
50 g	1.2 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391113	109
40 g	1.05 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391112	102
30 g	0.9 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391111	102
20 g	0.7 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391110	102
10 g	0.5 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391109	102

Weights by TROEMNER

Class 4 EB Weights with Traceable Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	600 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391170	2,247
25 kg	500 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391169	1,789
24 kg	450 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391168	1,729
20 kg	400 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391167	1,529
16 kg	300 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391166	1,408
10 kg	200 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391165	1,053
8 kg	150 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391164	969
5 kg	100 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391163	715
4 kg	80 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391161	690

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	100 mg	4	Traceable	Cylindrical	303 Stainless Steel	30391162	673
4 kg	80 mg	4	Traceable	Cylindrical	303 Stainless Steel	30391160	637
3 kg	60 mg	4	Traceable	Cylindrical	303 Stainless Steel	30391159	446
2 kg	40 mg	4	Traceable	Cylindrical	303 Stainless Steel	30391158	332
1,500 g	30 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391157	328
1,000 g	20 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391156	274
600 g	15 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391155	258
500 g	10 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391154	214
400 g	8 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391153	208
300 g	6 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391152	197
200 g	4 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391151	196
160 g	3 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391150	190
150 g	3 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391149	195
100 g	2 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391148	158
80 g	1.6 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391147	147
70 g	1.6 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391146	147
60 g	1.6 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391145	147
50 g	1.2 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391144	146
40 g	1.05 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391143	137
30 g	0.9 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391142	137
20 g	0.7 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391141	137
10 g	0.5 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391140	137

Weights by TROEMNER

Specifications and Prices subject to change without notice.

Class 4 EB Weights with NVLAP Certificate

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	600 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391194	2,414
25 kg	500 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391193	1,914
24 kg	450 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391192	1,861
20 kg	400 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391191	1,629
16 kg	300 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391190	1,510
10 kg	200 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391189	1,124
8 kg	150 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391188	1,035
5 kg	100 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391187	827
4 kg	80 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391185	744

Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	100 mg	4	NVLAP	Cylindrical	303 Stainless Steel	30391186	767
4 kg	80 mg	4	NVLAP	Cylindrical	303 Stainless Steel	30391184	726
3 kg	60 mg	4	NVLAP	Cylindrical	303 Stainless Steel	30391183	495
2 kg	40 mg	4	NVLAP	Cylindrical	303 Stainless Steel	80780146	357
1,500 g	30 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391182	434
1,000 g	20 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780144	313
600 g	15 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391181	295
500 g	10 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780142	282
400 g	8 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780140	264
300 g	6 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780138	251
200 g	4 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780136	248
160 g	3 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391180	272
150 g	3 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391179	272
100 g	2 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780134	184
80 g	1.6 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391178	184
70 g	1.6 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391177	184
60 g	1.6 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391176	184
50 g	1.2 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391175	175
40 g	1.05 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391174	175
30 g	0.9 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391173	175
20 g	0.7 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391172	175
10 g	0.5 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391171	175

Weights by TROEMNER

Class 1 Weight Sets Without Certificate

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Weights by TROEMNER

1

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	1	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391360	30,289
50 kg - 1 mg	1	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391359	30,934
30 kg - 1 g	1	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391358	21,284
30 kg - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391357	22,024
25 kg - 1 g	1	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391356	20,854
25 kg - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391355	21,499
20 kg - 1 g	1	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391354	13,546
20 kg - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391353	15,694
10 kg - 1 g	1	-	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391352	10,637
10 kg - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391351	11,173
5 kg - 1 g	1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391350	7,263
5 kg - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391349	7,955
(2) 2 kg - 1 g	1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390054	5,805
(2) 2 kg - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390053	6,235
2 kg - 1 g	1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391348	4,736
2 kg - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391347	5,596
1 kg - 1 g	1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391346	3,547
1 kg - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391345	4,354
500 g - 1 g	1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391344	2,407
500 g - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391343	3,267
(2) 200 g - 1 g	1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80781033	1,314
(2) 200 g - 1 mg	1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781031	1,929
200 g - 1 g	1	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391342	1,176
200 g - 1 mg	1	-	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391341	1,762
100 g - 1 g	1	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80781029	1,008
100 g - 100 mg	1	-	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391340	1,195
100 g - 10 mg	1	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391339	1,464
100 g - 5 mg	1	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391338	1,548
100g - 1mg	1	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781027	1,666
50 g - 1 g	1	-	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80781025	974
50 g - 100 mg	1	-	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391337	1,176
50 g - 10 mg	1	-	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391336	1,358
50 g - 5 mg	1	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391335	1,446
50 g - 1 mg	1	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781023	1,601
20 g - 1 g	1	-	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391334	908
20 g - 100 mg	1	-	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391333	1,093
20 g - 10 mg	1	-	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391332	1,297
20 g - 5 mg	1	-	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391331	1,349
20 g - 1 mg	1	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391330	1,572
500 mg - 10 mg	1	-	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391329	657
500 mg - 1 mg	1	-	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80781021	921

CLASS 1 WEIGHT SETS WITH TRACEABLE CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Weights by TROEMNER

1

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	1	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391574	33,037
50 kg - 1 mg	1	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391573	34,314
30 kg - 1 g	1	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391572	23,518
30 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391571	24,569
25 kg - 1 g	1	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391570	21,392
25 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391569	22,465
20 kg - 1 g	1	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391568	15,049
20 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391567	16,208
10 kg - 1 g	1	Traceable	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391566	11,018
10 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391565	12,182
5 kg - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391564	8,165
5 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391563	9,221
(2) 2 kg - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390060	6,672
(2) 2 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390059	7,841
2 kg - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391562	5,249
2 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391561	6,350
1 kg - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391560	4,176
1 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391559	5,280
500 g - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391558	3,034
500 g - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391557	4,198
(2) 200 g - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390058	1,847
(2) 200 g - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390057	2,975
200 g - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391556	1,607
200 g - 1 mg	1	Traceable	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391555	2,652
100 g - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30391554	1,321
100 g - 100 mg	1	Traceable	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391553	1,637
100 g - 10 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391552	2,067
100 g - 5 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391551	2,091
(2) 2g - 1mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391550	2,366
50 g - 1 g	1	Traceable	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30391549	1,326
50 g - 100 mg	1	Traceable	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391548	1,578
50 g - 10 mg	1	Traceable	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391547	1,877
50 g - 5 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391546	2,001
50 g - 1 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391545	2,264
20 g - 1 g	1	Traceable	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391544	1,083
20 g - 100 mg	1	Traceable	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391543	1,392
20 g - 10 mg	1	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391542	1,804
20 g - 5 mg	1	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391541	1,840
20 g - 1 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391540	2,157
500 mg - 10 mg	1	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391539	1,064
500 mg - 1 mg	1	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30391538	1,320

CLASS 1 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Weights by TROEMNER

1

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391392	33,527
50 kg - 1 mg	1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391391	34,745
30 kg - 1 g	1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391390	24,055
30 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391389	25,428
25 kg - 1 g	1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391388	21,798
25 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391387	23,122
20 kg - 1 g	1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391386	15,575
20 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391385	17,007
10 kg - 1 g	1	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391384	11,616
10 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391383	13,031
5 kg - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391382	8,683
5 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391381	10,123
(2) 2kg - 1g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390056	7,190
(2) 2kg - 1mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390055	8,623
2 kg - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391380	5,721
2 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391379	7,162
1 kg - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391378	4,623
1 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391377	6,055
500 g - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391376	3,458
500 g - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391375	5,094
(2) 200 g - 1g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80781034	2,126
(2) 200 g - 1mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781032	3,780
200 g - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391374	1,870
200 g - 1 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391373	3,481
100 g - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80781030	1,745
100 g - 100 mg	1	NVLAP	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391372	2,203
100 g - 10 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391371	2,813
100 g - 5 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391370	2,556
100 g - 1 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781028	3,272
50 g - 1 g	1	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80781026	1,673
50 g - 100 mg	1	NVLAP	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391369	2,108
50 g - 10 mg	1	NVLAP	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391368	2,622
50 g - 5 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391367	2,730
50 g - 1 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781024	3,058
20 g - 1 g	1	NVLAP	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391366	1,273
20 g - 100 mg	1	NVLAP	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391365	1,745
20 g - 10 mg	1	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391364	2,126
20 g - 5 mg	1	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391363	2,234
20 g - 1 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391362	2,766
500 mg - 10 mg	1	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391361	1,405
500 mg - 1 mg	1	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80781022	1,679

Class 4 Weight Sets Without Certificate

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Weights by TROEMNER

4

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	4	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391228	24,927
50 kg - 1 mg	4	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391227	25,297
30 kg - 1 g	4	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391226	17,402
30 kg - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391225	18,119
25 kg - 1 g	4	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391224	16,877
25 kg - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391223	17,724
20 kg - 1 g	4	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391222	11,120
20 kg - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391221	13,043
10 kg - 1 g	4	-	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391220	8,701
10 kg - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391219	9,186
5 kg - 1 g	4	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391218	5,996
5 kg - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391217	6,515
(2) 2 kg - 1 g	4	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390048	4,736
(2) 2 kg - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390047	5,566
2 kg - 1 g	4	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391216	3,911
2 kg - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391215	4,557
1 kg - 1 g	4	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391214	2,950
1 kg - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391213	3,619
500g - 1g	4	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391212	1,978
500 g - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391211	2,544
(2) 200 g - 1 g	4	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390046	1,052
(2) 200 g - 1 mg	4	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390045	1,357
200 g - 1 g	4	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391210	901
200 g - 1 mg	4	-	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391209	1,237
100 g - 1 g	4	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30391208	831
100 g - 100 mg	4	-	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391207	952
100 g - 10 mg	4	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391206	1,135
100 g - 5 mg	4	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391205	1,146
100 g - 1 mg	4	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780101	1,171
50 g - 1 g	4	-	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30391204	640
50 g - 100 mg	4	-	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391203	770
50 g - 10 mg	4	-	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391202	890
50 g - 5 mg	4	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391201	921
50 g - 1 mg	4	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780111	1,008
20 g - 1 g	4	-	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391200	530
20 g - 100 mg	4	-	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391199	633
20 g - 10 mg	4	-	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391198	706
20 g - 5 mg	4	-	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391197	770
20 g - 1 mg	4	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391196	855
500 mg - 10 mg	4	-	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391195	325
500 mg - 1 mg	4	-	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780100	474

Class 4 Weight Sets with Traceable Certificate

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Weights by TROEMNER

4

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	4	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391075	28,605
50 kg - 1 mg	4	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391074	29,655
30 kg - 1 g	4	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391073	20,282
30 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391072	21,188
25 kg - 1 g	4	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391071	18,538
25 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391070	19,504
20 kg - 1 g	4	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391069	13,031
20 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391068	13,999
10 kg - 1 g	4	Traceable	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391067	9,537
10 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391066	10,494
5 kg - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391065	6,994
5 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391064	8,049
(2) 2 kg - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390044	5,829
(2) 2 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390043	6,784
2 kg - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391063	4,563
2 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391062	5,482
1 kg - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391061	3,607
1 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391060	4,563
500 g - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391059	2,628
500 g - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391058	3,590
(2) 200 g - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390042	1,207
(2) 200 g - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390041	1,960
200 g - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391057	1,135
200 g - 1 mg	4	Traceable	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391056	1,667
100 g - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30391055	1,022
100 g - 100 mg	4	Traceable	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391054	1,237
100 g - 10 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391053	1,415
100 g - 5 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391052	1,572
100 g - 1mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391051	1,644
50 g - 1 g	4	Traceable	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30391050	789
50 g - 100 mg	4	Traceable	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391049	986
50 g - 10 mg	4	Traceable	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391048	1,273
50 g - 5 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391047	1,507
50 g - 1 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391046	1,552
20 g - 1 g	4	Traceable	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391045	668
20 g - 100 mg	4	Traceable	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391044	855
20 g - 10 mg	4	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391043	1,017
20 g - 5 mg	4	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391042	1,189
20 g - 1 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391041	1,327
500 mg - 10 mg	4	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391040	639
500 mg - 1 mg	4	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30391039	776

Class 4 Weight Sets with NVLAP Certificate

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Weights by TROEMNER

4

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	4	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391262	29,478
50 kg - 1 mg	4	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391261	30,194
30 kg - 1 g	4	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391260	20,842
30 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391259	22,049
25 kg - 1 g	4	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391258	18,944
25 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391257	20,137
20 kg - 1 g	4	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391256	13,545
20 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391255	14,870
10 kg - 1 g	4	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391254	10,074
10 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391253	11,323
5 kg - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391252	7,554
5 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391251	8,605
(2) 2 kg - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390052	6,211
(2) 2 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390051	7,662
2 kg - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391250	5,035
2 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391249	6,366
1 kg - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391248	4,199
1 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391247	5,274
500 g - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391246	3,058
500 g - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391245	4,246
(2) 200 g - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390050	1,517
(2) 200 g - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390049	2,534
200 g - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391244	1,321
200 g - 1 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391243	2,335
100 g - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30391242	1,183
100 g - 100 mg	4	NVLAP	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391241	1,601
100 g - 10 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391240	1,917
100 g - 5 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391239	1,984
100 g - 1 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80850265	2,245
50 g - 1 g	4	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30391238	1,088
50 g - 100 mg	4	NVLAP	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391237	1,392
50 g - 10 mg	4	NVLAP	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391236	1,870
50 g - 5 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391235	2,044
50 g - 1 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80850264	2,108
20 g - 1 g	4	NVLAP	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391234	956
20 g - 100 mg	4	NVLAP	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391233	1,124
20 g - 10 mg	4	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391232	1,368
20 g - 5 mg	4	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391231	1,643
20 g - 1 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391230	1,886
500 mg - 10 mg	4	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391229	1,034
500 mg - 1 mg	4	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80850263	1,129

EI IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	25 mg	E1	NVLAP	Cylindrical	316 Stainless Steel	30390927	14,397
20 kg	10 mg	E1	NVLAP	Cylindrical	316 Stainless Steel	30390928	6,545
10 kg	5 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390929	4,311
5 kg	2.5 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390930	3,199
2 kg	1 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390931	2,331
1 kg	0.5 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390932	1,593
500 g	0.25 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390933	1,308
200 g	0.1 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390934	1,070
100 g	0.05 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390935	938
50 g	0.03 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390936	845
20 g	0.025 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390937	803
10 g	0.02 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390938	767
5 g	0.016 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390939	731
2 g	0.012 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390940	714
1 g	0.01 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8	30390941	714

Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.005 mg	E1	NVLAP	Flat	304 Stainless Steel	30390942	383
200 mg	0.003 mg	E1	NVLAP	Flat	304 Stainless Steel	30390943	383
100 mg	0.005 mg	E1	NVLAP	Flat	304 Stainless Steel	30390944	383
50 mg	0.004 mg	E1	NVLAP	Flat	304 Stainless Steel	30390945	383
20 mg	0.003 mg	E1	NVLAP	Flat	304 Stainless Steel	30390946	383
10 mg	0.003 mg	E1	NVLAP	Flat	304 Stainless Steel	30390947	383
5 mg	0.003 mg	E1	NVLAP	Flat	304 Stainless Steel; Aluminum	30390948	383
2 mg	0.003 mg	E1	NVLAP	Flat	3003-H14 Aluminum	30390949	383
1 mg	0.003 mg	E1	NVLAP	Flat	3003-H14 Aluminum	30390950	383

Weights by TROEMNER

Specifications and Prices subject to change without notice.

E2 IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	80 mg	E2	NVLAP	Cylindrical	316 Stainless Steel	30390903	12,757
20 kg	30 mg	E2	NVLAP	Cylindrical	316 Stainless Steel	80780306	4,144
10 kg	16 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780305	3,204
5 kg	8 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780304	1,839
2 kg	3 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780303	1,161
1 kg	1.6 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780302	863
500 g	0.8 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780301	600
200 g	0.3 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780300	476
100 g	0.16 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780299	359
50 g	0.1 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780298	323
20 g	0.05 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780297	311
10 g	0.06 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780296	300
5 g	0.05 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780295	293
2 g	0.04 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780294	284
1 g	0.03 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8	80780293	284

Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.025 mg	E2	NVLAP	Flat	304 Stainless Steel	80780292	177
200 mg	0.02 mg	E2	NVLAP	Flat	304 Stainless Steel	80780291	177
100 mg	0.016 mg	E2	NVLAP	Flat	304 Stainless Steel	80780290	177
50 mg	0.012 mg	E2	NVLAP	Flat	304 Stainless Steel	80780289	177
20 mg	0.01 mg	E2	NVLAP	Flat	304 Stainless Steel	80780288	177
10 mg	0.008 mg	E2	NVLAP	Flat	304 Stainless Steel	80780287	177
5 mg	0.006 mg	E2	NVLAP	Flat	304 Stainless Steel; Aluminum	80780286	177
2 mg	0.006 mg	E2	NVLAP	Flat	3003-H14 Aluminum	80780285	177
1 mg	0.006 mg	E2	NVLAP	Flat	3003-H14 Aluminum	80780284	177

Weights by TROEMNER

FIND WEIGHTS WITHOUT CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	250 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780330	9,095
20 kg	100 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780329	3,293
10 kg	50 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780328	2,378
5 kg	25 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780327	1,392
2 kg	10 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780326	827
1 kg	5 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780325	577
500 g	2.5 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780324	332
200 g	1 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780323	259
100 g	0.5 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780322	184
50 g	0.3 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780321	163
20 g	0.25 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780320	163
10 g	0.2 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780319	163
5 g	0.16 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780318	163
2 g	0.12 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780317	163
1 g	0.1 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8	80780316	163

Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.08 mg	F1	No Certificate	Flat	304 Stainless Steel	80780315	67
200 mg	0.06 mg	F1	No Certificate	Flat	304 Stainless Steel	80780314	67
100 mg	0.05 mg	F1	No Certificate	Flat	304 Stainless Steel	80780313	67
50 mg	0.04 mg	F1	No Certificate	Flat	304 Stainless Steel	80780312	67
20 mg	0.03 mg	F1	No Certificate	Flat	304 Stainless Steel	80780311	67
10 mg	0.025 mg	F1	No Certificate	Flat	304 Stainless Steel	80780310	67
5 mg	0.02 mg	F1	No Certificate	Flat	304 Stainless Steel; Aluminum	80780309	67
2 mg	0.02 mg	F1	No Certificate	Flat	3003-H14 Aluminum	80780308	67
1 mg	0.02 mg	F1	No Certificate	Flat	3003-H14 Aluminum	80780307	67

Weights by TROEMNER

Specifications and Prices subject to change without notice.

FIND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	250 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	30390901	9,178
20 kg	100 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	80780353	3,466
10 kg	50 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	80780352	2,540
5 kg	25 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	80780351	1,593
2 kg	10 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	80780350	1,028
1 kg	5 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780349	762
500 g	2.5 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780348	508
200 g	1 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780347	434
100 g	0.5 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780346	261
50 g	0.3 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780345	238
20 g	0.25 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780344	238
10 g	0.2 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780343	238
5 g	0.16 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780342	238
2 g	0.12 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780341	238
1 g	0.1 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8	80780340	238

Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.08 mg	F1	NVLAP	Flat	304 Stainless Steel	80780339	144
200 mg	0.06 mg	F1	NVLAP	Flat	304 Stainless Steel	80780338	144
100 mg	0.05 mg	F1	NVLAP	Flat	304 Stainless Steel	80780337	144
50 mg	0.04 mg	F1	NVLAP	Flat	304 Stainless Steel	80780336	144
20 mg	0.03 mg	F1	NVLAP	Flat	304 Stainless Steel	80780335	144
10 mg	0.025 mg	F1	NVLAP	Flat	304 Stainless Steel	80780334	144
5 mg	0.02 mg	F1	NVLAP	Flat	304 Stainless Steel; Aluminum	80780333	144
2 mg	0.02 mg	F1	NVLAP	Flat	3003-H14 Aluminum	80780332	144
1 mg	0.02 mg	F1	NVLAP	Flat	3003-H14 Aluminum	80780331	144

Weights by TROEMNER

F2 IND WEIGHTS WITHOUT CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	800 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390853	6,445
20 kg	300 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390854	2,837
10 kg	160 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390855	1,784
5 kg	80 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390856	982
2 kg	30 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390857	773
1 kg	16 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390858	496
500 g	8 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390859	332
200 g	3 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390860	251
100 g	1.6 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390861	156
50 g	1 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390862	156
20 g	0.8 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390863	156
10 g	0.6 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390864	156
5 g	0.5 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390865	156
2 g	0.4 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390866	156
1 g	0.3 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8	30390867	156

Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.25 mg	F2	No Certificate	Flat	304 Stainless Steel	30390868	61
200 mg	0.2 mg	F2	No Certificate	Flat	304 Stainless Steel	30390869	61
100 mg	0.16 mg	F2	No Certificate	Flat	304 Stainless Steel	30390870	61
50 mg	0.12 mg	F2	No Certificate	Flat	304 Stainless Steel	30390871	61
20 mg	0.1 mg	F2	No Certificate	Flat	304 Stainless Steel	30390872	61
10 mg	0.08 mg	F2	No Certificate	Flat	304 Stainless Steel	30390873	61
5 mg	0.06 mg	F2	No Certificate	Flat	304 Stainless Steel; Aluminum	30390874	61
2 mg	0.06 mg	F2	No Certificate	Flat	3003-H14 Aluminum	30390875	61
1 mg	0.06 mg	F2	No Certificate	Flat	3003-H14 Aluminum	30390876	61

Weights by TROEMNER

Specifications and Prices subject to change without notice.

F2 IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	800 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390877	6,611
20 kg	300 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390878	3,103
10 kg	160 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390879	1,992
5 kg	80 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390880	1,177
2 kg	30 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390881	982
1 kg	16 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390882	678
500 g	8 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390883	508
200 g	3 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390884	427
100 g	1.6 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390885	231
50 g	1 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390886	231
20 g	0.8 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390887	231
10 g	0.6 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390888	184
5 g	0.5 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390889	231
2 g	0.4 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390890	231
1 g	0.3 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8	30390891	231

Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.25 mg	F2	NVLAP	Flat	304 Stainless Steel	30390892	137
200 mg	0.2 mg	F2	NVLAP	Flat	304 Stainless Steel	30390893	137
100 mg	0.16 mg	F2	NVLAP	Flat	304 Stainless Steel	30390894	137
50 mg	0.12 mg	F2	NVLAP	Flat	304 Stainless Steel	30390895	137
20 mg	0.1 mg	F2	NVLAP	Flat	304 Stainless Steel	30390896	137
10 mg	0.08 mg	F2	NVLAP	Flat	304 Stainless Steel	30390897	137
5 mg	0.06 mg	F2	NVLAP	Flat	304 Stainless Steel; Aluminum	30390898	137
2 mg	0.06 mg	F2	NVLAP	Flat	3003-H14 Aluminum	30390899	137
1 mg	0.06 mg	F2	NVLAP	Flat	3003-H14 Aluminum	30390900	137

Weights by TROEMNER

E1 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

E1

Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	E1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390904	54,237
50 kg - 1 mg	E1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390905	55,961
20 kg - 1 g	E1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390906	25,834
20 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390907	#N/A
10 kg - 1 g	E1	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390908	20,662
10 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390909	21,352
5 kg - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390911	15,361
5 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390912	16,538
2 kg - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390913	9,654
2 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390914	12,281
(2) 2 kg - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390037	11,538
(2) 2 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390038	13,780
1 kg - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390915	8,103
1 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390916	10,165
500 g - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390917	6,891
500 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390918	9,303
200 g - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390919	5,867
200 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390920	7,468
(2) 200 g - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390039	#N/A
(2) 200 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390040	7,752
100 g - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390921	#N/A
100 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390922	7,236
50 g - 1 g	E1	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390923	#N/A
50 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390924	#N/A
500 mg - 1 mg	E1	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390926	2,931
5 g - 1 mg	E1	NVLAP	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390925	4,654
5 kg - 1 kg	E1	NVLAP	(2) 2 kg; 1 kg; 5 kg	30390910	9,654

Weights by TROEMNER

Specifications and Prices subject to change without notice.

E2 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

E2

Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	E2	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780407	31,173
50 kg - 1 mg	E2	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780406	31,683
20 kg - 1 g	E2	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780405	15,361
20 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780404	16,264
10 kg - 1 g	E2	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780403	11,538
10 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780402	11,888
5 kg - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780400	7,931
5 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780399	9,136
2 kg - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	80780398	5,511
2 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780397	6,725
(2) 2 kg - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	80780396	6,302
(2) 2 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780395	6,979
1 kg - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	80780394	4,993
1 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780393	6,502
500 g - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	80780392	3,448
500 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780391	4,346
200 g - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	80780390	2,247
200 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780389	3,942
(2) 200 g - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80780388	3,109
(2) 200 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780387	3,800
100 g - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80780386	1,778
100 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780385	2,919
50 g - 1 g	E2	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80780384	1,557
50 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780383	2,586
500 mg - 1 mg	E2	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780381	1,766
5 g - 1 mg	E2	NVLAP	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780382	2,027
5 kg - 1 kg	E2	NVLAP	(2) 2 kg; 1 kg; 5 kg	80780401	5,326

Weights by TROEMNER

F1 WEIGHT SETS WITHOUT CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

F1

Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	F1	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780433	19,974
50 kg - 1 mg	F1	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780434	20,698
20 kg - 1 g	F1	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780432	12,341
20 kg - 1 mg	F1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780431	12,685
10 kg - 1 g	F1	-	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780430	9,392
10 kg - 1 mg	F1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780429	9,720
5 kg - 1 g	F1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780427	5,808
5 kg - 1 mg	F1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780426	6,177
2 kg - 1 g	F1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	80780425	3,858
2 kg - 1 mg	F1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780424	4,994
(2) 2 kg - 1 g	F1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	80780423	4,560
(2) 2 kg - 1 mg	F1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780422	5,220
1 kg - 1 g	F1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	80780421	3,401
1 kg - 1 mg	F1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780420	3,669
500 g - 1 g	F1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	80780419	1,927
500 g - 1 mg	F1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780418	2,581
200 g - 1 g	F1	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	80780417	1,355
200 g - 1 mg	F1	-	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780416	2,135
(2) 200 g - 1 g	F1	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80780415	1,474
(2) 200 g - 1 mg	F1	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780414	2,188
100 g - 1 g	F1	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80780413	1,005
100 g - 1 mg	F1	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780412	1,516
50 g - 1 g	F1	-	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80780411	868
50 g - 1 mg	F1	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780410	1,433
500 mg - 1 mg	F1	-	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780408	744
5 g - 1 mg	F1	-	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780409	851
5 kg - 1 kg	F1	-	(2) 2 kg; 1 kg; 5 kg	80780428	4,636

Weights by TROEMNER

Specifications and Prices subject to change without notice.

F1 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

F1

Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	F1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780461	22,397
50 kg - 1 mg	F1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780460	23,267
20 kg - 1 g	F1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780459	14,123
20 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780458	15,039
10 kg - 1 g	F1	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780457	11,027
10 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780456	11,806
5 kg - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780454	7,312
5 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780453	8,127
2 kg - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	80780452	5,029
2 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780451	6,445
(2) 2 kg - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	80780450	5,897
(2) 2 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780449	6,652
1 kg - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	80780448	4,685
1 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780447	5,861
500 g - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	80780446	2,812
500 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780445	4,143
200 g - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	80780444	2,117
200 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780443	3,669
(2) 200 g - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80780442	2,200
(2) 200 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780441	3,615
100 g - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80780440	1,500
100 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780439	2,676
50 g - 1 g	F1	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80780438	1,302
50 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780437	2,533
500 mg - 1 mg	F1	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780435	1,392
5 g - 1 mg	F1	NVLAP	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780436	1,433
5 kg - 1 kg	F1	NVLAP	(2) 2 kg; 1 kg; 5 kg	80780455	5,041

Weights by TROEMNER

F2 WEIGHT SETS WITHOUT CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

F2

Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	F2	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390807	17,285
50 kg - 1 mg	F2	-	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390808	17,655
20 kg - 1 g	F2	-	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390809	10,985
20 kg - 1 mg	F2	-	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390810	11,289
10 kg - 1 g	F2	-	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390811	8,358
10 kg - 1 mg	F2	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390812	8,639
5 kg - 1 g	F2	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390814	4,994
5 kg - 1 mg	F2	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390815	5,647
2 kg - 1 g	F2	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390816	3,823
2 kg - 1 mg	F2	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390817	4,328
(2) 2 kg - 1 g	F2	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390029	4,328
(2) 2 kg - 1 mg	F2	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390030	4,399
1 kg - 1 g	F2	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390818	3,376
1 kg - 1 mg	F2	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390819	3,543
500 g - 1 g	F2	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390820	1,706
500 g - 1 mg	F2	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390821	2,206
200 g - 1 g	F2	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390822	1,325
200 g - 1 mg	F2	-	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390823	2,098
(2) 200 g - 1 g	F2	-	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390031	1,404
(2) 200 g - 1 mg	F2	-	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390032	2,135
100 g - 1 g	F2	-	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390824	957
100 g - 1 mg	F2	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390825	1,202
50 g - 1 g	F2	-	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390826	863
50 g - 1 mg	F2	-	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390827	1,171
500 mg - 1 mg	F2	-	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390829	731
5 g - 1 mg	F2	-	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390828	809
5 kg - 1 kg	F2	-	(2) 2 kg; 1 kg; 5 kg	30390813	4,226

Weights by TROEMNER

Specifications and Prices subject to change without notice.

F2 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances

F2

Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	F2	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390830	17,583
50 kg - 1 mg	F2	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390831	18,428
20 kg - 1 g	F2	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390832	12,780
20 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390833	13,650
10 kg - 1 g	F2	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390834	10,011
10 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390835	10,730
5 kg - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390837	6,485
5 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390838	7,598
2 kg - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390839	4,994
2 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390840	6,159
(2) 2 kg - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390033	5,731
(2) 2 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390034	6,320
1 kg - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390841	4,388
1 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390842	5,225
500 g - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390843	2,604
500 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390844	3,763
200 g - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390845	1,931
200 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390846	3,389
(2) 200 g - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390035	2,087
(2) 200 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390036	3,555
100 g - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390847	1,457
100 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390848	2,360
50 g - 1 g	F2	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390849	1,291
50 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390850	2,276
500 mg - 1 mg	F2	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390852	1,385
5 g - 1 mg	F2	NVLAP	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390851	1,409
5 kg - 1 kg	F2	NVLAP	(2) 2 kg; 1 kg; 5 kg	30390836	4,762

Weights by TROEMNER

CAL-PAKS

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

NVLAP

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
2 g - 1 mg	UltraClass	NVLAP	200 mg; 2 g; 1 mg	30391799	565
5 g - 1 mg	UltraClass	NVLAP	5 g; 500 mg; 1 mg	30391798	564

1

Set Capacity	Weight Set Range	ASTM Class	Density at 20°C	Item Number	List Price (USD)
55.2 g	50 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30390007	539
57 g	50 g - 2 g	1	8.03 g/cm3	30391795	539
110.02 g	100 g - 20 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391794	539
110.2 g	100 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391793	539
112 g	100 g - 2 g	1	8.03 g/cm3	30391792	558
220.2 g	200 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391791	639
222 g	200 g - 2 g	1	8.03 g/cm3	30391790	639
550.02 g	500 g - 20 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391789	806
550.2 g	500 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391788	806
552 g	500 g - 2 g	1	8.03 g/cm3	30391787	806
1,102 g	1 kg - 2 g	1	8.03 g/cm3	30391786	981
1,120 g	1 kg - 20 g	1	8.03 g/cm3	30391785	1,176
2,202 g	2 kg - 2 g	1	2 kg is 7.95 g/cm3; 1 kg and below are 8.03 g/cm3	30391784	1,428
2,220 g	2 kg - 20 g	1	2 kg is 7.95 g/cm3; 1 kg and below are 8.03 g/cm3	30391783	1,840
5,502 g	5 kg - 2 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390005	#N/A
5,502 g	5 kg, 500 g, 2 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390006	1,929
5,520 g	5 kg - 20 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390004	#N/A
5,520 g	5 kg, 500 g, 20 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30391782	2,138
5,202 g	5 kg, 200 g, 2g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390002	#N/A
5,202 g	5 kg, 200 g, 2 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390003	2,108
5,220 g	5 kg - 20 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390000	#N/A
5,220 g	5 kg, 200 g, 20 g	1	1 kg and below are 8.03 g/cm3; 2 kg and above are 7.95 g/cm3	30390001	2,031
22.02 g	20 g - 20 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391797	555
22.2 g	20 g - 200 mg	1	500 mg and below are 7.95 g/cm3; 1 g and above are 8.03 g/cm3	30391796	555

Weights by TROEMNER

Specifications and Prices subject to change without notice.

Cast Iron Grip Metric Weights

Individual Scale Calibration Weights Adjusted to Meet or Exceed NIST Class F Tolerances

Grip Handle

Weight Value	NIST Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
2 kg	F	-	Grip Handle	Cast Iron	80850300	97
5 kg	F	-	Grip Handle	Cast Iron	80850301	112
10 kg	F	-	Grip Handle	Cast Iron	80850302	186
20 kg	F	-	Grip Handle	Cast Iron	80850303	193
25 kg	F	-	Grip Handle	Cast Iron	80850304	260
50 kg	F	-	Grip Handle	Cast Iron	80850305	824
100 kg	F	-	Grip Handle	Cast Iron	30391713	1,873
200 kg	F	-	Grip Handle	Cast Iron	30391714	2,042
250 kg	F	-	Grip Handle	Cast Iron	30391715	2,376
500 kg	F	-	Grip Handle	Cast Iron	30391716	4,146
1,000 kg	F	-	Grip Handle	Cast Iron	30391717	9,364
2 kg	F	Traceable	Grip Handle	Cast Iron	30391736	155
5 kg	F	Traceable	Grip Handle	Cast Iron	30391737	178
10 kg	F	Traceable	Grip Handle	Cast Iron	30391738	222
20 kg	F	Traceable	Grip Handle	Cast Iron	30391739	287
25 kg	F	Traceable	Grip Handle	Cast Iron	30391740	358
50 kg	F	Traceable	Grip Handle	Cast Iron	30391741	1,132
100 kg	F	Traceable	Grip Handle	Cast Iron	30391742	2,341
200 kg	F	Traceable	Grip Handle	Cast Iron	30391743	2,664
250 kg	F	Traceable	Grip Handle	Cast Iron	30391744	2,947
500 kg	F	Traceable	Grip Handle	Cast Iron	30391745	5,150
1,000 kg	F	Traceable	Grip Handle	Cast Iron	30391746	10,217
2 kg	F	NVLAP	Grip Handle	Cast Iron	30391695	200
5 kg	F	NVLAP	Grip Handle	Cast Iron	30391696	221
10 kg	F	NVLAP	Grip Handle	Cast Iron	30391697	282
20 kg	F	NVLAP	Grip Handle	Cast Iron	30391698	350
25 kg	F	NVLAP	Grip Handle	Cast Iron	30391699	417
50 kg	F	NVLAP	Grip Handle	Cast Iron	30391700	1,201
100 kg	F	NVLAP	Grip Handle	Cast Iron	30391701	2,482
200 kg	F	NVLAP	Grip Handle	Cast Iron	30391702	2,803
250 kg	F	NVLAP	Grip Handle	Cast Iron	30391703	3,087
500 kg	F	NVLAP	Grip Handle	Cast Iron	30391704	5,284
1,000 kg	F	NVLAP	Grip Handle	Cast Iron	30391705	10,361

Weights by TROEMNER

Cast Iron Grip AVD Weights

Individual Scale Calibration Weights Adjusted to Meet or Exceed NIST Class F Tolerances

Grip Handle

Weight Value	NIST Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 lb	F	-	Grip Handle	Cast Iron	80850306	77
10 lb		-	Grip Handle	Cast Iron	30391800	97
10 lb	F	-	Grip Handle	Cast Iron	80850307	101
20 lb	F	-	Grip Handle	Cast Iron	80850308	129
25 lb	F	-	Grip Handle	Cast Iron	80850309	160
30 lb	F	-	Grip Handle	Cast Iron	30391723	237
50 lb	F	-	Grip Handle	Cast Iron	80850310	216
250 lb	F	-	Grip Handle	Cast Iron	30391727	2,126
100 lb	F	-	Grip Handle	Cast Iron	80850311	814
200 lb	F	-	Grip Handle	Cast Iron	30391726	1,852
500 lb	F	-	Grip Handle	Cast Iron	30391728	2,319
1,000 lb	F	-	Grip Handle	Cast Iron	30391729	3,686
1,250 lb	F	-	Grip Handle	Cast Iron	30391730	7,728
1,500 lb	F	-	Grip Handle	Cast Iron	30391731	8,926
2,000 lb	F	-	Grip Handle	Cast Iron	30391732	10,208
2,500 lb	F	-	Grip Handle	Cast Iron	30391733	11,546
3,000 lb	F	-	Grip Handle	Cast Iron	30391734	12,864
5,000 lb	F	-	Grip Handle	Cast Iron	30391735	20,507
5 lb	F	Traceable	Grip Handle	Cast Iron	30391748	147
10 lb	F	Traceable	Grip Handle	Cast Iron	30391749	167
20 lb	F	Traceable	Grip Handle	Cast Iron	30391750	204
25 lb	F	Traceable	Grip Handle	Cast Iron	30391751	247
30 lb	F	Traceable	Grip Handle	Cast Iron	30391752	265
50 lb	F	Traceable	Grip Handle	Cast Iron	30391753	507
250 lb	F	Traceable	Grip Handle	Cast Iron	30391756	2,609
100 lb	F	Traceable	Grip Handle	Cast Iron	30391754	1,180
200 lb	F	Traceable	Grip Handle	Cast Iron	30391755	2,296
500 lb	F	Traceable	Grip Handle	Cast Iron	30391757	3,105
1,000 lb	F	Traceable	Grip Handle	Cast Iron	30391758	4,598
2,000 lb	F	Traceable	Grip Handle	Cast Iron	30391761	10,823
2,500 lb	F	Traceable	Grip Handle	Cast Iron	30391762	12,748
3,000 lb	F	Traceable	Grip Handle	Cast Iron	30391763	13,804
1,250 lb	F	Traceable	Grip Handle	Cast Iron	30391759	8,335
5,000 lb	F	Traceable	Grip Handle	Cast Iron	30391764	23,442
1,500 lb	F	Traceable	Grip Handle	Cast Iron	30391760	9,252
5 lb	F	NVLAP	Grip Handle	Cast Iron	30391765	190
10 lb	F	NVLAP	Grip Handle	Cast Iron	30391766	222
20 lb	F	NVLAP	Grip Handle	Cast Iron	30391767	252
25 lb	F	NVLAP	Grip Handle	Cast Iron	30391768	267
30 lb	F	NVLAP	Grip Handle	Cast Iron	30391769	343
50 lb	F	NVLAP	Grip Handle	Cast Iron	30391770	342
250 lb	F	NVLAP	Grip Handle	Cast Iron	30391773	2,749
100 lb	F	NVLAP	Grip Handle	Cast Iron	30391771	1,271
200 lb	F	NVLAP	Grip Handle	Cast Iron	30391772	2,436
500 lb	F	NVLAP	Grip Handle	Cast Iron	30391774	3,246
1,000 lb	F	NVLAP	Grip Handle	Cast Iron	30391775	4,733
1,250 lb	F	NVLAP	Grip Handle	Cast Iron	30391776	8,501
1,500 lb	F	NVLAP	Grip Handle	Cast Iron	30391777	9,627
2,000 lb	F	NVLAP	Grip Handle	Cast Iron	30391778	10,981
2,500 lb	F	NVLAP	Grip Handle	Cast Iron	30391779	12,955
3,000 lb	F	NVLAP	Grip Handle	Cast Iron	30391780	14,821
5,000 lb	F	NVLAP	Grip Handle	Cast Iron	30391781	#N/A

Weights by TROEMNER

Specifications and Prices subject to change without notice.

Accessories for Weighing

Track your results on paper when you connect a balance or scale to a printer from OHAUS.

SF40A

OHAUS Value in a Full-Featured, Portable Printer

Communication
RS233 (included)

Construction
ABS Housing

Design Features
Status indicator, 40 characters per line, perform zero and tare operations directly from the printer

Operation
AC adapter (included)

The statistics and totalization modes and real time clock complement OHAUS weighing instruments' application modes and offer functionality that assists the reporting processes.

SF40A helps support the efficiency of the weighing and recording processes.RS232 interface and PC configuration software make setting up and using the printer fast and simple.

With the ability to print in 13 different languages, SF40A can print in the language of the connected device to support universal operation.

Model	Printer Type	Print Speed	Item Number	List Price (USD)
SF40A	Impact Dot Matrix	1.2 lines per second	30064203	1,342

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	26
Axis, Paper Roll, SF40A	30063920	30
Ink Ribbon SF40A	30529322	79
Cable RS9 M/F 1m	30529323	270

Accessories	Item Number	List Price (USD)
RS232 cable for Defender 6000XW/5000X-W/3000XW	80500552	244
RS232 cable for Defender 5000P/3000P, DFD25P, Courier 7000, Ranger 7000/4000/3000 and Valor 7000	80500525	262

Statistics Totalization Time/Date

Specifications and Prices subject to change without notice.

SF40A/BT

Bluetooth Portable Printer

Communication
RS232, Bluetooth

Construction
ABS Housing

Design Features
2 Bluetooth Adapters, Status indicator, 40 characters per line, perform zero and tare operations directly from the printer

Operation
AC Adapter (Included)

Secure and simple set-up, with a factory paired Bluetooth adapter leading to plug and play integration.

With its statistics and totalization modes and clock, the SF40A/ BT ensures accurate and compliant reporting.

With the ability to print in 13 different languages, SF40A/BT can print in the language of the connected device to support universal operation.

Model	Printer Type	Print Speed	Item Number	List Price (USD)
SF40A/BT	Impact Dot Matrix	1.2 lines per second	30944360	1,521

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	26
Axis, Paper Roll, SF40A	30063920	30
Ink Ribbon SF40A	30529322	79
Cable RS9 M/F 1m	30529323	270

Accessories	Item Number	List Price (USD)
RS232 cable for Defender 6000XW/5000X-W/3000XW	80500552	244
RS232 cable for Defender 5000P/3000P, DFD25P, Courier 7000, Ranger 7000/4000/3000 and Valor 7000	80500525	262

Statistics Totalization Time/Date Bluetooth®

STP103

Economical Palm-Sized Thermal Printer

Communication
RS232 (cable available as an accessory)

Construction
ABS Housing

Design Features
Status indicator, paper feeder, graphical printing capabilities

Operation
AC Adapter (Included)

This ultra-compact printer has a very small footprint and also features very low power consumption, requiring limited resources from your workspace.

The extremely fast STP103 offers 42 column printing at a speed of approximately 11.8 lines per second.

Loading paper into the printer is quick and easy and when the paper becomes low, the printer will suspend printing in order to prevent printing errors resulting from lack of paper.

Model	Printer Type	Interface Type	Print Speed	Paper Type	Item Number	List Price (USD)
STP103	Direct Thermal	RS232 Serial	1.97 inches / sec	Thermal Paper, 57.5mm (W)	80251992	1,035

Accessories	Item Number	List Price (USD)
Adapter, 25 Pin-9 Pin, STP103	80251930	54
Paper Roll, Thermal, STP103	80251931	31
Cable, ST103-AR EP VP	80252580	262
Cable ST103-EX MB PA TxxP	80252581	262
Cable, ST103-TC TR	80252583	254

Accessories	Item Number	List Price (USD)
Cable, ST103-CKW55 TxxXW	80252584	294
RS232 cable for Defender 6000XW/5000X-W/3000XW	80500552	244
RS232 cable for Defender 5000P/3000P, DFD25P, Courier 7000, Ranger 7000/4000/3000 and Valor 7000	80500525	262

Time/Date

Specifications and Prices subject to change without notice.

ZEBRA ZD421 RS232

Economical Barcode Label Printer

Applications
Thermal Transfer Barcode Label Printing for Defender 5000 (TD52) and Ranger 7000.

Communication
RS232 (cable 80500525 required). Other communication not supported for OHAUS products.

Construction
ABS Housing

Design Features
Status indicator, paper feeder, graphical printing capabilities, AC adapter power (included).
Requires RS232 Kit 30037448 for connection to Ranger 7000.
Ranger 7000, Defender 5000 (TD52P) and Defender 3000 (DT33P) require RS232 Cable 80500525.
Defender 5000 (TD52XW) and Defender 3000 (DT33XW) required RS232 Cable 80500552

Datalogic QD2131 Barcode Scanner Accessory

Fast label printing with full part information—supports EPL2 and ZLP II Zebra programming languages.

Quickly configured with Ranger 7000 and Defender 6000/5000/3000 models using ScaleMate and print templates available on OHAUS DMX for dealers.

Easy label loading—accepts wide range of labels.

Model	Printer Type	Print Speed	Media Specifications	Operating Temperature	Item Number	List Price (USD)
ZD421 RS232	Thermal Transfer, 203 dpi/8 dots per mm	6" / 152 mm per second maximum	0.75" / 19 mm to 4.25" / 108 mm wide 0.25" / 6.4 mm to 39" / 990 mm long 0.003" / 0.08 mm to 0.0075" / 0.19 mm thick Max. roll size 5"/127 mm O.D.	40° F to 105° F / 4.4° C to 41° C 10% to 90% non-condensing relative humidity	30928908	953

Accessories	Item Number	List Price (USD)
Datalogic Barcode Scanner QD2131	30593703	259
RS232 Kit, Ranger 7000	30037448	210

Accessories	Item Number	List Price (USD)
Cable, RS232 for TD52 and Ranger 7000	80500525	262
USB Host (required for QD2131 to TD52)	30572923	182

NOTES

Laboratory Equipment

OHAUS is now offering equipment designed for every area of the laboratory, giving you the opportunity to Do More. From stirrers to shakers, lifts to clamps, our newly expanded portfolio is filled with products perfect for life sciences laboratories, giving you countless opportunities to fill every inch of your laboratory.

	Mini Centrifuge	Micro Centrifuges				
Model	FC5306	FC5513L	FC5513	FC5513R	FC5515	FC5515R
Description	Small but powerful mini centrifuge for simple and quick seperation	Space saving, economical 18-place micro centrifuge	Standard micro centrifuge for clinical and basic molecular biology applications		High-speed micro centrifuge for a broad range of applications	
Max Capacity (mL)	8 × 1.5/2.0 mL	18 × 1.5/2.0 mL	24 × 1.5/2.0 mL	18 × 1.5/2.0 mL	44 × 1.5/2.0 mL	
Max RCF	2,000 × g	15,994 × g	17,317 × g	17,157 × g	21,953 × g	
Max RPM	6,000	14,000	13,500	14,500	15,200	
Refrigerated	—	—	—	–20 °C to 40 °C	—	
Dimensions (W × D × H)	5.9 × 6.6 × 5.0"	14 × 9.3 × 10.9"	14 × 9.3 × 10.9"	11.3 × 21.8 × 11.3"	15.5 × 11.5 × 11.3"	22.1 × 11.5 × 11.3"
Weight (lbs)	4.1	27.8	27.8	72.7	38	77
Noise	≤60 dB(A)	≤ 57 dB(A)	≤60 dB(A)	≤ 56 dB(A)	≤60 dB(A)	≤ 57 dB(A)
Rotor Options	2	1	4	3	7	
Microtube 5 mL	—	—	—	—	12	
Microtubes 1.5/2.0 mL	8	18	24		44	
Microtubes 0.5 mL	8	18	24		44	
Microtubes 0.2 mL	8	18	24		44	
8-place PCR Strips	4	—	4		4	
Hematocrit Capillaries	—	—	24		24	
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	Multi Centrifuges	
Model	FC5707	FC5706
Description	Economical low-speed centrifuge with medium capacity	Compact, low-speed centrifuge with medium capacity for clinical and cell culture labs
Max Capacity Swinging-Bucket	—	6 × 5 mL
Max Capacity Fixed-Angle	8 × 15 mL	6 × 50 mL
Max RCF	4,445 × g	4,427 × g
Max RPM	6,800	6,000
Refrigerated	—	—
Dimensions (W × D × H)	14 × 9.3 × 10.9"	15.4 × 10.5 × 11.5"
Weight (lbs)	23	23
Noise	≤60 dB(A)	≤60 dB(A)
Rotor Options	2	3
Conical 50 mL	4	6
Round Bottom 50 mL	4	—
Conical 15 mL	4	12
Round Bottom 15 mL	8	—
Blood Tube 10 mL (16 mm)	—	12
Blood Tube 7 mL (13.5 mm)	8	12
Blood Tube 5 mL (13.5 mm)	8	12
Microtube 1.5/2.0 mL	8	12
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	Multi Pro Centrifuges						
Model	FC5714	FC5718	FC5718R	FC5816	FC5816R	FC5916	FC5916R
Description	Entry-level, multipurpose high-speed centrifuge	High-speed, compact multipurpose centrifuge		Medium through-put, general purpose centrifuge		High-throughput, multipurpose centrifuge for ultimate versatility	
Max Capacity Swinging-Bucket	4 × 100 mL	4 × 100 mL		4 × 250 mL		4 × 750 mL	
Max Capacity Fixed-Angle	30 × 15 mL	6 × 85 mL		6 × 250 mL		6 × 250 mL	
Max RCF	18,624 × g	23,542 × g		21,379 × g	24,325 × g	24,325 × g	26,328 × g
Max RPM	14,000	18,000		15,000	16,000	16,000	16,000
Refrigerated	—	—	–20 °C to 40 °C	—	–20 °C to 40 °C	—	–20 °C to 40 °C
Dimensions (W × D × H)	19.4 × 13 × 14.2"	19.6 × 13.8 × 16.0"	28.7 × 14.1 × 16.0"	21.2 × 14 × 17.6"	21.2 × 14 × 28.5"	26.4 × 15.4 × 21.3"	26.4 × 15.4 × 28.7"
Weight (lbs)	66	95	132	115	170	187	260
Noise	≤63 dB(A)	≤60 dB(A)	≤60 dB(A)	≤61 dB(A)	≤63 dB(A)	≤63 dB(A)	≤63 dB(A)
Rotor Options	9	19		13		14	
Bottles 750 mL	—	—		—		4	
Conical 500 mL	—	—		—		4	
Conical 250 mL	—	—		—		4	
Bottle 250 mL	—	—		6		6	
Round Bottom 100 mL	4	4		4		12	
Conical 50 mL	8	10		16		28	
Round Bottom 50 mL	6	6		12		28	
Conical 15 mL	30	30		40		68	
Blood Tube 13 mm	28	28		56		108	
Blood Tube 16 mm	20	20		32		72	
Microtube 1.5/2.0 mL	96	40		96		96	
Microtiter Plates (MTP)	6	6		6		12	
Deep Well Plates (DPW)	2	2		2		4	
8-place PCR Strips	—	4		—		4	
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FRONTIER™ 5000 SERIES MICRO

Dependable Benchtop Micro Centrifuges, Ideal for High-speed Lab Applications

Display
LCD, Backlight, 2 lines

Construction
Brushless quiet motor, small footprint

Design Features
High sample throughput,multi-safety control, personal program function

Operation
AC Power (Included)

Excellent functionality when used with rotors compatible with 1.5/2.0ml or 5ml microtubes with high throughput & biocontainment options, spin columns, PCR strips, cryo tubes & hematocrit capillaries.

Designed for ease of operation, Frontier Micro centrifuges feature convenient controls on an intuitive interface, allowing responsive operation – even when wearing gloves.

Packaging all their functionality within a small footprint, Frontier Micro centrifuges save valuable space on the lab bench.

Model	Speed Range	Temp Range	Maximum Relative Centrifuge Force (x g)	Maximum Capacity (Rotor)	Item Number	List Price (USD)
FC5513L + R06 120V	200 rpm - 14,000 rpm		15,994 g	18 × 1.5 / 2.0 ml	83041044	1,957
FC5513L + R06 230V	200 rpm - 14,000 rpm		15,994 g	18 × 1.5 / 2.0 ml	83041043	#N/A
FC5513 120V	200 rpm - 13,500 rpm		17,317 g	24 × 1.5 / 2.0 ml	30393188	2,401
FC5513 230V	200 rpm - 13,500 rpm		17,317 g	24 × 1.5 / 2.0 ml	30393187	2,401
FC5513+R02 120V	200 rpm - 13,500 rpm		17,317 g	24 × 1.5 / 2.0 ml	30370692	2,602
FC5513+R02 230V	200 rpm - 13,500 rpm		17,317 g	24 × 1.5 / 2.0 ml	30370691	2,602
FC5513R 120V	200 rpm - 14,500 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	17,157 g	24 × 1.5 / 2.0 ml	83041042	5,459
FC5513R 230V	200 rpm - 14,500 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	17,157 g	24 × 1.5 / 2.0 ml	83041041	#N/A
FC5515 120V	200 rpm - 15,200 rpm		21,953 g	44 × 1.5 / 2.0ml; 12 × 5 ml	30130867	3,291
FC5515 230V	200 rpm - 15,200 rpm		21,953 g	44 × 1.5 / 2.0ml; 12 × 5 ml	30130866	3,291
FC5515R 120V	200 rpm - 15,200 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	21,953 g	44 × 1.5 / 2.0ml; 12 × 5 ml	30130869	7,189
FC5515R 230V	200 rpm - 15,200 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	21,953 g	44 × 1.5 / 2.0ml; 12 × 5 ml	30130868	7,189

Accessories	Item Number	List Price (USD)
Rotor, Angle, 30×1.5/2.0ml, Sealable	30130872	1,743
Rotor, Angle, 12×5ml, Sealable	30130873	1,935
Rotor, Angle, 4×8-Place PCR Stripes	30130874	2,274
Adapter, D6mm, 0.2/0.4ml Tubes ×6	30130884	131
Adapter, D8mm, 0.5ml Tubes ×6	30130885	131
Rotor, Angle, 24 × 2.0 ml Spin Column	30210898	551
Rotor, Angle, 44×1.5/2.0ml, v2	30372717	1,384

Accessories	Item Number	List Price (USD)
Rotor, Angle, 24×1.5/2.0ml BIOSEALS V2	30472302	703
Rotor Hematocrit 24×Capillaries V2	30472304	817
Rotor, Angle, 24×1.5/2.0ml BIOSEALS V2	30642371	1,228
Rotor, Angle, 18×1.5/2.0ml Sealable	83041006	303
Rotor, Angle, 4×8-Place PCR Strip V1	83041014	672
Rotor, Angle ,24×2.0ml Spin Column V1	83041050	1,055

Specifications and Prices subject to change without notice.

FRONTIER™ 5000 SERIES MULTI PRO

Powerful and Versatile Universal Centrifuges for Virtually Every Lab Application

Display
Backlit Liquid Crystal Display (LCD)

Construction
Corrosion-resistant stainless steel chamber with Polycarbonate/ABS plastic lid

Design Features
Ten acceleration & deceleration rates, selection of running time from 10s to 99h 59min or continuous, quick spin, CFC-free refrigeration system, sample temp. indication (refrigerated models), lid-locking system, over-speed protection, dual imbalance sensing

Operation
Designed to be used with a variety of rotors and accessories

Our multi-purpose centrifuges offer a high-speed centrifugation platform which can be customized to fit workflow needs using a wide variety of rotors and accessories.

The intuitive design of the centrifuges and accessories enables easy access to parameter settings and quick rotation between applications. Features include automatic rotor recognition and backlit LCD.

The performance of these centrifuges is propelled by German engineering and high quality components for reliable use. Constructed from chemical-resistant stainless steel to ensure durability in lab use.

Model	Speed Range	Temp Range	Maximum Relative Centrifuge Force (x g)	Maximum Capacity (Rotor)	Item Number	List Price (USD)
FC5714 120V	200 rpm - 14,000 rpm		18,624 g	4 × 100 ml	30314811	3,966
FC5714 230V	200 rpm - 14,000 rpm		18,624 g	4 × 100 ml	30314810	3,966
FC5718 120V	200 rpm - 18,000 rpm		23,542 g	4 × 100 ml	30314813	6,028
FC5718 230V	200 rpm - 18,000 rpm		23,542 g	4 × 100 ml	30314812	6,028
FC5718R 120V	200 rpm - 18,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	23,542 g	4 × 100 ml	30314815	8,773
FC5718R 230V	200 rpm - 18,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	23,542 g	4 × 100 ml	30314814	8,773
FC5720R 120V	200 rpm - 20,000 rpm	-4 °F ; 104 °F (-20 °C ; 30 °C)	38,007 g	4 × 200 ml	83041046	#N/A
FC5720R 230V	200 rpm - 20,000 rpm	-4 °F ; 104 °F (-20 °C ; 30 °C)	38,007 g	4 × 200 ml	83041045	#N/A
FC5816 120V	200 rpm - 15,000 rpm		21,379 g	6 × 250 ml	30314817	6,923
FC5816 230V	200 rpm - 15,000 rpm		21,379 g	6 × 250 ml	30314816	6,923
FC5816R 120V	200 rpm - 16,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	24,325 g	6 × 250 ml	30314819	10,250
FC5816R 230V	200 rpm - 16,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	24,325 g	6 × 250 ml	30314818	10,250
FC5830R 120V	200 rpm - 30,000 rpm	-4 °F ; 104 °F (-20 °C ; 30 °C)	65,395 g	4 × 290 ml	83041048	#N/A
FC5830R 230V	200 rpm - 30,000 rpm	-4 °F ; 104 °F (-20 °C ; 30 °C)	65,395 g	4 × 290 ml	83041047	#N/A
FC5916 120V	200 rpm - 16,000 rpm		24,325 g	4 × 750 ml	30553037	9,029
FC5916R 120V	200 rpm - 16,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	26,331 g	4 × 750 ml	30553103	12,745

Accessories	Item Number	List Price (USD)
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D13.5mm, 7ml Tubes x2	30130889	157
Adapter, D13.5mm, 5ml Tubes x2	30130890	144
Adapter, D26mm, 30ml Tubes x2	30130891	323
Adapter, D18mm, 16ml Tubes x2	30130892	323
Adapter, D17mm, 15ml Tubes x2	30130893	323
Adapter D17mm 15ml RB/FA Tubes x2	30130894	226
Rack, 8x4-10ml D16mm Vac, 2/pk	30304367	413
Adapter, 9x1.5/2.0ml D11mm, 2/pk	30304368	386

Accessories	Item Number	List Price (USD)
Adapter, 8x1.5ml D11mm, 2/pk	30304369	355
Adapter, 5x10ml D16mm RB, 2/pk	30304370	361
Adapter, 4x15ml D17mm FA, 2/pk	30304371	355
Adapter, 2x30ml D26mm RB, 2/pk	30304372	361
Adapter, 1x50ml D29mm RB, 2/pk	30304373	361
Adapter, 1x50ml D30mm FA, 2/pk	30304374	355
Rack, 4x50ml D29mm FA, 2/pk	30304375	564
Rack, 10x15ml D17mm FA, 2/pk	30314583	564
Rack, 14x5-7ml D13mm Vac/Sar, 2/pk	30314584	564
Rack, 12x4-10ml D16mm Vac/Sar, 2/pk	30314585	564
Rotor, Swing out, 4x250ml, ID	30314820	2,034

Accessories continued on next page

FRONTIER™ 5000 SERIES MULTI PRO ACCESSORIES

Accessories	Item Number	List Price (USD)
Rotor, Angle, 6x250ml FB, ID	30314821	5,000
Rotor, Swing out, 4x100ml, ID	30314822	1,686
Rotor, Swing out, 4x100ml, ID, Sealable	30314823	1,420
Rotor Swing out 2x3MTP w/ bucket ID	30314824	2,445
Rotor, Angle, 6x85ml RB, ID, Hi	30314825	2,794
Rotor, Angle, 6x85ml RB, ID	30314826	2,820
Rotor, Angle, 4x85ml RB, ID, Hi	30314827	2,888
Rotor, Angle, 24x1.5/2.0ml ID, Bioseal	83041238	1,313
Rotor, Swing out, 16x50ml, ID	30314828	3,012
Rotor, Angle, 10x50ml FA, ID	30314829	3,579
Rotor, Angle, 6x50ml RB/FA, ID	30314830	1,228
Rotor, Angle, 6x50ml RB, ID, Hi	30314831	2,445
Rotor, Angle, 30x15ml RB/FA, ID	30314832	1,910
Rotor, Angle, 20x10ml RB, ID, Hi	30314833	2,528
Rotor, Angle, 12x15ml RB/FA, ID	30314834	1,238
Rotor, Angle, 30x1.5/2.0ml, ID, Sealable	30314836	1,977
Rotor, Angle, 24x1.5/2.0ml, ID	30642361	1,379
Rotor, Angle, 12x1.5/2.0ml, ID	30314839	1,769
Rotor, Angle, 4x8-w PCR Strip, ID	30314841	2,549
Rack, 1x100ml D46mm RB, 2/pk	30314842	351
Rack, 1x85ml D38mm RB, 2/pk	30314843	357
Rack, 1x50ml D34mm RB, 2/pk	30314844	357
Rack, 1x50ml D29mm RB, 2/pk	30314845	351
Rack, 1x50ml D29mm FA, 2/pk	30314846	351
Rack, 1x50ml D29mm Rim, 2/pk	30314847	351
Rack, 1x30ml D25mm Rim, 2/pk	30314848	357
Rack, 1x25ml D25mm RB, 2/pk	30314849	357
Rack, 2x15ml D17mm FA, 2/pk	30314850	351
Rack, 1x15ml D17mm Rim, 2/pk	30314851	357
Rack, 7x15ml D17mm RB, 2/pk	30314852	351
Rack, 9x5-7ml D13mm RB, 2/pk	30314853	357
Rack, 10x1.5ml D11mm, 2/pk	30314854	357
Rack, 9x4.5ml D12mm FB, 2/pk	30314855	357
Rack, 7x5-7ml D13mm RB, 2/pk	30314856	351
Rack, 7x5-7ml D13mm Vac, 2/pk	30314857	351
Rack, 5x4-10ml D16mm Sar, 2/pk	30314858	351
Bucket, 100ml w/o Cap, 2/pk	30314860	428
Bucket, 100ml w/ Cap, Sealable, 2/pk	30314861	514
Screw Cap, 100ml Bucket, Sealable, 2/pk	30314862	156
O-ring, 100ml Bucket, Sealable, 10/pk	30314863	74
Rack, 1x100ml D40mm RB, 2/pk	30314864	315
Rack, 1x85ml D38mm RB, 2/pk, V2	30314865	320
Rack, 1x50ml D34mm RB, 2/pk, V2	30314866	320
Rack, 1x50ml D29mm RB, 2/pk, V2	30314867	315
Rack, 1x50ml D29mm FA, 2/pk, V2	30314868	315
Rack, 1x50ml D29mm Rim, 2/pk, V2	30314869	315
Rack, 1x30ml D25mm Rim, 2/pk, V2	30314870	315
Rack, 1x25ml D25mm RB, 2/pk, v2	30314871	323
Rack, 1x15ml D17mm FA, 2/pk	30314872	329
Rack, 2x15ml D17mm FA, 2/pk, V2	30314873	323
Rack, 2x15ml D17mm Rim, 2/pk	30314874	329
Rack, 4x15ml D17mm RB, 2/pk	30314875	329
Rack, 7x5-7ml D13mm RB, 2/pk, V2	30314876	323
Rack, 5x1.5ml D11mm, 2/pk	30314877	329
Rack, 3x10ml D17mm Sar, 2/pk	30314878	329
Rack, 4x5-7ml D13mm RB, 2/pk	30314879	329
Rack, 4x10ml D17mm Vac, 2/pk	30314880	315
Bucket, 2x50ml D29mm FA, w/ Rack, 2/pk	30314881	670
Bucket, 3x15ml D17mm FA, w/ Rack, 2/pk	30314882	685
Bucket, 3xMTP, 2/pk	30314890	4,144
Adapter, 48x1.5/2.0ml D11mm, 2/pk	30314891	1,106
Adapter, 1x15ml D17.5mm FA, 2/pk	30314892	276
Adapter, 1x15ml D17mm RB, 2/pk	30314893	249

Accessories	Item Number	List Price (USD)
Adapter, 1x30ml D25mm RB, 2/pk	30314894	249
Adapter, 1x50ml D29mm RB, 2/pk, V2	30314895	249
Adapter, 1x50ml D29mm FA, 2/pk	30314896	246
Adapter, 1x15ml D17mm FA, 2/pk	30314897	246
Adapter, 2x15ml D17mm RB, 2/pk	30314898	246
Adapter, 1x16ml D18mm RB, 2/pk	30314899	249
Adapter, 1x1.5ml for over16000xg, 6/pk	30314900	136
Screw Cap, Rack of 250ml Rotor, 2/pk	30314901	173
O-ring, Rack of 250ml Rotor, 10/pk	30314902	90
Rack, 1x250ml D62mm FB, 2/pk	30314903	402
Rack, 1x100ml D41mm RB, 2/pk	30314904	408
Rack, 3x50ml D29mm RB, 2/pk	30314905	402
Rack, 3x50ml D29mm FA, 2/pk	30314906	402
Rack, 1x50ml D34mm RB, 2/pk, V3	30314907	408
Rack, 2x50ml D29mm Rim, 2/pk	30314908	402
Rack, 1x50ml D29mm Rim, 2/pk, V3	30314909	408
Rack, 5x25ml D24.5mm RB, 2/pk	30314910	408
Rack, 3x25ml D24.5mm Rim, 2/pk	30314911	408
Rack, 9x15ml D17mm RB, 2/pk	30314912	408
Rack, 7x15ml D17mm FA, 2/pk	30314913	402
Rack, 7x15ml D17mm Rim, 2/pk	30314914	408
Rack, 8x10ml D16mm RB, 2/pk	30314915	402
Rack, 14x5-7ml D13mm RB, 2/pk	30314916	408
Rack, 10x1.6-7ml D13mm Vac, 2/pk	30314917	408
Rotor, Angle, 44x1.5/2.0ml, ID, v2	30372718	1,560
Adapter 1x15ml D17mm RB 2/pk V2	30472300	145
Adapter 1x15ml D17mm FA 2/pk V2	30472307	145
Rotor Swing out 4x750ml ID Sealable	30553085	2,300
Rotor Angle 4x500ml ID	30553086	5,540
Bucket MTP x2 V1	30553104	2,118
Holder removing aid for Bucket 30553104	30553105	234
Lid Assembly for bucket 30553104 PC x2	30553117	338
O-Ring for bucket 30553104 SIL x2	30553118	165
Bucket MTP x2 V2	30553119	969
Lid Assembly for Bucket 30602502 PC 2x	30553122	266
O-Ring for bucket 30602502 NBR 10x	30553123	165
Rack 1x500ml D96mm FA x2	30553124	477
Rack 1x250ml D62mm FB x2 V1	30553125	477
Rack 1x175/225ml D61mm FA x2	30553126	477
Rack 3x100ml D41mm RB x2	30553127	477
Rack 5x50ml D29mm FA x2	30553128	477
Rack 5x50ml D29mm FAw/R x2	30553129	477
Rack 7x50ml D29mm FA x2	30553130	477
Rack 7x50ml D29mm RB x2	30553131	477
Rack 8x30ml D26mm RB x2	30553132	477
Rack 14x15ml D17mm FA x2	30553133	477
Rack 17x15ml D17mm FA x2	30553134	477
Rack 18x15ml D17mm RB x2	30553135	477
Rack 21x10ml D16mm RB x2	30553136	477
Rack 32x7ml D13mm RB x2	30553138	477
Rack 27x1.8/7ml D13mm Vac/Sar x2	30553139	477
Rack 18x4/10ml D16mm Vac/Sar x2	30553140	477
Rack 38x1.1/1.4ml D8mm Sar x2	30559377	477
Adapter 15x1.5/2.0ml D11mm MTB x2	30559412	355
Adapter 1x175/225ml D61mm FA x2	30559414	355
Adapter 1x250ml D60.5mm FA x2	30559416	355
Adapter 1x175/225 ml D61.5mm FA x2	30559417	355
Adapter 1x50ml D29.5mm FA x2	30559419	355
Adapter 3x50ml D29mm RB x2	30559420	355
Adapter 4x30ml D25.5mm RB x2	30559421	355
Adapter 6x15ml D17mm FA x2	30559422	355
Adapter 1x250ml D61.5mm FB x2	30564850	355
Bucket 1x750ml D99mm FB x2 V1	30602502	897

Specifications and Prices subject to change without notice.

FRONTIER™ 5000 SERIES MULTI

Reliable and Compact Multi-Function Centrifuges Ideal for General Lab Applications

Display
LCD, Backlight, 2 lines

Construction
Brushless quiet motor, small footprint

Design Features
Easy installation design

Operation
AC Power (Included)

Designed for ease of operation, Frontier™ Multi Centrifuges feature convenient control on an intuitive interface, which allows for responsive operation – even when wearing gloves.

Frontier™ Multi Centrifuges can accommodate standard 50ml and 15ml tubes, including common blood tubes. When used with accessories, rotors can be adapted for sizes as small as 1.5ml.

Enclosing all its functionalities within a small footprint, Frontier™ Multi Centrifuges save valuable space on the lab bench.

Model	Speed Range	Maximum Relative Centrifuge Force (x g)	Maximum Capacity(Rotor)	Item Number	List Price (USD)
FC5707+R05 100-230V	200 rpm - 6,800 rpm	4,445 g	8 × 15 ml	30393189	2,063
FC5707+R09 100-230V	200 rpm - 6,800 rpm	4,445 g	4 × 50 ml or 4 × 15 ml	83041073	2,013
FC5706 120V	200 rpm - 6,000 rpm	4,427 g	6 × 50 ml	30130876	2,509
FC5706 230V	200 rpm - 6,000 rpm	4,427 g	6 × 50 ml	30130875	2,509

Accessories	Item Number	List Price (USD)
Rotor Angle 12x15ml RB/FA	30130877	744
Rotor Angle 6x50ml RB/FA	30130878	1,311
Rotor Angle 4x50 mL RB/FA or 15mL RB/FA	83041009	520
Rotor, Swing Out, 6x5ml RB	30130880	880
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D13.5mm, 7ml Tubes x2	30130889	157
Adapter, D13.5mm, 5ml Tubes x2	30130890	144

Accessories	Item Number	List Price (USD)
Adapter, D26mm, 30ml Tubes x2	30130891	323
Adapter, D18mm, 16ml Tubes x2	30130892	323
Adapter, D17mm, 15ml Tubes x2	30130893	323
Adapter D17mm 15ml RB/FA Tubes x2	30130894	226
Buckets, For 30130880 x2	30130895	137
Rotor Angle 8x15ml	30472305	536

FRONTIER™ 5000 SERIES MINI

Powerful and Convenient Mini Centrifuge for Simple and Quick Life Science Separation Applications!

Construction
Brushless quiet motor, auto shut-off safety switches

Design Features
One-touch operation

Operation
AC adapter (included)

With a low voltage power input, quiet brushless motor and a rubber base that absorbs vibrations, Frontier 5306 minimizes operational noise and reduces disruptions in the laboratory.

Frontier 5306 is designed with operator safety in mind, and includes a rotor imbalance sensor and two safety switches which immediately stop the rotors should the lid open during use.

Frontier 5306 takes simple one-step operation to a new level. Simply place your sample in the centrifuge, close the lid, and it will begin to rotate without the press of a button.

Model	Speed Range	Maximum Relative Centrifuge Force (x g)	Maximum Capacity(Rotor)	Item Number	List Price (USD)
FC5306	0 rpm - 6,000 rpm	2,000 g	8 × 1.5 / 2.0 ml	30134157	276

Accessories	Item Number	List Price (USD)
Rotor, 1.5/2ml × 8, FC5306	30129559	66
Rotor, 0.2ml PCR 8 × 4, FC5306	30129560	66

Accessories	Item Number	List Price (USD)
Adapter, 0.2ml Tube × 8, FC5306	30129561	67
Adapter, 0.5ml Tube × 8, FC5306	30129562	67

FRONTIER™ 5000 ROTORS

Offering Flexibility to Maximize Sample Preparation

Construction

Aluminum or polypropylene material

Design Features

Easy-installation

Choose from a range of rotors to be used with Frontier centrifuges to match capacities and flexibility required for your basic to high-performance sample preparation needs.

Designed with usability in mind, the Frontier rotors can be effortlessly installed or removed in a few quick and simple steps, and users have easy access to the samples.

The sturdy rotors are constructed of high-quality materials, built to last through demanding workflows from autoclave sterilization to sub-zero temperature.

Model	Angle	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A24x2SC	45°	24 × 1.5 / 2.0 ml	17,317 g	13,500 rpm	FC5513	30210898	551
R-A24X2/16MIS	45°	24 × 1.5 / 2.0 ml	24,325 g	16,000 rpm	FC5816R; FC5718R; FC5916R; FC5816; FC5718; FC5916; FC5714	30642361	1,379
R-A24X2/15MS	45°	24 × 1.5 / 2.0 ml	21,953 g	15,200 rpm	FC5515; FC5515R	30642371	1,228
R-A8x2/6M	45°	8 × 1.5 / 2.0 ml	2,560 g	6,000 rpm	FC5306	30129559	66
R-A4xPCR/6	45°	4 × 0.2 ml PCR8	2,260 g	6,000 rpm	FC5306	30129560	66
R-A30x2/13MS	45°	30 × 1.5 / 2.0 ml	19,150 g	13,500 rpm	FC5515; FC5515R	30130872	1,743
R-A12x5/14MS	45°	12 × 5 ml	19,978 g	14,500 rpm	FC5515; FC5515R	30130873	1,935
R-A4xPCR/15	45°	4 × 0.2 ml PCR8	15,342 g	15,000 rpm	FC5515; FC5515R	30130874	2,274
R-A12x15/6M	32°	12 × 15 ml	4,427 g	6,000 rpm	FC5706	30130877	744
R-A6x50/6M	40°	6 × 50 ml	4,427 g	6,000 rpm	FC5706	30130878	1,311
R-S6x5/4	0-90°	6 × 5 ml	1,817 g	4,000 rpm	FC5706	30130880	880
R-A24xCAP/12	90°	24 × Capillaries	14,970 g	12,000 rpm	FC5515; FC5515R	30130881	843
R-S4x250/4MI	0-90°	4 × 250 ml	3,780 g	4,500 rpm	FC5816R; FC5816	30314820	2,034
R-A6x250/8MI	28°	6 × 250 ml	10,016 g	8,000 rpm	FC5816R; FC5816; FC5916; FC5916R	30314821	5,000
R-S4x100/4MI	0-90°	4 × 100 ml	3,350 g	4,500 rpm	FC5718R; FC5718; FC5714	30314822	1,686
R-S4x100/5MIS	0-90°	4 × 100 ml	3,885 g	5,000 rpm	FC5718R; FC5718; FC5714	30314823	1,420
R-S6xMTP/4MI	0-90°	2 × 3MTP	2,716 g	4,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714; FC5916; FC5916R	30314824	2,445
R-A6x85/14MI	25°	6 × 85 ml	20,984 g	13,500 rpm	FC5718R; FC5718	30314825	2,794
R-A6x85/13MI	38°	6 × 85 ml	21,726 g	13,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314826	2,820
R-A4x85/12MI	30°	4 × 85 ml	14,809 g	12,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314827	2,888
R-S16x50/4MI	0-90°	16 × 50 ml	3,735 g	4,500 rpm	FC5816R; FC5816	30314828	3,012
R-A10x50/10MI	38°	10 × 50 ml	16,022 g	10,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314829	3,579
R-A6x50/6MI	40°	6 × 50 ml	4,427 g	6,000 rpm	FC5718R; FC5718; FC5714	30314830	1,228
R-A6x50/13MI	26°	6 × 50 ml	15,869 g	13,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314831	2,445
R-A30x15/4MI	35°	30 × 15 ml	2,830 g	4,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714	30314832	1,910
R-A20x10/12MI	30°	20 × 10 ml	15,775 g	12,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314833	2,528
R-A12x15/6MI	32°	12 × 15 ml	4,427 g	6,000 rpm	FC5718R; FC5718; FC5714	30314834	1,238
R-A30x2/14MIS	45°	30 × 1.5 / 2.0 ml	20,595 g	14,000 rpm	FC5718R; FC5718; FC5714; FC5916; FC5916R	30314836	1,977
R-A24X2/16MIS	45°	24 × 1.5 / 2.0 ml	24,325 g	16,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714; FC5916; FC5916R	30642361	1,379
R-A12x2/18MI	40°	12 × 1.5 / 2.0 ml	23,542 g	18,000 rpm	FC5718R; FC5718	30314839	1,769
R-A4xPCR/15I	45°	4 × 8 PCR Strip	15,343 g	15,000 rpm	FC5718R; FC5718	30314841	2,549
R-A44x2/16Mb	32° / 55°	44 × 1.5 / 2.0ml	21,379 g	15,000 rpm	FC5515; FC5515R	30372717	1,384
R-A44x2/16MIb	32° / 55°	44 × 1.5 / 2.0ml	24,325 g	16,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30372718	1,560
R-A24x2/13MSb	45°	24 × 1.5 / 2.0 ml	17,317 g	13,500 rpm	FC5513	30472302	703
R-A24xCAP/12b	90°	24 × Capillaries	16,058 g	13,000 rpm	FC5513	30472304	817
R-A8x15/7M	32°	8 × 15 ml	4,445 g	6,800 rpm	FC5707	30472305	536
R-S4X750/10MIS		4 × 750 ml	4,346 g	4,500 rpm	FC5916; FC5916R	30553085	2,300
R-S4X500/7MI	25°	4 × 500mL	10,367 g	8,000 rpm	FC5916; FC5916R	30553086	5,540

FRONTIER™ 5000 ROTORS

Offering Flexibility to Maximize Sample Preparation

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A24x2SC	24 × 1.5 / 2.0 ml	17,317 g	13,500 rpm	30210898	551

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A24X2/16MIS	24 × 1.5 / 2.0 ml	24,325 g	16,000 rpm	30642361	1,379

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A24X2/15MS	24 × 1.5 / 2.0 ml	21,953 g	15,200 rpm	30642371	1,228

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A8x2/6M	8 × 1.5 / 2.0 ml	2,560 g	6,000 rpm	30129559	66

Accessories	Item Number	List Price (USD)
Adapter, 0.2ml Tube x8, FC5306	30129561	67
Adapter, 0.5ml Tube x8, FC5306	30129562	67

Specifications and Prices subject to change without notice.

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A4xPCR/6	4 × 0.2 ml PCR8	2,260 g	6,000 rpm	30129560	66

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A30x2/13MS	30 × 1.5 / 2.0 ml	19,150 g	13,500 rpm	30130872	1,743

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A12x5/14MS	12 × 5 ml	19,978 g	14,500 rpm	30130873	1,935

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D12.6mm, 1.8ml Cryo x6	30130888	406
Adapter, D12.6mm, 1.0ml Cryo x6	30130887	406

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A4xPCR/15	4 × 0.2 ml PCR8	15,342 g	15,000 rpm	30130874	2,274

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A12x15/6M	12 × 15 ml	4,427 g	6,000 rpm	30130877	744

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D13.5mm, 5ml Tubes x2	30130890	144
Adapter, D13.5mm, 7ml Tubes x2	30130889	157

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A6x50/6M	6 × 50 ml	4,427 g	6,000 rpm	30130878	1,311

Accessories	Item Number	List Price (USD)
Adapter D17mm 15ml RB/FA Tubes x2	30130894	226
Adapter, D17mm, 15ml Tubes x2	30130893	323
Adapter, D18mm, 16ml Tubes x2	30130892	323
Adapter, D26mm, 30ml Tubes x2	30130891	323

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-S6x5/4	6 × 5 ml	1,817 g	4,000 rpm	30130880	880

Accessories	Item Number	List Price (USD)
Buckets, For 30130880 x2	30130895	137

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A24xCAP/12	24 × Capillaries	14,970 g	12,000 rpm	30130881	843

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-S4x250/4MI	4 × 250 ml	3,780 g	4,500 rpm	30314820	2,034

Accessories	Item Number	List Price (USD)
Rack, 3x25ml D24.5mm Rim, 2/pk	30314911	408
Screw Cap, Rack of 250ml Rotor, 2/pk	30314901	173
Rack, 9x15ml D17mm RB, 2/pk	30314912	408
Rack, 5x25ml D24.5mm RB, 2/pk	30314910	408
Rack, 2x50ml D29mm Rim, 2/pk	30314908	402
Rack, 1x50ml D29mm Rim, 2/pk, V3	30314909	408
Rack, 3x50ml D29mm FA, 2/pk	30314906	402
Rack, 10x1.6-7ml D13mm Vac, 2/pk	30314917	408
Rack, 1x50ml D34mm RB, 2/pk, V3	30314907	408
Rack, 8x10ml D16mm RB, 2/pk	30314915	402
Rack, 1x100ml D41mm RB, 2/pk	30314904	408
Rack, 3x50ml D29mm RB, 2/pk	30314905	402
Rack, 14x5-7ml D13mm RB, 2/pk	30314916	408
O-ring, Rack of 250ml Rotor, 10/pk	30314902	90
Rack, 7x15ml D17mm FA, 2/pk	30314913	402
Rack, 8x4-10ml D16mm Vac, 2/pk	30304367	413
Adapter, 9x1.5/2.0ml D11mm, 2/pk	30304368	386
Rack, 7x15ml D17mm Rim, 2/pk	30314914	408
Rack, 1x250ml D62mm FB, 2/pk	30314903	402

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A6x250/8MI	6 × 250 ml	10,016 g	8,000 rpm	30314821	5,000

Accessories	Item Number	List Price (USD)
Adapter, 1x50ml D29mm RB, 2/pk	30304373	361
Adapter, 1x50ml D30mm FA, 2/pk	30304374	355
Adapter, 2x30ml D26mm RB, 2/pk	30304372	361
Adapter, 4x15ml D17mm FA, 2/pk	30304371	355
Adapter, 5x10ml D16mm RB, 2/pk	30304370	361
Adapter, 8x1.5ml D11mm, 2/pk	30304369	355

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-S4x100/4MI	4 × 100 ml	3,350 g	4,500 rpm	30314822	1,686

Accessories	Item Number	List Price (USD)
Rack, 10x1.5ml D11mm, 2/pk	30314854	357
Rack, 1x100ml D46mm RB, 2/pk	30314842	351
Rack, 1x15ml D17mm Rim, 2/pk	30314851	357
Rack, 1x25ml D25mm RB, 2/pk	30314849	357
Rack, 1x30ml D25mm Rim, 2/pk	30314848	357
Rack, 1x50ml D29mm FA, 2/pk	30314846	351
Rack, 1x50ml D29mm RB, 2/pk	30314845	351
Rack, 1x50ml D29mm Rim, 2/pk	30314847	351
Rack, 1x50ml D34mm RB, 2/pk	30314844	357
Rack, 1x85ml D38mm RB, 2/pk	30314843	357
Rack, 2x15ml D17mm FA, 2/pk	30314850	351
Rack, 5x4-10ml D16mm Sar, 2/pk	30314858	351
Rack, 7x15ml D17mm RB, 2/pk	30314852	351
Rack, 7x5-7ml D13mm RB, 2/pk	30314856	351
Rack, 7x5-7ml D13mm Vac, 2/pk	30314857	351
Rack, 9x4.5ml D12mm FB, 2/pk	30314855	357
Rack, 9x5-7ml D13mm RB, 2/pk	30314853	357

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-S4x100/5MIS	4 × 100 ml	3,885 g	5,000 rpm	30314823	1,406

Accessories	Item Number	List Price (USD)
Bucket, 100ml w/ Cap, Sealable, 2/pk	30314861	514
Bucket, 100ml w/o Cap, 2/pk	30314860	428
Bucket, 2x50ml D29mm FA, w/ Rack, 2/pk	30314881	670
Bucket, 3x15ml D17mm FA, w/ Rack, 2/pk	30314882	685
O-ring, 100ml Bucket, Sealable, 10/pk	30314863	74
Rack, 1x100ml D40mm RB, 2/pk	30314864	315
Rack, 1x15ml D17mm FA, 2/pk	30314872	329
Rack, 1x25ml D25mm RB, 2/pk, v2	30314871	323
Rack, 1x30ml D25mm Rim, 2/pk, V2	30314870	315
Rack, 1x50ml D29mm FA, 2/pk, V2	30314868	315
Rack, 1x50ml D29mm RB, 2/pk, V2	30314867	315
Rack, 1x50ml D29mm Rim, 2/pk, V2	30314869	315
Rack, 1x50ml D34mm RB, 2/pk, V2	30314866	320
Rack, 1x85ml D38mm RB, 2/pk, V2	30314865	320
Rack, 2x15ml D17mm FA, 2/pk, V2	30314873	323
Rack, 2x15ml D17mm Rim, 2/pk	30314874	329
Rack, 3x10ml D17mm Sar, 2/pk	30314878	329
Rack, 4x10ml D17mm Vac, 2/pk	30314880	315
Rack, 4x15ml D17mm RB, 2/pk	30314875	329
Rack, 4x5-7ml D13mm RB, 2/pk	30314879	329
Rack, 5x1.5ml D11mm, 2/pk	30314877	329
Rack, 7x5-7ml D13mm RB, 2/pk, V2	30314876	323
Screw Cap, 100ml Bucket, Sealable, 2/pk	30314862	156

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-S6xMTP/4MI	2 × 3MTP	2,716 g	4,500 rpm	30314824	2,445

Accessories	Item Number	List Price (USD)
Adapter, 48x1.5/2.0ml D11mm, 2/pk	30314891	1,106
Bucket, 3xMTP, 2/pk	30314890	4,144

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A6x85/14MI	6 × 85 ml	20,984 g	13,500 rpm	30314825	2,794

Accessories	Item Number	List Price (USD)
Adapter, 1x15ml D17mm FA, 2/pk	30314897	246
Adapter, 1x15ml D17mm RB, 2/pk	30314893	249
Adapter, 1x16ml D18mm RB, 2/pk	30314899	249
Adapter, 1x30ml D25mm RB, 2/pk	30314894	249
Adapter, 1x50ml D29mm FA, 2/pk	30314896	246
Adapter, 1x50ml D29mm RB, 2/pk, V2	30314895	249
Adapter, 2x15ml D17mm RB, 2/pk	30314898	246

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A6x85/13MI	6 × 85 ml	21,726 g	13,000 rpm	30314826	2,820

Accessories	Item Number	List Price (USD)
Adapter, 1x15ml D17mm FA, 2/pk	30314897	246
Adapter, 1x15ml D17mm RB, 2/pk	30314893	249
Adapter, 1x16ml D18mm RB, 2/pk	30314899	249
Adapter, 1x30ml D25mm RB, 2/pk	30314894	249
Adapter, 1x50ml D29mm FA, 2/pk	30314896	246
Adapter, 1x50ml D29mm RB, 2/pk, V2	30314895	249
Adapter, 2x15ml D17mm RB, 2/pk	30314898	246

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A4x85/12MI	4 × 85 ml	14,809 g	12,000 rpm	30314827	2,888

Accessories	Item Number	List Price (USD)
Adapter, 1x15ml D17mm FA, 2/pk	30314897	246
Adapter, 1x15ml D17mm RB, 2/pk	30314893	249
Adapter, 1x16ml D18mm RB, 2/pk	30314899	249
Adapter, 1x30ml D25mm RB, 2/pk	30314894	249
Adapter, 1x50ml D29mm FA, 2/pk	30314896	246
Adapter, 1x50ml D29mm RB, 2/pk, V2	30314895	249
Adapter, 2x15ml D17mm RB, 2/pk	30314898	246

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-S16x50/4MI	16 × 50 ml	3,735 g	4,500 rpm	30314828	3,012

Accessories	Item Number	List Price (USD)
Rack, 10x15ml D17mm FA, 2/pk	30314583	564
Rack, 14x5-7ml D13mm Vac/Sar, 2/pk	30314584	564
Rack, 12x4-10ml D16mm Vac/Sar, 2/pk	30314585	564
Rack, 4x50ml D29mm FA, 2/pk	30304375	564

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A10x50/10MI	10 × 50 ml	16,022 g	10,500 rpm	30314829	3,579

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D13.5mm, 5ml Tubes x2	30130890	144
Adapter, D13.5mm, 7ml Tubes x2	30130889	157
Adapter 1x15ml D17mm FA 2/pk V2	30472307	145
Adapter 1x15ml D17mm RB 2/pk V2	30472300	145

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A6x50/6MI	6 × 50 ml	4,427 g	6,000 rpm	30314830	1,228

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D13.5mm, 5ml Tubes x2	30130890	144
Adapter, D13.5mm, 7ml Tubes x2	30130889	157
Adapter D17mm 15ml RB/FA Tubes x2	30130894	226
Adapter, D17mm, 15ml Tubes x2	30130893	323
Adapter, D18mm, 16ml Tubes x2	30130892	323
Adapter, D26mm, 30ml Tubes x2	30130891	323

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A6x50/13MI	6 × 50 ml	15,869 g	13,000 rpm	30314831	2,445

Accessories	Item Number	List Price (USD)
Adapter, D17mm, 15ml Tubes x2	30130893	323
Adapter, D18mm, 16ml Tubes x2	30130892	323
Adapter, D26mm, 30ml Tubes x2	30130891	323
Adapter, 1x15ml D17.5mm FA, 2/pk	30314892	276

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A30x15/4MI	30 × 15 ml	2,830 g	4,500 rpm	30314832	1,910

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D13.5mm, 5ml Tubes x2	30130890	144
Adapter, D13.5mm, 7ml Tubes x2	30130889	157

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A20x10/12MI	20 × 10 ml	15,775 g	12,000 rpm	30314833	2,528

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A12x15/6MI	12 × 15 ml	4,427 g	6,000 rpm	30314834	1,238

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D13.5mm, 5ml Tubes x2	30130890	144
Adapter, D13.5mm, 7ml Tubes x2	30130889	157

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A30x2/14MIS	30 × 1.5 / 2.0 ml	20,595 g	14,000 rpm	30314836	1,977

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A24x2/16MIS	24 × 1.5 / 2.0 ml	24,325 g	16,000 rpm	30642361	1,379

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A12x2/18MI	12 × 1.5 / 2.0 ml	23,542 g	18,000 rpm	30314839	1,769

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131
Adapter, 1x1.5ml for over16000xg, 6/pk	30314900	136

Model	Capacity	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A4xPCR/15I	4 × 8 PCR Strip	15,343 g	15,000 rpm	30314841	2,549

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A44x2/16Mb	44 × 1.5 / 2.0ml	21,379 g	15,000 rpm	30372717	1,384

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A44x2/16MIb	44 × 1.5 / 2.0ml	24,325 g	16,000 rpm	30372718	1,560

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A24x2/13MSb	24 × 1.5 / 2.0 ml	17,317 g	13,500 rpm	30472302	703

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	131
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	131

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A24xCAP/12b	24 × Capillaries	16,058 g	13,000 rpm	30472304	817

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-A8x15/7M	8 × 15 ml	4,445 g	6,800 rpm	30472305	536

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	258
Adapter, D13.5mm, 5ml Tubes x2	30130890	144
Adapter, D13.5mm, 7ml Tubes x2	30130889	157

Model	Maximum Capacity(Rotor)	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-S4X750/10MIS	4 × 750 ml	4,346 g	4,500 rpm	30553085	2,300

Accessories	Item Number	List Price (USD)
Adapter 15x1.5/2.0ml D11mm MTB x2	30559412	355
Adapter 1x175/225ml D61mm FA x2	30559414	355
Adapter 6x15ml D17mm FA x2	30559422	355
Rack 38x1.1/1.4ml D8mm Sar x2	30559377	477
Rack 5x50ml D29mm FAw/R x2	30553129	477
Bucket 1x750ml D99mm FB x2 V1	30602502	897
Rack 14x15ml D17mm FA x2	30553133	477
Rack 1x250ml D62mm FB x2 V1	30553125	477
Holder removing aid for Bucket 30553104	30553105	234
Lid Assembly for bucket 30553104 PC x2	30553117	338
O-Ring for bucket 30553104 SIL x2	30553118	165
Adapter 1x50ml D29.5mm FA x2	30559419	355
Lid Assembly for Bucket 30602502 PC 2x	30553122	266
Rack 17x15ml D17mm FA x2	30553134	477
Rack 1x175/225ml D61mm FA x2	30553126	477
Rack 32x7ml D13mm RB x2	30553138	477
Adapter 1x250ml D61.5mm FB x2	30564850	355
Rack 7x50ml D29mm FA x2	30553130	477
Adapter 3x50ml D29mm RB x2	30559420	355
Adapter 1x250ml D60.5mm FA x2	30559416	355
Bucket MTP x2 V2	30553119	969
O-Ring for bucket 30602502 NBR 10x	30553123	165
Rack 18x15ml D17mm RB x2	30553135	477
Rack 3x100ml D41mm RB x2	30553127	477
Rack 27x1.8/7ml D13mm Vac/Sar x2	30553139	477
Rack 7x50ml D29mm RB x2	30553131	477
Adapter 4x30ml D25.5mm RB x2	30559421	355
Adapter 1x175/225 ml D61.5mm FA x2	30559417	355
Rack 8x30ml D26mm RB x2	30553132	477
Rack 1x500ml D96mm FA x2	30553124	477
Rack 21x10ml D16mm RB x2	30553136	477
Bucket MTP x2 V1	30553104	2,118
Rack 5x50ml D29mm FA x2	30553128	477
Rack 18x4/10ml D16mm Vac/Sar x2	30553140	477

Model	Capacity	Max g-force	Maximum Speed	Item Number	List Price (USD)
R-S4X500/7Ml	4 × 500mL	10,367 g	8,000 rpm	30553086	5,540

Accessories	Item Number	List Price (USD)
Adapter 6x15ml D17mm FA x2	30559422	355
Adapter 1x50ml D29.5mm FA x2	30559419	355
Adapter 1x250ml D61.5mm FB x2	30564850	355
Adapter 3x50ml D29mm RB x2	30559420	355
Adapter 1x250ml D60.5mm FA x2	30559416	355
Adapter 4x30ml D25.5mm RB x2	30559421	355
Adapter 1x175/225 ml D61.5mm FA x2	30559417	355

	Endeavor™ Orbital Shaker	Endeavor™ Orbital Shaker	Endeavor™ Orbital Shaker
Model	e-E51LD0403	e-E51LD0420	e-E51LDMP03
Speed Range	100 - 800 rpm	50-300 rpm	100 - 1200 rpm
Timer	Up to 99 hours 59 minutes	Up to 99 hours 59 minutes	Up to 99 hours 59 minutes
Motion	Orbital	Orbital	Orbital
Orbit	3 mm	20 mm	3 mm
Max Weight Capacity	8.8 lbs	8.8 lbs	4 Microplates / 2 Micro-tube Racks / 4 Deepwell Plates
Audible Alarm	•	•	•
Load Sensor	—	—	—
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO_2 Environment	•	•	•
Overload Protection	•	•	•
User Calibration (Speed)	—	—	—
RS232 Interface	•	•	•
Programs	On-board programming for 8 separate, 5-step programs	On-board programming for 8 separate, 5-step programs	On-board programming for 8 separate, 5-step programs
Included Tray (L × W)	11.75 × 8.75"	11.75 × 8.75"	11 × 7.75"
Tray / Platform Options	Universal Platform, Adjustable Platform	Universal Platform, Adjustable Platform	—

	High Speed Microplate Shaker	Extreme Environment Shaker	Heavy Duty Shaker	Heavy Duty Shaker	Heavy Duty Shaker
Model	SHHSMPDG	SHEX1619DG	SHHD1619AL	SHHD1619DG	SHHD2325AL
Speed Range	600 rpm to 2500 rpm	15 to 500 rpm	25 to 500 rpm	15 to 500 rpm	25 to 500 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 to 120 minutes	1 second to 160 hours	1 to 120 minutes
Motion	Orbital	Orbital	Orbital	Orbital	Orbital
Orbit	3.6 mm	19 mm	19 mm	19 mm	25 mm
Max Weight Capacity	48 microplates	35 lbs	35 lbs	35 lbs	50 lbs
Audible Alarm	•	•	—	•	—
Load Sensor	•	•	—	•	—
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO_2 Environment	•	•	•	•	•
Overload Protection	•	•	—	•	—
User Calibration (Speed)	•	•	—	•	—
RS232 Interface	•	•	—	•	—
Included Tray (L × W)	12.3 × 11"	11 × 13"	11 × 13"	11 × 13"	18 × 24"
Tray / Platform Options (L × W)	12.25 × 11" (31.1 × 27.9 cm)	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	18 × 24", 18 × 30" Adjustable Platform Large Vessel Carrier Platform

• Yes *Maximum speed/tilt angle may vary with heavy or unbalanced loads. **Centered on tray.

	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker
Model	SHHD2325DG	SHHD4525DG	SHHD4550DG	SHHD6825DG	SHHD6850DG
Speed Range	20 to 500 rpm	15 to 500 rpm	15 to 300 rpm	15 to 500 rpm	15 to 300 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Orbital	Orbital	Orbital	Orbital
Orbit	25 mm	25 mm	51 mm	25 mm	51 mm
Max Weight Capacity	50 lbs	100 lbs	100 lbs	150 lbs	150 lbs
Audible Alarm	•	•	•	•	•
Load Sensor	•	•	•	•	•
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO_2 Environment	•	•	•	•	•
Overload Protection	•	•	•	•	•
User Calibration (Speed)	•	•	•	•	•
RS232 Interface	•	•	•	•	•
Included Tray (L × W)	18 × 24"	24 × 24"	24 × 24"	24 × 36"	24 × 36"
Tray / Platform Options (L × W)	18 × 24", 18 × 30" Adjustable Platform Large Vessel Carrier Platform	24 × 24" Large Vessel Carrier Platform	24 × 24" Large Vessel Carrier Platform	24 × 36" Large Vessel Carrier Platform	24 × 36" Large Vessel Carrier Platform

	Rocking Shaker	Rocking Shaker	Waving Shaker	Waving Shaker	Reciprocating Shaker
Model	SHRK04DG	SHRK07AL1	SHWV02DG	SHWV02AL	SHRC0719DG
Speed Range	1 to 50 rpm*	1 to 75 rpm*	1 to 30 rpm*	1 to 75 rpm*	20 to 300 rpm
Timer	1 second to 160 hours	1 minute to 120 minutes	1 second to 160 hours	1 minute to 120 minutes	1 second to 160 hours
Motion	Rocking	Rocking	Waving	Waving	Reciprocating
Orbit	Tilt Angle: 0 to 15°	Tilt Angle: 0 to 15°	Tilt Angle: 0 to 20° *	Tilt Angle: 0 to 16°	Stroke: 19 mm
Max Weight Capacity	10 lbs**	16 lbs**	5 lbs**	5 lbs**	15 lbs
Audible Alarm	•	—	•	—	•
Load Sensor	—	—	—	—	•
Motor Type	Stepper Motor	Stepper Motor	Stepper Motor	Stepper Motor	Brushless DC Motor
CO_2 Environment	•	—	•	—	•
Overload Protection	•	—	•	—	•
User Calibration (Speed)	—	—	—	—	•
RS232 Interface	—	—	—	—	•
Included Tray (L × W)	12.75 × 10"	14 × 11"	11.75 × 8.75"	14 × 11"	11 × 13"
Tray / Platform Options (L × W)	Stacking Tray	Stacking Tray	Stacking Tray	—	11 × 13", 13 × 13", 18 × 18", 18 × 24" Separatory Funnel Platform

• Yes *Maximum speed/tilt angle may vary with heavy or unbalanced loads. **Centered on tray.

ENDEAVOR™ 5000

Digital Light Duty Orbital Shakers You Can Trust for Everyday Shaking

Display
Easy-to-read, LED display for speed/time allow the operator to view all settings simultaneously and control knobs with dial markings for speed/time

Communication
Easy access RS232 communication port

Construction
Cast aluminum

Design Features
Visual and audio alarm when timer counts down to zero or an error occurs, small footprint to save bench space, advanced microprocessor control slowly ramps the shaker tray up to the desired speed and avoids splashing, durable chemical-resistant polymer housing, sturdy easy-to-clean aluminum standard tray with attachment points for accessories, optional accessory platform to expand capacity, control knobs, ON/OFF switch

Operation
Detachable 3-wire cord and plug (included)

Budget-Friendly—no need to buy a separate tray. Ready to attach a wide variety of accessories to customize for low to mid volume applications.

Programmable—save time and guarantee reproducible results. Simple on-board menu to set, store and recall multi-step programs.

Data logging and control—remote function permits PC control and data transfer.

Model	Control	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
e-E51LD0403	Digital	100 rpm – 800 rpm	±2 rpm, Above 100 rpm ±2% of set speed	Up to 99 hours 59 minutes	0.1 in (3 mm)	4.0 kg*	11.75 in × 8.75 in (30 cm × 22.2 cm)	30770909	1,442
e-E51LDMP03	Digital	100 rpm – 1200 rpm	±2 rpm, Above 100 rpm ±2% of set speed	Up to 99 hours 59 minutes	0.1 in (3 mm)	4 Microplates	11 in × 7.75 in (28 cm × 19.7 cm)	30770911	1,030
e-E51LD0420	Digital	50 rpm – 300 rpm	±2 rpm, Above 100 rpm ±2% of set speed	Up to 99 hours 59 minutes	0.8 in (20 mm)	4.0 kg*	11.75 in × 8.75 in (30 cm × 22.2 cm)	30770910	1,339

Accessories for e-E51LD0403 and e-E51LD0420	Item Number	List Price (USD)
Flask Clamp, 10 mL	30400084	53
Flask Clamp, 25 mL	30400085	53
Flask Clamp, 50 mL	30400086	56
Flask Clamp, 125 mL	30400087	56
Flask Clamp, 250 mL	30400088	56
Flask Clamp, 500 mL	30400089	62
Flask Clamp, 1L	30400090	81
500 mL Media Bottle Clamp	30400097	157
Flask Clamp PVC 125mL	30400099	61
Flask Clamp PVC 250mL	30400100	62
Flask Clamp PVC 500mL	30400101	68
Micro Tube Rack	30400114	228
Test Tube Rack 10-13 mm Diameter	30400115	250
Test Tube Rack 14-16 mm Diameter	30400116	250

Accessories for e-E51LDMP03	Item Number	List Price (USD)
Micro Tube Rack	30400114	228
Deep Plate Kit, set of 4	30772773	155

Accessories for e-E51LD0403 and e-E51LD0420	Item Number	List Price (USD)
Test Tube Rack 18-20 mm Diameter	30400117	250
Test Tube Rack 22-25 mm Diameter	30400118	250
Test Tube Rack For 15 mL Tubes	30400119	259
Test Tube Rack For 50 mL Tubes	30400120	259
Universal Platform 8.75 x 11.75 in / 22 x 30 cm e-E51LD	30770938	237
Adjustable Platform 8.75 x 11.75 in / 22 x 30 cm, 2 bars	30400121	722
Roller Bar, 8.6 in / 22 cm (for Adjustable Platform only)	30400122	67
Dimpled Mat, 8.75 x 11.75 in /22 x 30 cm	30400124	77
Rubber Mat 11.4 x 8.75 in / 29 x 22 cm	30770935	72
Sticky Mat 8.75 x 7.0 in / 22 x 18 cm	30770939	93
Universal Harness e-E51LD	30770940	93

*4 × 500 ml flasks
6 × 250 ml flasks
6 × 125 ml flasks
From 39 × 10 ml up to 3 × 1 L flasks (Universal Platform 30770938 required for expanded capacity from 39 × 10 ml up to 3 × 1L flasks

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Extreme Environment Shakers

High Performance Orbital Shaker Designed to Withstand Extreme Environments Up To 100% Humidity

Display
Independent LED displays for speed/time allow the operator to view both settings simultaneously

Communication
RS232 interface provides two-way communication for data logging and unit control (digital models)

Construction
Cold rolled steel (CRS) and stainless steel, external control module, thin ribbon cable (5.5 feet or 1.7 m) easily passes underneath an incubator door or via incubator's utility port

Design Features
Built-in tray (11x13 inch or 28x33 cm) with a non-slip rubber mat (included)

Operation
Detachable 3-wire cord and plug (included)

Defy the elements - rely on this orbital shaker's unique construction to deliver exceptional speed control, accuracy and durability under the most extreme environmental conditions.

Best in class load capacity to maximize efficiency in your incubator. Customize the Extreme Environment Shaker for your unique application with over 50 accessories.

For repeatable results, the exclusive Accu-Drive shaking system ensures speed accuracy. The triple eccentric drive provides smooth, stable shaking motion throughout the entire speed range.

Model	Control	Speed Range	Speed Accuracy	Timer	Orbit	Tray Dimensions	Item Number	List Price (USD)
SHEX1619DG	Digital	15 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	0.8 in (19 mm)	13 in × 13 in (33 cm × 33 cm)	30391809	4,326

Accessories	Item Number	List Price (USD)
Double Tier Braces, Set of 4	30400051	160
Universal Platform, 28 X 33 cm, S/S	30400052	294
Universal Platform, 33 X 33 cm, S/S	30400053	418
Universal Platform, 46 X 46 cm, S/S	30400054	499
Universal Platform, 61 X 46 cm, S/S	30400056	564
Rubber Mat, 28 × 33 cm	30400060	84
Rubber Mat, 33 × 33 cm	30400061	102
Rubber Mat, 46 × 46 cm	30400062	147
Rubber Mat, 46 X 61 cm	30400063	161
Culture Platform with Mat, 46 X 46 cm	30400066	497
Culture Platform with Mat, 46 X 61 cm	30400067	519
Adjustable Platform, 46 X 46 cm	30400068	769
Adjustment Bar, 46 cm	30400073	89
Dedicated Platform, 33 X 33 cm, 125 mL	30400075	796
Dedicated Platform, 33 X 33 cm, 250 mL	30400076	796
Dedicated Platform, 33 X 33 cm, 500 mL	30400077	796
Dedicated Platform, 33 X 33 cm, 1000 mL	30400078	796
Dedicated Platform, 46 X 46 cm, 125 mL	30400079	874
Dedicated Platform, 46 X 46 cm, 250 mL	30400080	874
Dedicated Platform, 46 X 46 cm, 500 mL	30400081	874
Dedicated Platform, 46 X 46 cm, 1000 mL	30400082	874

Accessories	Item Number	List Price (USD)
Separatory Funnel Platform 46 X 46 cm	30400083	849
Flask Clamp, 10 mL	30400084	53
Flask Clamp, 25 mL	30400085	53
Flask Clamp, 50 mL	30400086	56
Flask Clamp, 125 mL	30400087	56
Flask Clamp, 250 mL	30400088	56
Flask Clamp, 500 mL	30400089	62
1 Liter Erlenmeyer Flask Clamp	30400090	81
2 Liter Erlenmeyer Flask Clamp	30400091	127
2.8 Liter Erlenmeyer Flask Clamp	30400092	167
3 Liter Erlenmeyer Flask Clamp	30400093	226
4 Liter Erlenmeyer Flask Clamp	30400094	208
5 Liter Erlenmeyer Flask Clamp	30400095	251
6 Liter Erlenmeyer Flask Clamp	30400096	246
500 mL Media Bottle Clamp	30400097	157
1000 mL Media Bottle Clamp	30400098	171
Flask Clamp PVC 125mL	30400099	61
Flask Clamp PVC 250mL	30400100	62
Flask Clamp PVC 500mL	30400101	68
Flask Clamp PVC 1000mL	30400102	78
Flask Clamp PVC 2000mL	30400103	128

Accessories continued on next page

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EXTREME ENVIRONMENT SHAKERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Clamp Microplate Stainless Steel	30400104	85
Test Tube Rack 13 mm Pivoting	30400105	436
Test Tube Rack 16 mm Pivoting	30400106	436
Test Tube Rack 20 mm Pivoting	30400107	436
Test Tube Rack 25 mm Pivoting	30400108	436
Test Tube Rack 30 mm Pivoting	30400109	436
Test Tube Rack 10-14 mm Stationary	30400110	491
Test Tube Rack 16-20 mm Stationary	30400111	491
Test Tube Rack 21-25 mm Stationary	30400112	491

Accessories	Item Number	List Price (USD)
Test Tube Rack 50 mL Tubes Stationary	30400113	514
Micro Tube Rack	30400114	228
Test Tube Rack 10-13 mm Diameter	30400115	250
Test Tube Rack 14-16 mm Diameter	30400116	250
Test Tube Rack 18-20 mm Diameter	30400117	250
Test Tube Rack 22-25 mm Diameter	30400118	250
Test Tube Rack For 15 mL Tubes	30400119	259
Test Tube Rack For 50 mL Tubes	30400120	259

HEAVY DUTY ORBITAL SHAKERS

Eight Orbital Shakers Offering a Variety of Capacities and Flexibility to Maximize Sample Processing

Display
Independent LED displays for speed/time allow the operator to view both settings simultaneously and control knobs with dial markings (analog models)

Communication
RS232 interface provides two-way communication for data logging and unit control (digital models)

Construction
Cold rolled steel (CRS)

Design Features
Built-in tray (11 × 13 inch or 28 × 33 cm) with a non-slip rubber mat (included on 16kg models)

Operation
Detachable 3-wire cord and plug (included)

Ready for your lab - all models include a tray and rubber mat and can be customized with over 70 accessory options.

Rely on the digital shakers' exclusive Accu-Drive shaking system for exceptional speed control, accuracy and durability. All models feature a maintenance-free motor for long-term use.

Protect your samples. Optimal speed ramping feature slowly increases speed to setpoint to avoid splashing. The load sensor detects unbalanced conditions and automatically reduces to a safe speed.

Model	Control	Speed Range	Speed Accuracy	Timer	Orbit	Capacity	Tray Dimensions	Item Number	List Price (USD)
SHHD1619AL	Analog	25 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 minute – 120 minutes	0.8 in (19 mm)	16 kg	11 in × 13 in (27.9 cm × 33 cm)	30391307	2,781
SHHD1619DG	Digital	15 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	0.8 in (19 mm)	16 kg	11 in × 13 in (27.9 cm × 33 cm)	30391807	3,311
SHHD2325AL	Analog	25 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 minute – 120 minutes	1 in (25 mm)	22.7 kg	18 in × 24 in (45.7 cm × 61 cm)	30391835	6,103
SHHD2325DG	Digital	20 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	1 in (25 mm)	22.7 kg	18 in × 24 in (45.7 cm × 61 cm)	30391842	6,468
SHHD4525DG	Digital	15 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	1 in (25 mm)	45.4 kg	24 in × 24 in (61 cm × 61 cm)	30391863	9,198
SHHD4550DG	Digital	15 rpm – 300 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	2 in (51 mm)	45.4 kg	24 in × 24 in (61 cm × 61 cm)	30391870	9,512
SHHD6825DG	Digital	15 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	1 in (25 mm)	68 kg	24 in × 36 in (61 cm × 91 cm)	30391877	10,372
SHHD6850DG	Digital	15 rpm – 300 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	2 in (51 mm)	68 kg	24 in × 36 in (61 cm × 91 cm)	30391884	11,546

Accessories	Item Number	List Price (USD)
Double Tier Braces, Set of 4	30400051	160
Universal Platform, 28 X 33 cm, S/S	30400052	294
Universal Platform, 33 X 33 cm, S/S	30400053	418
Universal Platform, 46 X 46 cm, S/S	30400054	499
Universal Platform, 61 X 46 cm, S/S	30400056	564
Universal Platform, 61 X 61 cm, S/S	30400057	1,333
Universal Platform, 76 X 46 cm, S/S	30400058	1,285
Universal Platform, 91 X 61 cm, S/S	30400059	1,707

Accessories continued on next page

Accessories	Item Number	List Price (USD)
Rubber Mat, 28 × 33 cm	30400060	84
Rubber Mat, 33 × 33 cm	30400061	102
Rubber Mat, 46 × 46 cm	30400062	147
Rubber Mat, 46 X 61 cm	30400063	161
Rubber Mat, 61 X 61 cm	30400064	192
Rubber Mat, 61 X 91 cm	30400065	211
Culture Platform with Mat, 46 X 46 cm	30400066	497
Culture Platform with Mat, 46 X 61 cm	30400067	519

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HEAVY DUTY ORBITAL SHAKERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Adjustable Platform, 46 X 46 cm	30400068	769
Adjustable Platform, 61 X 46 cm	30400069	1,096
Large Vessel Carrier, 76 X 46 cm	30400070	1,808
Large Vessel Carrier, 61 X 61 cm	30400071	1,897
Large Vessel Carrier, 91 X 61 cm	30400072	2,429
Adjustment Bar, 46 cm	30400073	89
Adjustment Bar, 61 cm	30400074	111
Dedicated Platform, 33 X 33 cm, 125 mL	30400075	796
Dedicated Platform, 33 X 33 cm, 250 mL	30400076	796
Dedicated Platform, 33 X 33 cm, 500 mL	30400077	796
Dedicated Platform, 33 X 33 cm, 1000 mL	30400078	796
Dedicated Platform, 46 X 46 cm, 125 mL	30400079	874
Dedicated Platform, 46 X 46 cm, 250 mL	30400080	874
Dedicated Platform, 46 X 46 cm, 500 mL	30400081	874
Dedicated Platform, 46 X 46 cm, 1000 mL	30400082	874
Separatory Funnel Platform 46 X 46 cm	30400083	849
Flask Clamp, 10 mL	30400084	53
Flask Clamp, 25 mL	30400085	53
Flask Clamp, 50 mL	30400086	56
Flask Clamp, 125 mL	30400087	56
Flask Clamp, 250 mL	30400088	56
Flask Clamp, 500 mL	30400089	62
1 Liter Erlenmeyer Flask Clamp	30400090	81
2 Liter Erlenmeyer Flask Clamp	30400091	127
2.8 Liter Erlenmeyer Flask Clamp	30400092	167
3 Liter Erlenmeyer Flask Clamp	30400093	226
4 Liter Erlenmeyer Flask Clamp	30400094	208

Accessories	Item Number	List Price (USD)
5 Liter Erlenmeyer Flask Clamp	30400095	251
6 Liter Erlenmeyer Flask Clamp	30400096	246
500 mL Media Bottle Clamp	30400097	157
1000 mL Media Bottle Clamp	30400098	171
Flask Clamp PVC 125mL	30400099	61
Flask Clamp PVC 250mL	30400100	62
Flask Clamp PVC 500mL	30400101	68
Flask Clamp PVC 1000mL	30400102	78
Flask Clamp PVC 2000mL	30400103	128
Clamp Microplate Stainless Steel	30400104	85
Test Tube Rack 13 mm Pivoting	30400105	436
Test Tube Rack 16 mm Pivoting	30400106	436
Test Tube Rack 20 mm Pivoting	30400107	436
Test Tube Rack 25 mm Pivoting	30400108	436
Test Tube Rack 30 mm Pivoting	30400109	436
Test Tube Rack 10-14 mm Stationary	30400110	491
Test Tube Rack 16-20 mm Stationary	30400111	491
Test Tube Rack 21-25 mm Stationary	30400112	491
Test Tube Rack 50 mL Tubes Stationary	30400113	514
Micro Tube Rack	30400114	228
Test Tube Rack 10-13 mm Diameter	30400115	250
Test Tube Rack 14-16 mm Diameter	30400116	250
Test Tube Rack 18-20 mm Diameter	30400117	250
Test Tube Rack 22-25 mm Diameter	30400118	250
Test Tube Rack For 15 mL Tubes	30400119	259
Test Tube Rack For 50 mL Tubes	30400120	259

Specifications and Prices subject to change without notice.

ROCKING & WAVING SHAKERS

Reliable Rocking and Waving Shakers with Simple Adjustments for Tilt Angle and Speed

Display
Easy-to-read, independent LED displays for speed, tilt angle and time allow the operator to view all settings simultaneously (digital models) and basic control knobs with dial markings for speed, tilt angle and time (analog models)

Construction
Cast aluminum housing, non-slip rubber mat (included), stacking tray option (with all models except the analog Waver model)

Design Features
Spill-resistant design, overload protection with audio/visual alarm on digital models and audible alarm on analog models

Operation
Detachable 3-wire cord and plug (included)

Electronic control allows simple tilt angle and speed adjustments while the unit is still running to achieve optimal mixing.

Achieve reproducible results you can trust with digital models. Precisely adjust the tilt angle in 1° increments with variable speed down to 1 rpm with intuitive touchpad controls.

Optimal speed ramping feature slowly increases speed to desired setpoint to avoid splashing. Smooth rocking or waving motion is maintained with state-of- the-art motor and electronics.

Model	Speed Range	Speed Accuracy	Motion	Timer	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
SHRK07AL1	1 rpm – 75 rpm	-	Rocking, 0 – 15°	1 minute – 120 minutes	7.3 kg	14 in × 11 in (35.6 cm × 27.9 cm)	30391959	1,262
SHRK07AL2	1 rpm – 75 rpm	-	Rocking, 0 – 15°	1 minute – 120 minutes	7.3 kg	14 in × 11 in (35.6 cm × 27.9 cm)	30391966	1,391
SHWV02DG	1 rpm – 30 rpm	±1 rpm	Waving, 0 – 20°	1 second – 160 hours	2.3 kg	11.75 in × 8.75 in (29.9 cm × 22.2 cm)	30391947	2,266
SHWV02AL	1 rpm – 75 rpm	-	Waving, 0 – 16°	1 second – 160 hours	2.3 kg	14 in × 11 in (35.6 cm × 27.9 cm)	30391973	1,797
SHRK04DG	1 rpm – 50 rpm	±1 rpm	Rocking, 0 – 15°	1 second – 160 hours	4.5 kg	12.75 in × 10 in (32.4 cm × 25.4 cm)	30391994	1,535

Accessories	Item Number	List Price (USD)
Double Tier Platform Kit Rocker SHRK04DG	30400137	191
Double Tier Platform Kit Waver SHWV02DG	30400138	230
Double Tier Platform Kit Rocker SHRK07AL	30400139	167

Accessories	Item Number	List Price (USD)
Dimpled Mat For Rocker SHRK04DG	30400140	80
Dimpled Mat For Waver SHWV02DG	30400142	80
Dimpled Mat For Rocker SHRK07AL	30400144	92

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RECIPROCATING SHAKERS

Providing Consistent, Repeatable Reciprocating Shaking Action for a Variety of Applications

Display
Independent LED displays for speed/time allow the operator to view both settings simultaneously

Construction
Cold rolled steel (CRS)

Design Features
Built-in tray (11x13 inch or 28x33 cm) with a non-slip rubber mat (included)

Operation
Detachable 3-wire cord and plug (included)

A flexible unit for the lab - our multi-purpose Reciprocating Shakers can be customized to fit your unique workflow needs using a wide variety of accessories.

Reciprocating motion is ideal for gentle-to-vigorous mixing of separatory funnels with the sturdy separatory funnel platform. Other optional platforms for flask clamps, media bottles and tube racks.

Designed for safety - speed ramping feature slowly increases speed to avoid splashing. Load sensor detects unbalanced conditions and automatically reduces to a safe speed to protect samples.

Model	Speed Range	Speed Accuracy	Timer	Stroke	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
SHRC0719DG	20 rpm – 300 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	0.75 (19)	6.8 kg	11 in × 13 in (27.9 cm × 33 cm)	30391828	2,936

Accessories	Item Number	List Price (USD)
Universal Platform, 28 X 33 cm, S/S	30400052	294
Universal Platform, 33 X 33 cm, S/S	30400053	418
Universal Platform, 46 X 46 cm, S/S	30400054	499
Universal Platform, 61 X 46 cm, S/S	30400056	564
Rubber Mat, 28 × 33 cm	30400060	84
Rubber Mat, 33 × 33 cm	30400061	102
Rubber Mat, 46 × 46 cm	30400062	147
Rubber Mat, 46 X 61 cm	30400063	161
Culture Platform with Mat, 46 X 46 cm	30400066	497
Culture Platform with Mat, 46 X 61 cm	30400067	519
Dedicated Platform, 33 X 33 cm, 125 mL	30400075	796
Dedicated Platform, 33 X 33 cm, 250 mL	30400076	796
Dedicated Platform, 33 X 33 cm, 500 mL	30400077	796
Dedicated Platform, 33 X 33 cm, 1000 mL	30400078	796
Dedicated Platform, 46 X 46 cm, 125 mL	30400079	874
Dedicated Platform, 46 X 46 cm, 250 mL	30400080	874
Dedicated Platform, 46 X 46 cm, 500 mL	30400081	874
Dedicated Platform, 46 X 46 cm, 1000 mL	30400082	874
Separatory Funnel Platform 46 X 46 cm	30400083	849
Flask Clamp, 10 mL	30400084	53
Flask Clamp, 25 mL	30400085	53

Accessories continued on next page

Accessories	Item Number	List Price (USD)
Flask Clamp, 50 mL	30400086	56
Flask Clamp, 125 mL	30400087	56
Flask Clamp, 250 mL	30400088	56
Flask Clamp, 500 mL	30400089	62
1 Liter Erlenmeyer Flask Clamp	30400090	81
2 Liter Erlenmeyer Flask Clamp	30400091	127
2.8 Liter Erlenmeyer Flask Clamp	30400092	167
3 Liter Erlenmeyer Flask Clamp	30400093	226
4 Liter Erlenmeyer Flask Clamp	30400094	208
5 Liter Erlenmeyer Flask Clamp	30400095	251
6 Liter Erlenmeyer Flask Clamp	30400096	246
500 mL Media Bottle Clamp	30400097	157
1000 mL Media Bottle Clamp	30400098	171
Flask Clamp PVC 125mL	30400099	61
Flask Clamp PVC 250mL	30400100	62
Flask Clamp PVC 500mL	30400101	68
Flask Clamp PVC 1000mL	30400102	78
Flask Clamp PVC 2000mL	30400103	128
Clamp Microplate Stainless Steel	30400104	85
Test Tube Rack 13 mm Pivoting	30400105	436
Test Tube Rack 16 mm Pivoting	30400106	436

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Reciprocating Shakers Accessories

Accessories	Item Number	List Price (USD)
Test Tube Rack 20 mm Pivoting	30400107	436
Test Tube Rack 25 mm Pivoting	30400108	436
Test Tube Rack 30 mm Pivoting	30400109	436
Test Tube Rack 10-14 mm Stationary	30400110	491
Test Tube Rack 16-20 mm Stationary	30400111	491
Test Tube Rack 21-25 mm Stationary	30400112	491
Test Tube Rack 50 mL Tubes Stationary	30400113	514

Accessories	Item Number	List Price (USD)
Micro Tube Rack	30400114	228
Test Tube Rack 10-13 mm Diameter	30400115	250
Test Tube Rack 14-16 mm Diameter	30400116	250
Test Tube Rack 18-20 mm Diameter	30400117	250
Test Tube Rack 22-25 mm Diameter	30400118	250
Test Tube Rack For 15 mL Tubes	30400119	259
Test Tube Rack For 50 mL Tubes	30400120	259

HIGH SPEED MICROPLATE SHAKERS

High Speed Shaking for up to 48 Microplates

Display
Independent LED displays for speed and time

Communication
RS-232

Construction
Die Cast Aluminum

Design Features
Programmable pulse feature with adjustments for pulse ON and pulse OFF intervals of between 1 and 59 seconds. Program timer to count down from set time and turn off when timer reaches zero, or to run in continuous mode as timer counts accumulated time until user turns it off.

Sturdy, adjustable top plate secures up to 48 microplates, 6 deep well plates, or small tubes less than 5 in. (12.7 cm) tall and up to 7 lb. (3.2 kg).

For difficult to mix samples, or to prevent overheating samples while shaking, the Pulse Feature can be adjusted to Pulse ON and Pulse OFF for intervals of between 1 and 59 seconds.

Independent LEDs and Touchpad Control for Speed and Time allow you to accurately reproduce the exact settings every time.

Model	Motion	Speed Range	Capacity	Dimensions	Tray Dimensions	Timer	Item Number	List Price (USD)
SHHSMPDG	Orbital, 3.6 mm	600 rpm – 2,500 rpm	48 microplates	15.5 in × 12.8 in × 12 in (394 mm × 325 mm × 305 mm)	12.25 in × 11 in (311 mm × 279 mm)	1 second – 160 hours	30573784	5,912

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Specifications and Prices subject to change without notice.

	Incubating Cooling Thermal Shakers	Incubating Light Duty Orbital Shaker	Incubating Light Duty Orbital Shakers
Model	ISTHBLCTS (Heat/Cool) ISTHBLHTS (Heat)	ISLD04HDG	ISLDMPHDG ISLDMPHDGL
Temperature Range	17 below ambient to 100°C / ambient +4 to 100°C	Ambient +5° to 65°C	Ambient +5° to 65°C
Speed Range	300 to 3000 rpm	100 to 1200 rpm	100 to 1200 rpm
Timer	1 minute to 99 hours, 59 min	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Orbital	Orbital
Orbit	3 mm	3 mm	3 mm
Max Weight Capacity	1 Block	8 lbs	4 Microplates / 2 Micro-Tube Racks
Audible Alarm	•	•	•
Load Sensor	•	—	—
Drive System	—	Triple Eccentric	Triple Eccentric
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
Set-Point Retention	• Displays Last Setting	• Displays Last Setting	• Displays Last Setting
Restart/Power Out	•	•	•
Ramp to Speed	•	•	•
Temperature Overshoot Protection	•	—	—
Overload Protection	•	•	•
User Calibration (Temperature)	•	•	•
User Calibration (Speed)	•	—	—
Interface	USB	—	—
Overall Dimensions (L × W ×H)	10.59 × 10.31 × 5.39"	17 × 11 × 10.5"	17 × 11 × 7.75"
Included Tray (L × W)	N/A	11 × 7.75"	11 × 7.75"
Platform Options (L × W)	N/A	N/A	N/A

• Yes ** Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

	Incubating Cooling Light Duty Orbital Shaker	Incubating Rocking Shaker	Incubating Waving Shaker	Incubating Heavy Duty Orbital Shakers
Model	ISICMBCDG	ISRK04HDG	ISWV02HDG	ISHD16HDG, ISHD23HDG, ISHD23CDG
Temperature Range	10°C Below Ambient to 65°C	Ambient +5° to 65°C	Ambient +5° to 65°C	Ambient +5°C to 65°C, 15°C below ambient to 65°C (ISHD23CDG Models only)
Speed Range	100 to 1200 rpm	1 to 50 rpm	1 to 30 rpm	15 to 500 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Rocking	Waving	Orbital
Orbit	3 mm	Tilt Angle: 0 to 15° *	Tilt Angle: 0 to 20° *	19 mm
Max Weight Capacity	2 Microplates 2 Modular Blocks	10 lbs**	5 lbs**	ISHD16HDG 35 lb ISHD23HDG 50 lb ISHD23CDG 50 lb
Audible Alarm	•	•	—	•
Load Sensor	—	—	—	•
Drive System	Triple Eccentric	Cable	Cable	Triple Eccentric
Motor Type	Brushless DC Motor	Stepper Motor	Stepper Motor	Brushless DC Motor
Set-Point Retention	• Displays Last Setting	• Displays Last Setting	• Displays Last Setting	• Displays Last Setting
Restart/Power Out	•	•	—	•
Ramp to Speed	•	•	—	•
Temperature Overshoot Protection	—	—	—	•
Overload Protection	•	•	—	•
User Calibration (Temperature)	—	—	—	•
User Calibration (Speed)	—	—	—	•
Interface	—	—	—	RS-232 Interface
Overall Dimensions (L × W ×H)	16.49 × 10.11 × 10.98"	17 × 11 × 10.5"	17 × 11 × 10.5"	ISHD16HDG 16.0 × 25.5 × 14.0" ISHD23HDG 23.5 × 32.1 × 26.6" ISHD23CDG 23.5 × 41.1 × 26.6"
Included Tray (L × W)	N/A	10 × 7.5"	9.25 × 7.25"	ISHD16HDG 13 × 11" ISHD23HDG 18 × 18" ISHD23CDG 18 × 18"
Platform Options (L × W)	N/A	N/A	N/A	N/A

• Yes ** Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

INCUBATING COOLING THERMAL SHAKERS

Industry Leading Thermal Shaker with Exceptional Heating/Cooling Performance with High Speed Shaking

Display
4.3 inch (10.9 cm) color touchscreen Liquid Crystal Display (LCD) which can be programmed in six languages

Communication
USB port provides greater flexibility in data collection and transfer

Construction
Valox cool touch housing, removable plastic rack, cover and screwdriver for block removal (included)

Design Features
Hot top indicator, audible alarm, maximum temperature limiting function, temperature priority function, pulse/quick mix mode, temperature calibration mode, temperature ramp rate function

Operation
Detachable 3-wire cord and plug (included), unit requires a block - compatible with Eppendorf Thermomixer® R blocks

Best in class temperature performance. Enhanced electronics and software allow for fast and accurate temperature control you can trust. Cooling models reach temperatures down to 17°C below ambient.

Intuitive touchscreen for simple operation and programming. Set the functions and the comprehensive help screens in one of six languages to guide the user through the operation of the unit.

Easily create programs for repeat applications. Storage for five separate, 5-step programs. The USB port allows the transfer of test data to a flash drive for data logging and program storage.

Model	Blocks Included	Temp. Range	Temperature accuracy (±)	Speed Range	Speed Accuracy	Timer	Cooling rate	Heating Rate (/min)	Item Number	List Price (USD)
ISTHBLCTSN	Blocks sold separately	17°C below Ambient – 100°C	+/- 0.5°C between 20°C and 45°C; +/-2°C below 20°C and 45°C	300 rpm – 3,000 rpm	±2%	1 minute – 99 hours, 59 minutes	Above ambient 2-3°C/min	5°C/min	30573841	3,760
ISTHBLHTSN	Blocks sold separately	Ambient +4°C – 100°C	+/- 0.5°C between 20°C and 45°C; +/-2°C below 20°C and 45°C	300 rpm – 3,000 rpm	±2%	1 minute – 99 hours, 59 minutes		5°C/min	30573847	2,905
ISTHBLCTS	24 X 1.5 mL tube block, rack and cover	17°C below Ambient – 100°C	+/- 0.5°C between 20°C and 45°C; +/-2°C below 20°C and 45°C	300 rpm – 3,000 rpm	±2%	1 second – 99 hours, 59 minutes	Above ambient 2-3°C/min	5°C/min	30391996	4,172
ISTHBLHTS	24 X 1.5 mL tube block, rack and cover	Ambient +4°C – 100°C	+/- 0.5°C between 20°C and 45°C; +/-2°C below 20°C and 45°C	300 rpm – 3,000 rpm	±2%	1 second – 99 hours, 59 minutes		5°C/min	30392003	3,136

Accessories	Item Number	List Price (USD)
Microplate Thermal Block	30400126	1,497
384 Well PCR Plate Thermal Block	30400127	1,497
0.2 mL PCR Plate/Tube Thermal Block	30400128	1,497
Block For 30 X 0.5 mL Tubes	30400129	1,138
Block For 24 X 1.5 mL Tubes	30400130	1,138
Block For 24 X 2.0 mL Tubes	30400131	1,138

Accessories	Item Number	List Price (USD)
Block For 9 X 5mL Eppendorf Tubes	30400134	1,138
Block For 9 X 15 mL Conical Tubes	30400135	1,138
Block For 4 X 50 mL Conical Tubes	30400136	1,138
Rack For 30 X 0.5 mL Tube Block	30400250	61
Rack For 24X1.5 / 24X2.0 mL Tube Blocks	30400251	61
Cover For 0.5mL/1.5mL/2.0mL Tube Blocks	30400252	41

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INCUBATING LIGHT DUTY ORBITAL SHAKERS

Save Bench Space with Combined Incubating and Shaking Features

Display
Easy-to-read, independent LED displays for temperature, speed and time allow the operator to view all settings simultaneously

Construction
Cast aluminum housing with polycarbonate lid, brushless DC motor

Design Features
Spill-resistant design, overload protection, caution hot indicator

Operation
Detachable 3-wire cord and plug (included)

Designed to provide flexibility in your applications, these shakers with a 4 kg capacity include the ready-to-use tray to customize with over 10 easy-to-install accessories.

When precision is required, achieve temperature accuracy with the user-controlled temperature calibration feature for sensitive applications. Digital control for reliable and repeatable shaking speed.

Microplate shaker is designed to hold up to 4 microplates or deepwell plates, or easily install 2 microtube racks. Two options - opaque lid for light sensitive samples and clear lid for viewing samples.

Model	Temp. Range	Temp Uniformity	Speed Accuracy	Timer	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
ISLD04HDG	Ambient +5°C – 65°C	± 0.5°C at 37°C	±2%	1 second – 160 hours	3.6 kg	11 in × 7.75 in (27.9 cm × 19.7 cm)	30391924	3,909
ISLDMPHDGL	Ambient +5°C – 65°C	± 0.5°C at 37°C	±2%	1 second – 160 hours	4 Microplates or 2 Micro-tube Racks	11 in × 7.75 in (27.9 cm × 19.7 cm)	30391931	3,579
ISLDMPHDG	Ambient +5°C – 65°C	± 0.5°C at 37°C	±2%	1 second – 160 hours	4 Microplates or 2 Micro-tube Racks	11 in × 7.75 in (27.9 cm × 19.7 cm)	30391938	3,579

Accessories	Item Number	List Price (USD)
Flask Clamp, 10 mL	30400084	53
Flask Clamp, 25 mL	30400085	53
Flask Clamp, 50 mL	30400086	56
Flask Clamp, 125 mL	30400087	56
Flask Clamp, 250 mL	30400088	56
Flask Clamp PVC 125mL	30400099	61

Accessories	Item Number	List Price (USD)
Flask Clamp PVC 250mL	30400100	62
Micro Tube Rack	30400114	228
Test Tube Rack 10-13 mm Diameter	30400115	250
Test Tube Rack 14-16 mm Diameter	30400116	250
Test Tube Rack For 15 mL Tubes	30400119	259
Test Tube Rack For 50 mL Tubes	30400120	259

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INCUBATING COOLING ORBITAL SHAKERS

Innovatively Designed Incubating Orbital Shaker to Heat, Cool and Shake Samples

Display
Easy-to-read, independent LED displays for temperature, speed and time allow the operator to view all settings simultaneously

Construction
Cast aluminum housing with polycarbonate lid, brushless DC motor

Design Features
Spill-resistant design, overload protection, caution hot indicator

Operation
Detachable 3-wire cord and plug (included)

Designed to provide flexibility in your applications, these shakers are microplate ready - no accessories required, and can easily accommodate modular blocks with the included block adapter.

When precision is required, achieve temperature accuracy with the unique temperature calibration feature for sensitive applications. Digital control for reliable and repeatable shaking speed.

Innovative temperature system allows for fast, accurate and uniform temperatures you can trust. The unique Peltier design with direct plate-to-sample contact offers precise heating and cooling.

Model	Temp. Range	Temp Uniformity	Speed Range - Microplates	Speed Range - Modular Blocks	Speed Accuracy	Timer	Maximum Weight Capacity	Item Number	List Price (USD)
ISICMBCDG	10°C below Ambient – 65°C	± 0.5°C at 37°C	100 to 1200 rpm	100 to 600 rpm	±2%	1 second – 160 hours	2 Microplates or 2 Modular Blocks	30391945	5,948

Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	197
Module Block 12/13 mm 20 Hole	30400152	197
Module Block Combination	30400156	197
Module Block 0.5 mL Microtaper	30400157	197
Module Block 6 mm Test Tube	30400158	197
Module Block 1.5 mL Microtaper	30400159	197
Module Block 50mLConical Centrifuge	30400168	197
Module Block 15 mL Conical Centrifuge	30400172	194
Module Block For Vials 12 mm	30400182	197
Module Block For Vials 15 mm	30400183	197

Accessories	Item Number	List Price (USD)
Module Block For Vials 17 mm	30400184	197
Module Block For Vials 19 mm	30400185	197
Module Block For Vials 21 mm	30400186	197
Module Block For Vials 23 mm	30400187	197
Module Block For Vials 25 mm	30400188	197
Module Block For Vials 28 mm	30400189	197
Module Block For Vials 16 mm	30400190	197
Module Block, 2.0 mL Tube	30400191	197
Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	197
Module Block Combo - Micro Tube	30400194	197

INCUBATING HEAVY DUTY ORBITAL SHAKERS

Save Incubator Space with Benchtop Incubating and Incubating Refrigerating Shakers

Display
Independent LED displays for temperature, speed and time

Communication
RS232

Construction
Aluminum and Cycoloy

Design Features
Temperature calibration feature, overload protection, overshoot protection (temperature), load sensor, PID temperature controller, Triple Eccentric Drive system

The exclusive Opti-Flow Forced Ventilation System utilizes twin induction or a single large fan. Air is deflected around & not directly on samples, creating a circular flow of air ensuring uniformity.

For repeatable results, the exclusive Accu-Drive shaking system ensures speed accuracy. The Triple Eccentric Drive provides consistent shaking motion throughout the entire speed range.

The chambers for the ISHD23HDG and ISHD23CDG units are large enough to hold 2 × 6 L Erlenmeyer flasks with optional clamps and platform.

Model	Capacity	Speed Range	Speed Accuracy	Temp. Range	Temp Uniformity	Timer	Item Number	List Price (USD)
ISHD16HDG	35 lb (16kg)@ 75rpm, 5 lb (2.3kg)@ 500 rpm	15 rpm - 500 rpm	Above 100rpm +/- 1%, Below 100rpm /- 1 rpm	Ambient +5°C – 65°C	± 0.5°C at 37°C	1 second – 160 hours	30573769	4,563
ISHD23HDG	50 lb (22.7kg) @ 125 rpm, 10 lb (4.53kg) @ 500 rpm	15 rpm - 500 rpm	Above 100rpm +/- 1%, Below 100rpm /- 1 rpm	Ambient +5°C – 65°C	± 0.5°C at 37°C	1 second – 160 hours	30573774	8,461
ISHD23CDG	50 lb (22.7kg) @ 125 rpm, 10 lb (4.53kg) @ 500 rpm	15 rpm - 500 rpm	Above 100rpm +/- 1%, Below 100rpm /- 1 rpm	15°C below Ambient – 65°C	± 0.5°C at 37°C	1 second – 160 hours	30573779	11,577

Accessories	Item Number	List Price (USD)
Universal Platform, 28 X 33 cm, S/S	30400052	294
Universal Platform, 46 X 46 cm, S/S I-IR	30400055	491
Rubber Mat, 28 × 33 cm	30400060	84
Flask Clamp, 10 mL	30400084	53
Flask Clamp, 25 mL	30400085	53
Flask Clamp, 50 mL	30400086	56
Flask Clamp, 125 mL	30400087	56
Flask Clamp, 250 mL	30400088	56
Flask Clamp, 500 mL	30400089	62
1 Liter Erlenmeyer Flask Clamp	30400090	81
2 Liter Erlenmeyer Flask Clamp	30400091	127
2.8 Liter Erlenmeyer Flask Clamp	30400092	167
3 Liter Erlenmeyer Flask Clamp	30400093	226
4 Liter Erlenmeyer Flask Clamp	30400094	208
5 Liter Erlenmeyer Flask Clamp	30400095	251
6 Liter Erlenmeyer Flask Clamp	30400096	246
500 mL Media Bottle Clamp	30400097	157
1000 mL Media Bottle Clamp	30400098	171
Flask Clamp PVC 125mL	30400099	61
Flask Clamp PVC 250mL	30400100	62

Accessories	Item Number	List Price (USD)
Flask Clamp PVC 500mL	30400101	68
Flask Clamp PVC 1000mL	30400102	78
Flask Clamp PVC 2000mL	30400103	128
Clamp Microplate Stainless Steel	30400104	85
Test Tube Rack 13 mm Pivoting	30400105	436
Test Tube Rack 16 mm Pivoting	30400106	436
Test Tube Rack 20 mm Pivoting	30400107	436
Test Tube Rack 25 mm Pivoting	30400108	436
Test Tube Rack 30 mm Pivoting	30400109	436
Test Tube Rack 10-14 mm Stationary	30400110	491
Test Tube Rack 16-20 mm Stationary	30400111	491
Test Tube Rack 21-25 mm Stationary	30400112	491
Test Tube Rack 50 mL Tubes Stationary	30400113	514
Test Tube Rack 10-13 mm Diameter	30400115	250
Test Tube Rack 14-16 mm Diameter	30400116	250
Test Tube Rack 18-20 mm Diameter	30400117	250
Test Tube Rack 22-25 mm Diameter	30400118	250
Test Tube Rack For 15 mL Tubes	30400119	259
Test Tube Rack For 50 mL Tubes	30400120	259

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INCUBATING ROCKING & WAVING SHAKERS

Save Incubator Space with Unique Benchtop Incubating Rocking and Waving Shakers

Display
Easy-to-read, independent LED displays for temperature, speed/tilt angle and time allow the operator to view all settings simultaneously

Construction
Cast aluminum housing with polycarbonate lid

Design Features
Spill-resistant design, overload protection with audio/visual alarm on digital models and audible alarm on analog models, caution hot indicator

Operation
Detachable 3-wire cord and plug (included)

Electronic control allows simple tilt angle, speed and temperature adjustments while the unit is still running to achieve optimal mixing.

Achieve reproducible results you can trust. Precisely adjust the tilt angle in 1° increments, vary the speed by 1 rpm and set temperature in 1°C increments with intuitive touchpad controls.

Innovative speed ramping feature slowly increases speed to desired setpoint to avoid splashing. Smooth rocking or waving motion is maintained with unique, state-of-the-art motor and electronics.

Model	Temp. Range	Temp Uniformity	Speed Accuracy	Tilt Angle	Timer	Max. Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
ISWV02HDG	Ambient +5°C – 65°C	± 0.5°C at 37°C	±1 rpm	Waving, 0 – 20°	1 second – 160 hours	2.3 kg	9.25 in × 7.25 in (23.5 cm × 18.4 cm)	30391987	4,012
ISRK04HDG	Ambient +5°C – 65°C	± 0.5°C at 37°C	±1 rpm	Rocking, 0 – 15°	1 second – 160 hours	4.5 kg	10 in × 7.75 in (25.4 cm × 19.7 cm)	30391980	4,099

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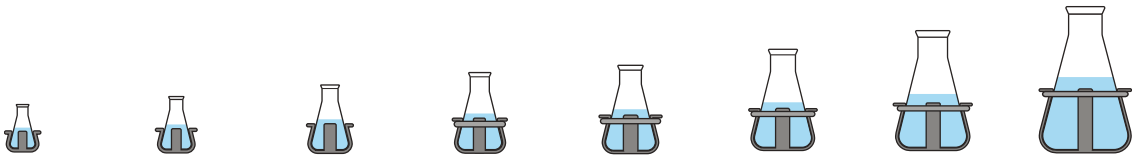
Open Air, Incubating, Incubating Cooling Shakers Accessories

Stainless Steel Flask Clamps

Designed to hold Erlenmeyer flasks from 10 mL to 6 L. Constructed of type 302 and 304 stainless steel. Includes hardware for easy attachment to platforms. Flask clamps 50 mL and higher are supplied with a spring to hold the flask in place. The 2.8 L clamp is designed to hold a Fernbach flask. Media bottle clamps feature the same details as flask clamps.

Media Bottle Flask Clamps

Erlenmeyer Flask Clamps



	10 mL Erlenmeyer Flask Clamp	25 mL Erlenmeyer Flask Clamp	50 mL Erlenmeyer Flask Clamp	125 mL Erlenmeyer Flask Clamp	250 mL Erlenmeyer Flask Clamp	500 mL Erlenmeyer Flask Clamp	1 L Erlenmeyer Flask Clamp	2 L Erlenmeyer Flask Clamp
Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Item No.	30400084	30400085	30400086	30400087	30400088	30400089	30400090	30400091
List Price (USD)	38	38	40	40	40	43	58	91
Tray or Platform	Number of Flask Clamps per Tray or Platform							
11.75 × 8.75" (29.9 × 22.2 cm) Open Air Digital 4 kg Shakers	35	20	15	12	6	4	N/A	N/A
11 × 7.75" (27.9 × 19.7 cm) Incubating 4 kg Shakers	35	20	12	8	5	N/A	N/A	N/A
11 × 13" (27.9 × 33 cm)								
Analog/Digital 16 kg Shakers	60	25	13	10	9	7	4	N/A
Digital Reciprocating Shakers	60	25	13	10	9	7	4	N/A
13 × 13" (33 × 33 cm)								
Analog/Digital 16 kg Shakers	60	30	15	12	12	8	4	3
Digital Reciprocating Shakers	60	30	15	12	12	8	4	3
18 × 18" (45.7 × 45.7 cm)								
Analog/Digital 16 kg Shakers	113	64	32	20	20	13	8	5
Digital Reciprocating Shakers	113	64	32	20	20	13	8	5
18 × 24" (45.7 × 61 cm)								
Analog/Digital 16 kg Shakers	158	88	44	28	28	20	12	6
Digital Reciprocating Shakers	158	88	44	28	28	20	12	6
Analog/Digital 23 kg Shakers	158	88	44	28	28	20	12	6
18 × 30" (45.7 × 76.2 cm) Analog/Digital 23 kg Shakers	203	112	56	36	36	26	15	8
24 × 24" (61 × 61 cm) Digital 45 kg Shakers	221	121	61	41	41	25	16	9
24 × 36" (61 × 91.4 cm) Digital 63 kg Shakers	336	160	94	61	64	40	24	14

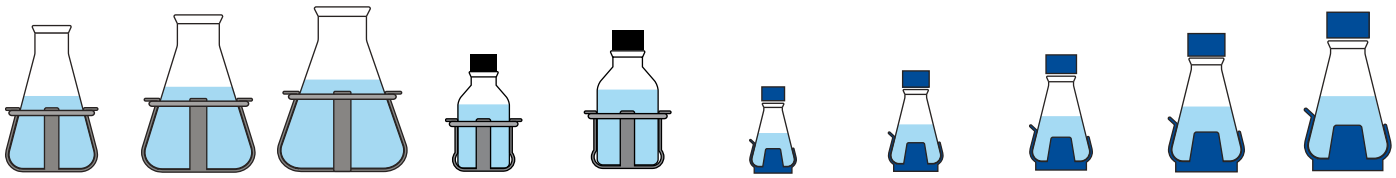
*All units require a universal platform for mounting flask clamps or test tube racks with the exception of the digital open air and incubating 4 kg shakers

OPEN AIR, INCUBATING, INCUBATING COOLING SHAKERS ACCESSORIES

PVC Flask Clamps

Constructed of one piece, molded PVC. Autoclavable. Will not scratch or mark flask like other clamps. Includes hardware for easy attachment to universal platforms. The attachment and removal of flasks is quick and easy. Ideal for polycarbonate flasks.

PVC Flask Clamps



2.8 L & 3 L Fernbach Flask Clamp	4 L Erlenmeyer Flask Clamp	5 L & 6 L Erlenmeyer Flask Clamp	500 mL Media Bottle Clamp	1 L Media Bottle Clamp	125 mL Erlenmeyer Flask Clamp	250 mL Erlenmeyer Flask Clamp	500 mL Erlenmeyer Flask Clamp	1 L Erlenmeyer Flask Clamp	2 L Erlenmeyer Flask Clamp
Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	PVC	PVC	PVC	PVC	PVC
2.8L-30400092 3L-30400093	30400094	5 L-30400095 6 L-30400096	30400097	30400098	30400099	30400100	30400101	30400102	30400103
121 / 164	151	183 / 179	113	122	42	43	49	55	92
Number of Flask Clamps per Tray or Platform									
N/A	N/A	N/A	3	N/A	12	6	4	N/A	N/A
N/A	N/A	N/A	N/A	N/A	8	4	N/A	N/A	N/A
N/A	N/A	N/A	5	2	10	8	5	2	N/A
N/A	N/A	N/A	5	2	10	8	5	2	N/A
1	1	1	6	5	12	10	6	4	3
1	1	1	6	5	12	10	6	4	3
2	4	2	16	10	20	18	12	8	4
2	4	2	16	10	20	18	12	8	4
3	4	3	20	13	28	25	16	10	6
3	4	3	20	13	28	25	16	10	6
3	4	3	20	13	28	25	16	10	6
3	6	4	28	18	36	33	20	14	8
5	5	5	25	18	41	35	24	13	9
7	9	7	40	30	61	55	38	22	13

Open Air, Incubating, Incubating Cooling Shakers Accessories

Test Tube Racks

Half Size, Stationary

Racks constructed of PVC coated steel. Includes hardware for easy attachment to platforms.

Dimensions:

5 L × 7 W × 4" H (12.7 × 17.8 × 10.2 cm) / Micro-Tube Rack: 1.7" H (4.3 cm).

Test Tube Racks Half-Size, Stationary

	1.5 to 2 mL Micro-Tube Rack Half Size, Stationary	10 to 13 mm Test Tube Rack Half Size, Stationary	14 to 16 mm Test Tube Rack Half Size, Stationary	18 to 20 mm Test Tube Rack Half Size, Stationary	22 to 25 mm Test Tube Rack Half Size, Stationary	15 mL Centrifuge Tube Rack Half Size, Stationary	50 mL Centrifuge Tube Rack Half Size, Stationary
Tube Capacity	70	63	48	35	24	35	12
Item No.	30400114	30400115	30400116	30400117	30400118	30400119	30400120
List Price (USD)	165	182	182	182	182	189	189
Tray or Platform	Number of Test Tube Racks per Tray or Platform						
11.75 × 8.75" (29.9 × 22.2 cm)							
Digital Open Air 4 kg Shakers	2	2	2	2	2	2	2
11 × 7.75" (27.9 × 19.7 cm)							
Incubating 4 kg Shakers	2	1	1	N/A	N/A	1	1
Digital Open Air 4 kg Shakers	2	N/A	N/A	N/A	N/A	N/A	N/A
Incubating Microplate Shakers	2	N/A	N/A	N/A	N/A	N/A	N/A
11 × 13" (27.9 × 33 cm)							
Analog/Digital 16 kg Shakers	2	2	2	2	2	2	2
Digital Reciprocating Shakers	2	2	2	2	2	2	2
13 × 13" (33 cm × 33 cm)							
Analog/Digital 16 kg Shakers	2	2	2	2	2	2	2
Digital Reciprocating Shakers	2	2	2	2	2	2	2
18 × 18" (45.7 × 45.7 cm)							
Analog/Digital 16 kg Shaker	4	4	4	4	4	4	4
Digital Reciprocating Shakers	4	4	4	4	4	4	4
18 × 24" (45.7 × 61 cm)							
Analog/Digital 16 kg Shakers	6	6	6	6	6	6	6
Digital Reciprocating Shakers	6	6	6	6	6	6	6
Analog/Digital 23 kg Shakers	6	6	6	6	6	6	6
18 × 30" (45.7 × 76.2 cm)							
Analog/Digital 23 kg Shakers	8	8	8	8	8	8	8
24 × 24" (61 × 61 cm)							
Digital 45 kg Shakers	8	8	8	8	8	8	8
24 × 36" (61 × 91.4 cm)							
Digital 63 kg Shakers	7	7	7	7	7	7	7

*All units require a universal platform for mounting flask clamps or test tube racks with the exception of the digital open air and incubating 4 kg shakers

Open Air, Incubating, Incubating Cooling Shakers Accessories

Test Tube Racks

Full Size, Stationary

Racks constructed of PVC coated steel. Includes hardware for easy attachment to platforms..

Dimensions:

3.75 L × 16.5 W × 4" H (9.5 × 41.9 × 10.2 cm)

Full Size, Pivoting

Has adjustable angle, custom tilt. Stainless steel holder includes removable plastic rack. Rack is easily removed to transport from work area to shaker.

Inside pivoting rack dimensions:

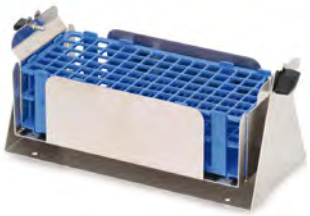
5.1 × 10.8 × 3.9" (12.9 × 27.4 × 9.9 cm)

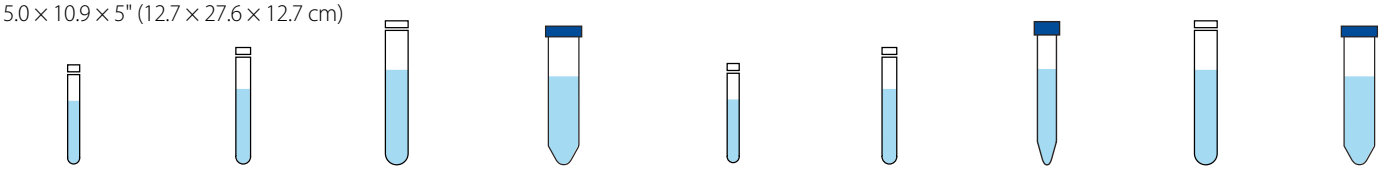
Outside stationary rack dimensions:

5.0 × 10.9 × 5" (12.7 × 27.6 × 12.7 cm)

Test Tube Racks Full-Size, Stationary

Test Tube Racks Full-Size, Pivoting





10 to 14 mm Test Tube Rack Full Size, Stationary	16 to 20 mm Test Tube Rack Full Size, Stationary	21 to 25 mm Test Tube Rack Full Size Stationary	50 mL Centrifuge Tube Rack Full Size, Stationary	13 mm Test Tube Rack Full Size, Pivoting	16 mm Test Tube Rack Full Size, Pivoting	20 mm Test Tube Rack Full Size, Pivoting	25 mm Tube Rack Full Size, Pivoting	30 mm Tube Rack Full Size, Pivoting
48	33	21	17	90	60	40	24	21
30400110	30400111	30400112	30400113	30400105	30400106	30400107	30400108	30400109
359	359	359	376	320	320	320	320	320
Number of Test Tube Racks per Tray or Platform								
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	1	1	1	1	1
N/A	N/A	N/A	N/A	1	1	1	1	1
N/A	N/A	N/A	N/A	2	2	2	2	2
N/A	N/A	N/A	N/A	2	2	2	2	2
N/A	N/A	N/A	N/A	2	2	2	2	2
N/A	N/A	N/A	N/A	2	2	2	2	2
5	5	5	5	3	3	3	3	3
5	5	5	5	3	3	3	3	3
5	5	5	5	3	3	3	3	3
6	6	6	6	4	4	4	4	4
7	7	7	7	4	4	4	4	4
5	5	5	5	6	6	6	6	6

MINI VORTEX MIXERS

Choose the Perfect Vortex Mixer From Four Durable Models for Every-day Mixing

Display
Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models)

Construction
Cup head and 3-inch accessory platform for beakers, flasks, test tubes etc. (included with all models), stainless steel microtube holder for 12 tubes (pulsing models)

Design Features
Microprocessor-control to maintain set speed for consistent mixing action (digital models), 230V models have a maximum speed of 2500 rpm

Operation
Detachable 3-wire cord and plug (included)

Touch mode operation activates mixing when depressing the cup head or continuous mode for use with accessory attachments. Sturdy, rugged design ensures the unit stays in place while in use.

Robust digital and non-digital Vortex Mixers offer effective speed control from low RPM start-up for gentle shaking to high-speed mixing for vigorous vortexing of samples.

The Fixed Speed Vortex Mixer is an economical choice for vigorous mixing of samples at high speed. To ease repetitive sample processing, this unit provides simple, effective full-speed mixing.

Model	Type	Speed Range	Timer	Orbit	Capacity	Duty Rating	Item Number	List Price (USD)
VXMNAL	Analog	300 rpm – 3200 rpm	-	0.2 in (4.9 mm)	0.5 kg	Intermittent	30392115	392
VXMNDG	Digital	500 rpm – 3000 rpm	1 second - 9999 minutes	0.2 in (4.9 mm)	0.5 kg	Intermittent	30392122	504
VXMNFS	Fixed Speed	3200 rpm	-	0.2 in (4.9 mm)	0.5 kg	Intermittent	30392108	345
VXMNPS	Pulsing	500 rpm – 3000 rpm	1 second - 9999 minutes	0.1 in (2.5 mm)	0.5 kg	Intermittent	30392129	621

Accessories	Item Number	List Price (USD)
8 cm Head with Rubber Cover	30400196	80
Tube Holder Kit with Retainer	30400197	287
Micro Tube and Well Plate Holder Kit	30400198	171
Micro Well Plate Kit with Retainer	30400199	171
Microtube Kit with Retainer	30400200	171
Foam Insert Variety Pack	30400201	85
Single Tube Holder	30400202	246
Single Tube Holder Adapter Vortex Genie	30400203	127
0.5 mL Micro-Tube Holder	30400204	107
1.5-2.0 mL Micro-Tube Holder	30400205	107
1.5-2.0 mL Stainless Steel Tube Holder	30400206	389
Ampule Tube Holder - Small (15-17mm)	30400207	180

Accessories	Item Number	List Price (USD)
Ampule Tube Holder - Large (10-17mm)	30400208	255
Insert Retainer	30400227	192
Vessel Harness, Pack of 2	30400228	19
Holder For 9-13 mm Tubes, Pack of 2	30400229	48
Holder For 14-19 mm Tubes, Pack of 2	30400230	48
Holder For 20-25 mm Tubes, Pack of 2	30400231	48
Micro-Tube Holder, Pack of 2	30400232	99
Micro-Well Plate Holder, Pack of 2	30400233	99
Flat Foam Insert, Pack of 2	30400234	45
Cup Head	30400235	60
7.6 cm Head (3")	30400236	60
7.6 cm Rubber Head Cover (3")	30400237	60

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HEAVY-DUTY VORTEX MIXERS

Increase Productivity with Continuous-Duty Vortexing of Multiple Samples

Display
Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models)

Construction
Cycoloy, Touch/Standby/On rocker switch (both models)

Design Features
Universal holder, foam insert for (38) 1.5 to 2 ml microtubes, universal cover and cup head (included)

Operation
Detachable 3-wire cord and plug (included)

Safe to mix at high speeds - the unique locking design of the mixer accessories allows the mixer to safely operate throughout the entire speed range.

For the most demanding applications, these mixers utilize a high quality German-manufactured motor, allowing for continuous duty operation and increased load capacities up to 1.1 kg.

Robust digital and non-digital models offer effective speed control from low rpm for gentle shaking to high-speed mixing for vigorous vortexing of difficult samples.

Model	Control	Speed Range	Timer	Orbit	Capacity	Duty Rating	Item Number	List Price (USD)
VXHDAL	Analog	On Mode, 300 rpm – 2500 rpm; Touch Mode, 300 rpm – 3500 rpm	-	0.2 in (4.9 mm)	1.1 kg	Continuous	30392148	1,312
VXHDDG	Digital	On Mode, 300 rpm – 2500 rpm; Touch Mode, 300 rpm – 3500 rpm	1 second - 9999 minutes	0.2 in (4.9 mm)	1.1 kg	Continuous	30392146	1,528

Accessories	Item Number	List Price (USD)
Foam Insert Blank	30400209	61
Cup Head, VXHD and VXMP Vortex Mixers	30400210	60
Large Vessel Holder For 500 ml/1 L Flask	30400211	70
4 Place Stackable Microplate Holder	30400212	179
Double Microplate Holder	30400213	96
4 Place Microplate Holder	30400214	193
Single Microplate Holder	30400215	84
Foam Insert For (52) 0.5 mL Microtubes	30400216	61
Foam Insert (38) 1.5-2.0 mL Microtubes	30400217	61

Accessories	Item Number	List Price (USD)
Small Vessel Holder 125 & 250 mL Flasks	30400218	70
Foam Insert For (34) 12-13 mm Tubes	30400220	61
Foam Insert For (20) 15-18 mm Tubes	30400221	61
Foam Insert For (18) 19-21 mm Tubes	30400222	61
Foam Insert For (13) 22-25 mm Tubes	30400223	61
Foam Insert For (4) 26-29 mm Tubes	30400224	61
Cover For Universal Holder	30400225	32
Universal Holder	30400226	87

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MICROPLATE VORTEX MIXERS

The Ideal Solution for Dependable Vortex Mixing of Microplates

Display
Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models)

Construction
Cycoloy

Design Features
Microplate adapter and cup head (included)

Operation
Detachable 3-wire cord and plug (included)

Safe to mix at high speeds - the innovative locking design of the microplate accessories allows these mixers to safely operate throughout the entire speed range.

These mixers utilize a high quality German-manufactured motor allowing for reliable, continuous-duty operation at any speed.

Robust digital and non-digital models offer effective speed control from low rpm for gentle shaking to high-speed mixing for vigorous vortexing of samples.

Model	Control	Speed Range	Timer	Orbit	Capacity	Duty Rating	Item Number	List Price (USD)
VXMPAL	Analog	On Mode, 300 rpm – 2500 rpm; Touch Mode, 300 rpm – 3500 rpm	-	0.1 in (3.5 mm)	2 Microplates	Continuous	30392162	615
VXMPDG	Digital	On Mode, 300 rpm – 2500 rpm; Touch Mode, 300 rpm – 3500 rpm	1 second - 9999 minutes	0.1 in (3.5 mm)	2 Microplates	Continuous	30392160	713

Accessories	Item Number	List Price (USD)
Cup Head, VXHD and VXMP Vortex Mixers	30400210	60
Double Microplate Holder	30400213	96

Accessories	Item Number	List Price (USD)
Single Microplate Holder	30400215	84

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MULTI-TUBE VORTEX MIXERS

Powerful Hands-Free Vortex Mixer for Efficient High-Throughput Mixing

Display

Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models)

Construction

Stainless steel foam rack for (50) 12 mm diameter tubes (included), interchangeable foam racks for vortexing tubes from 10 - 29 mm in diameter

Operation

Detachable 3-wire cord and plug (included)

Easily process up to 50 samples at one time - the Multi-Tube Vortex Mixer can be customized for your application with six different tube racks and a post- extension kit.

The Multi-Tube Vortex Mixers feature either an easy-to-clean one-piece stainless steel housing that is perfect for clean rooms, or a painted steel version for a more economical option.

For challenging samples, enhance vortex action & create a more vigorous mix with the programmable pulse mode on the digital models. Adjust the pulse-on/pulse-off time interval to customize operation.

Model	Speed Range	Timer	Orbit	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
VXMTAL	1200 rpm – 2400 rpm	-	0.1 in (3.6 mm)	4.5 kg	7.25 in × 12.25 in (18.4 cm × 31.1 cm)	30392164	3,760
VXMTDG	500 rpm – 2500 rpm	1 second - 9999 minutes	0.1 in (3.6 mm)	4.5 kg	7.25 in × 12.25 in (18.4 cm × 31.1 cm)	30392171	4,403
VXMTALB	1200 rpm – 2400 rpm	-	0.1 in (3.6 mm)	4.5 kg	7.25 in × 12.25 in (184 mm × 311 mm)	30573831	3,203
VXMTDGB	500 rpm – 2500 rpm	1 second - 9999 minutes	0.1 in (3.6 mm)	4.5 kg	7.25 in × 12.25 in (184 mm × 311 mm)	30573836	3,744

Accessories	Item Number	List Price (USD)
10 mm Tube Rack (Gray)	30400238	53
12 mm Tube Rack (Blue)	30400239	52
13 mm Tube Rack (Yellow)	30400240	52
16 mm Tube Rack (Green)	30400241	67

Accessories	Item Number	List Price (USD)
50 mL Tube Rack (Red)	30400242	67
25 mm Tube Rack (White)	30400243	67
Post Extension Kit	30400244	261
Tray Pad Set - Top And Bottom	30400245	77

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I BLOCK DRY BLOCK HEATERS

Versatile block heaters designed for everyday use with accessories for every application

Display
LED display (digital models) and dual-adjustment knobs with dial markings (analog models)

Construction
Painted steel housing, support rod holder with locking knob

Design Features
Touchpad control and audible alarm (digital models)

Operation
Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint

Designed for reliable everyday use in the lab. Digital and non-digital block heaters offer exceptional temperature uniformity with outstanding temperature stability.

Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.

Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.

Model	Temp. Range	Temp Stability	Uniformity Within the Block	Heat Up Time	Item Number	List Price (USD)
HB1AL	High 75°C – 150°C; Low Ambient + 5°C – 100°C	± 1°C	± 0.1°C at 37°C	16 min	30392045	419
HB1DG	Ambient + 5°C – 120°C	± 0.1°C	± 0.1°C at 37°C	16 min	30392059	556

Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	197
Module Block 12/13 mm 20 Hole	30400152	197
Module Block 15/16 mm 12 Hole	30400153	197
Module Block 20 mm 8 Well Test Tube	30400154	197
Module Block 25 mm Test Tube 6 Hole	30400155	197
Module Block Combination	30400156	197
Module Block 0.5 mL Microtaper	30400157	197
Module Block 6 mm Test Tube	30400158	197
Module Block 1.5 mL Microtaper	30400159	197
Module Block Solid	30400160	197
Module Block Cuvette - 12 Cuvet	30400161	235
Module Block 11.5/1.5 mL Microcentrifuge	30400162	197
Module Block 250 Microliter/6 mm	30400163	197
Module Block 12/13 mm 16 Holes	30400165	197
Module Block 4 X 35 mm Test Tube	30400167	197
Module Block 50mLConical Centrifuge	30400168	197
Module Block 0.2 mL Micro 80 Hole	30400169	217
Module Block 0.2 mL Micro 64 Hole	30400170	217
Module Block 15 mL Conical Centrifuge	30400172	194
Sand Bath, 1 Block Unit	30400173	420

Accessories	Item Number	List Price (USD)
Sand, 0.5 kg (1 Lb) Bag	30400177	122
Stainless Steel Shot, 0.5 kg (1 Lb)	30400178	147
Cover Low-Temperature 2 Block	30400179	177
Cover Low-Temperature 4 Block	30400180	173
Cover Low-Temperature 6 Block	30400181	188
Module Block For Vials 12 mm	30400182	197
Module Block For Vials 15 mm	30400183	197
Module Block For Vials 17 mm	30400184	197
Module Block For Vials 19 mm	30400185	197
Module Block For Vials 21 mm	30400186	197
Module Block For Vials 23 mm	30400187	197
Module Block For Vials 25 mm	30400188	197
Module Block For Vials 28 mm	30400189	197
Module Block For Vials 16 mm	30400190	197
Module Block, 2.0 mL Tube	30400191	197
Module Block, 2.0 mL Corning Tube	30400192	197
Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	197
Module Block Combo - Micro Tube	30400194	197
Module Block 12 Holes 17-18 mm	30400195	197
Stainless Steel Probe Kit	30400246	446

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2 Block Dry Block Heaters

Versatile block heaters designed for everyday use with accessories for every application

Display
LED display (digital models) and dual-adjustment knobs with dial markings (analog models)

Construction
Painted steel housing, support rod holder with locking knob

Design Features
Touchpad control and audible alarm (digital models)

Operation
Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint

Three models to customize your application. All models offer exceptional temperature uniformity with outstanding temperature stability.

Avoid contamination to ensure repeatable, reliable results. The Heatblock with Heated Lid features a second heater in the lid to minimize condensation to maintain your sample integrity.

Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.

Model	Temp. Range	Temp Stability	Uniformity Within the Block	Uniformity Across Similar Blocks	Heat Up Time	Item Number	List Price (USD)
HB2AL	High 75°C – 150°C; Low Ambient + 5°C – 100°C	± 1.5°C	± 0.1°C at 37°C	± 0.1°C at 37°C	16 min	30392052	544
HB2DG	Ambient + 5°C – 120°C	± 0.1°C	± 0.1°C at 37°C	± 0.1°C at 37°C	16 min	30392080	679
HB2DGHL	Ambient + 5°C – 100°C	± 0.1°C	± 0.1°C at 37°C	± 0.1°C at 37°C	16 min	30392101	1,428

Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	197
Module Block 12/13 mm 20 Hole	30400152	197
Module Block 15/16 mm 12 Hole	30400153	197
Module Block 20 mm 8 Well Test Tube	30400154	197
Module Block 25 mm Test Tube 6 Hole	30400155	197
Module Block Combination	30400156	197
Module Block 0.5 mL Microtaper	30400157	197
Module Block 6 mm Test Tube	30400158	197
Module Block 1.5 mL Microtaper	30400159	197
Module Block Solid	30400160	197
Module Block Cuvette - 12 Cuvet	30400161	235
Module Block 11.5/1.5 mL Microcentrifuge	30400162	197
Module Block 250 Microliter/6 mm	30400163	197
Module Block Titer Plate	30400164	399
Module Block 12/13 mm 16 Holes	30400165	197
Module Block Solid Double	30400166	287
Module Block 4 X 35 mm Test Tube	30400167	197
Module Block 50mLConical Centrifuge	30400168	197
Module Block 0.2 mL Micro 80 Hole	30400169	217

Accessories	Item Number	List Price (USD)
Module Block 0.2 mL Micro 64 Hole	30400170	217
Module Block 0.2mL96Hole DoubleBloc	30400171	437
Module Block 15 mL Conical Centrifuge	30400172	194
Sand Bath, 2 Block Unit	30400174	436
Sand, 0.5 kg (1 Lb) Bag	30400177	122
Stainless Steel Shot, 0.5 kg (1 Lb)	30400178	147
Cover Low-Temperature 2 Block	30400179	177
Cover Low-Temperature 4 Block	30400180	173
Cover Low-Temperature 6 Block	30400181	188
Module Block For Vials 12 mm	30400182	197
Module Block For Vials 15 mm	30400183	197
Module Block For Vials 17 mm	30400184	197
Module Block For Vials 19 mm	30400185	197
Module Block For Vials 21 mm	30400186	197
Module Block For Vials 23 mm	30400187	197
Module Block For Vials 25 mm	30400188	197
Module Block For Vials 28 mm	30400189	197
Module Block For Vials 16 mm	30400190	197
Module Block, 2.0 mL Tube	30400191	197

Accessories continued on next page

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2 BLOCK DRY BLOCK HEATERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Module Block, 2.0 mL Corning Tube	30400192	197
Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	197
Module Block Combo - Micro Tube	30400194	197

Accessories	Item Number	List Price (USD)
Module Block 12 Holes 17-18 mm	30400195	197
Stainless Steel Probe Kit	30400246	446

4 Block Dry Block Heaters

Versatile and dependable block heaters deliver precise, reliable results

Display
LED display (digital models) and dual-adjustment knobs with dial markings (analog models)

Construction
Painted steel housing, support rod holder with locking knob

Design Features
Touchpad control and audible alarm (digital models)

Operation
Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint

Designed for flexibility with your applications. The four-block capacity allows you to process multiple samples simultaneously with one device.

Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.

Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.

Model	Temp. Range	Temp Stability	Uniformity Within the Block	Uniformity Across Similar Blocks	Heat Up Time	Item Number	List Price (USD)
HB4AL	High 75°C – 150°C; Low Ambient + 5°C – 100°C	± 2°C	± 0.1°C at 37°C	± 0.2°C at 37°C	23 min	30392066	800
HB4DG	Ambient + 5°C – 120°C	± 0.1°C	± 0.1°C at 37°C	± 0.2°C at 37°C	23 min	30392087	867

Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	197
Module Block 12/13 mm 20 Hole	30400152	197
Module Block 15/16 mm 12 Hole	30400153	197
Module Block 20 mm 8 Well Test Tube	30400154	197
Module Block 25 mm Test Tube 6 Hole	30400155	197
Module Block Combination	30400156	197
Module Block 0.5 mL Microtaper	30400157	197
Module Block 6 mm Test Tube	30400158	197
Module Block 1.5 mL Microtaper	30400159	197
Module Block Solid	30400160	197
Module Block Cuvette - 12 Cuvet	30400161	235
Module Block 11.5/1.5 mL Microcentrifuge	30400162	197
Module Block 250 Microliter/6 mm	30400163	197
Module Block Titer Plate	30400164	399
Module Block 12/13 mm 16 Holes	30400165	197
Module Block Solid Double	30400166	287
Module Block 4 X 35 mm Test Tube	30400167	197
Module Block 50mLConical Centrifuge	30400168	197
Module Block 0.2 mL Micro 80 Hole	30400169	217
Module Block 0.2 mL Micro 64 Hole	30400170	217

Accessories	Item Number	List Price (USD)
Module Block 0.2mL96Hole DoubleBloc	30400171	437
Module Block 15 mL Conical Centrifuge	30400172	194
Sand Bath, 4 Block Unit	30400175	468
Sand, 0.5 kg (1 Lb) Bag	30400177	122
Stainless Steel Shot, 0.5 kg (1 Lb)	30400178	147
Cover Low-Temperature 2 Block	30400179	177
Cover Low-Temperature 4 Block	30400180	173
Cover Low-Temperature 6 Block	30400181	188
Module Block For Vials 12 mm	30400182	197
Module Block For Vials 15 mm	30400183	197
Module Block For Vials 17 mm	30400184	197
Module Block For Vials 19 mm	30400185	197
Module Block For Vials 21 mm	30400186	197
Module Block For Vials 23 mm	30400187	197
Module Block For Vials 25 mm	30400188	197
Module Block For Vials 28 mm	30400189	197
Module Block For Vials 16 mm	30400190	197
Module Block, 2.0 mL Tube	30400191	197
Module Block, 2.0 mL Corning Tube	30400192	197
Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	197

Accessories continued on next page

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4 BLOCK DRY BLOCK HEATERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Module Block Combo - Micro Tube	30400194	197
Module Block 12 Holes 17-18 mm	30400195	197

Accessories	Item Number	List Price (USD)
Stainless Steel Probe Kit	30400246	446

6 Block Dry Block Heaters

Process more samples with large capacity block heaters that deliver precise, reliable results

Display
LED display (digital models) and dual-adjustment knobs with dial markings (analog models)

Construction
Painted steel housing, support rod holder with locking knob

Design Features
Touchpad control and audible alarm (digital models)

Operation
Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint

Unique design for high throughput applications. The six-block capacity allows you the most flexibility to process multiple samples simultaneously with one device.

Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.

Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.

Model	Temp. Range	Temp Stability	Uniformity Within the Block	Uniformity Across Similar Blocks	Heat Up Time	Item Number	List Price (USD)
HB6AL	High 75°C – 150°C; Low Ambient + 5°C – 100°C	± 2°C	± 0.1°C at 37°C	± 0.3°C at 37°C	30 min	30392073	1,179
HB6DG	Ambient + 5°C – 120°C	± 2°C	± 0.1°C at 37°C	± 0.3°C at 37°C	30 min	30392094	1,316

Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	197
Module Block 12/13 mm 20 Hole	30400152	197
Module Block 15/16 mm 12 Hole	30400153	197
Module Block 20 mm 8 Well Test Tube	30400154	197
Module Block 25 mm Test Tube 6 Hole	30400155	197
Module Block Combination	30400156	197
Module Block 0.5 mL Microtaper	30400157	197
Module Block 6 mm Test Tube	30400158	197
Module Block 1.5 mL Microtaper	30400159	197
Module Block Solid	30400160	197
Module Block Cuvette - 12 Cuvet	30400161	235
Module Block 11.5/1.5 mL Microcentrifuge	30400162	197
Module Block 250 Microliter/6 mm	30400163	197
Module Block Titer Plate	30400164	399
Module Block 12/13 mm 16 Holes	30400165	197
Module Block Solid Double	30400166	287
Module Block 4 X 35 mm Test Tube	30400167	197
Module Block 50mLConical Centrifuge	30400168	197
Module Block 0.2 mL Micro 80 Hole	30400169	217
Module Block 0.2 mL Micro 64 Hole	30400170	217

Accessories	Item Number	List Price (USD)
Module Block 0.2mL96Hole DoubleBloc	30400171	437
Module Block 15 mL Conical Centrifuge	30400172	194
Sand Bath, 6 Block Unit	30400176	484
Sand, 0.5 kg (1 Lb) Bag	30400177	122
Stainless Steel Shot, 0.5 kg (1 Lb)	30400178	147
Cover Low-Temperature 2 Block	30400179	177
Cover Low-Temperature 4 Block	30400180	173
Cover Low-Temperature 6 Block	30400181	188
Module Block For Vials 12 mm	30400182	197
Module Block For Vials 15 mm	30400183	197
Module Block For Vials 17 mm	30400184	197
Module Block For Vials 19 mm	30400185	197
Module Block For Vials 21 mm	30400186	197
Module Block For Vials 23 mm	30400187	197
Module Block For Vials 25 mm	30400188	197
Module Block For Vials 28 mm	30400189	197
Module Block For Vials 16 mm	30400190	197
Module Block, 2.0 mL Tube	30400191	197
Module Block, 2.0 mL Corning Tube	30400192	197
Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	197

Accessories continued on next page

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6 BLOCK DRY BLOCK HEATERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Module Block Combo - Micro Tube	30400194	197
Module Block 12 Holes 17-18 mm	30400195	197

Accessories	Item Number	List Price (USD)
Stainless Steel Probe Kit	30400246	446

GUARDIAN™ 7000 HOTPLATES & STIRRERS

Durable Digital Hotplate Stirrers with Superior Safety Features and Intelligent Performance

Display
Backlit LCD Display for temperature, speed and time, green indicator lights when unit is heating and stirring, two prominent hot top indicator lights, icons for SmartRate™, SmartHeat™, SmartPresence™, SmartLink™, probe in use, Single Point Calibration

Communication
USB port provides flexibility for programming of repeat applications and enhancing safety with SmartLink™ technology; the long range user detection function operated with the OHAUS Bluetooth dongle accessory (sold separately)

Construction
Probe connection, SmartHousing™ stays cool to the touch and is chemical-resistant, IP21 Ingress Protection, hardened glass front panel, control knobs, On/Off switch for heater disconnect, built-in support rod holder, easy-to-clean ceramic or aluminum tops

Design Features
Hot top indicator lights, audible alarm, SmartHeat™ temperature limiting function, SafetyHeat™ shuts off heater in the event of malfunction, temperature calibration feature for 5 probe & 5 plate setpoints, temperature priority function, SmartRate™ functions

Operation
Timer, Stirring from 60 to 1600 rpm, temperature range of ambient +5°C to 500°C (ceramic top) or 380°C (aluminum top), power cord (included), 8" (20.3 cm) stainless steel RTD temperature probe, 1.5" (3.8 cm) PTFE coated stir bar, in-use cover

Protect your lab with SmartPresence™ and SmartLink™ technologies. These exclusive features automatically shut off the heater if no one is detected after a user-defined "time out" period has elapsed.

SafetyHeat™ protects the lab – an industry-leading early detection system uses two independent safety controls to monitor the electronics and stop heating before an overtemperature condition occurs.

Precise stirring from 60 to 1600 rpm is made possible by the design of a powerful motor, strong magnet and software controlled ramp rate, ensuring secure magnetic coupling for viscous applications.

Model	Function	Temp. Range	Speed Range	Maximum Stirring Capacity (H_2O)	Plate Size	Item Number	List Price (USD)
e-G71HS07C	Heating and Stirring	Ambient +5°C – 500°C	60 rpm ; 1,600 rpm	15 L	7 in × 7 in (178 mm × 178 mm)	30500600	1,045
e-G71HS10C	Heating and Stirring	Ambient +5°C – 500°C	60 rpm ; 1,600 rpm	18 L	10 in × 10 in (254 mm × 254 mm)	30500610	1,455
e-G71HSRDM	Heating and Stirring	Ambient +5°C – 380°C	60 rpm ; 1,600 rpm	20 L	5.3 in (135 mm)	30500620	939

Accessories	Item Number	List Price (USD)
Clamp, Specialty, Rod, CLS-RODS	30392233	56
Clamp, Specialty, Column, CLS-COLMNSS	30392314	99
Clamp, Specialty, Column, CLS-COLMNSM	30392315	101
Clamp, Specialty, Column, CLS-COLMNSL	30392316	103
Clamp, Specialty, Column, CLS-COLMNSX	30392317	103
Clamp, Specialty, Nester, CLS-NESTXS	30392318	134
Ultra Flex Support Kit	30400145	289
Support Rod And Clamp Kit	30400146	211
Spinbar 2.5 cm PTFE	30400147	19
Spinbar 3.8 cm PTFE	30400148	20
Spinbar 7 cm PTFE	30400149	64
Spinbar 10 cm with Pivot Ring PTFE	30400150	117
Wireless Dongle MTICWD-200	30412537	312
Base Plate 135 mm	30500570	344
Handles for Base Plate	30500571	274
Sectional Block 12 mm Vials	30500572	131
Sectional Block 15 mm vials	30500573	131

Accessories	Item Number	List Price (USD)
Sectional Block 17 mm Vials	30500574	131
Sectional Block 21 mm Vials	30500575	131
Sectional Block 28 mm Vials	30500576	131
Sectional Block 12 mm Test Tubes	30500577	266
Sectional Block 16 mm Test Tubes	30500578	266
Sectional Block 20 mm Test Tubes	30500579	266
Sectional Block 25 mm Test Tubes	30500580	266
Uni Block 12 mm Vials	30500581	377
Uni Block 15 mm vials	30500582	377
Uni Block 17 mm Vials	30500583	377
Uni Block 21 mm Vials	30500584	377
Uni Block 28 mm Vials	30500585	377
Uni Block 12 mm Test Tubes	30500586	425
Uni Block 16 mm Test Tubes	30500587	425
Uni Block 20 mm Test Tubes	30500588	425
Uni Block 25 mm Test Tubes	30500589	425
Temperature Probe 20 cm S/S	30500590	266

Accessories continued on next page

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GUARDIAN™ 7000 HOTPLATES & STIRRERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Temperature Probe 20 cm PTFE	30500591	296
Temperature Probe 25 cm S/S	30500592	344
Temperature Probe 25 cm PTFE	30500593	377
In Use Cover Guardian 7x7	30500594	64

Accessories	Item Number	List Price (USD)
In Use Cover Guardian 10x10	30500595	64
In Use Cover Guardian Round	30500596	64
Vessel Clamp	30500597	265
Stir Bar Retriever	30500598	56

GUARDIAN™ 5000 HOTPLATES & STIRRERS

Reliable Digital Hotplate Stirrers with Exceptional Safety Features for Everyday Use

Display

Backlit LCD Display for temperature and speed, green indicator lights when unit is heating and stirring, prominent hot top indicator light, probe in use icon, Single Point Calibration icon

Construction

Probe connection, robust, chemical resistant aluminum housing, IP32 ingress protection, control knobs, On/Off switch for heater disconnect, built-in support rod holders, easy to clean ceramic or ceramic coated aluminum tops, built-in RS232 interface

Design Features

Hot top indicator light, audible alarm, SafetyHeat™ protection shuts off the heater in the event of a malfunction, temperature calibration feature for 3 probe and 3 plate setpoints

Operation

Stirring from 50–1800 rpm, temperature range of ambient +5°C to 550°C 7×7 model, 500°C (10×10) or 360° (round top), power cord (included), stirring models include a 1.5" (3.8 cm) PTFE coated stir bar

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e-G52HS07C

e-G52HSRDA

SafetyHeat™ protects the lab—an industry-leading early detection system uses two independent safety controls to monitor the electronics and stop heating before an overtemperature condition occurs.

Precise stirring from 50–1800 rpm is made possible by the design of a powerful motor, strong magnet and software controlled ramp rate, ensuring secure magnetic coupling for viscous applications.

The bright LCD display includes large temperature and speed settings, intuitive icons and a prominent hot top indicator—all designed to quickly and easily monitor performance from across the lab.

Model	Power	Function	Temp. Range	Speed Range	Max. Stirring Capacity (H_2O)	Plate Size	Item Number	List Price (USD)
e-G52HSRDA	100V-120V~ 8A 50/60Hz	Heating and Stirring	Ambient + 5°C–360°C	50.0 rpm–1800.0 rpm	20 L	5.3 in (13.5 cm)	30541629	850
e-G52HSRDA	220V-240V~ 4A 50/60Hz	Heating and Stirring	Ambient + 5°C–360°C	50.0 rpm–1800.0 rpm	20 L	5.3 in (13.5 cm)	30541630	850
e-G52HS07C	100V-120V~ 15A 50/60Hz	Heating and Stirring	Ambient + 5°C–550°C	50.0 rpm–1800.0 rpm	20 L	7×7 in (18×18 cm)	30541631	750
e-G52HS07C	220V-240V~ 7A 50/60Hz	Heating and Stirring	Ambient + 5°C–550°C	50.0 rpm–1800.0 rpm	20 L	7×7 in (18×18 cm)	30541632	750
e-G52HP07C	100V-120V~ 15A 50/60Hz	Heating	Ambient + 5°C–550°C			7×7 in (18×18 cm)	30541633	500
e-G52HP07C	220V-240V~ 7A 50/60Hz	Heating	Ambient + 5°C–550°C			7×7 in (18×18 cm)	30541634	500
e-G52ST07C	100V-120V~ 1A 50/60Hz	Stirring		50.0 rpm–1800.0 rpm	20 L	7×7 in (18×18 cm)	30541635	485
e-G52ST07C	220V-240V~ 1A 50/60Hz	Stirring		50.0 rpm–1800.0 rpm	20 L	7×7 in (18×18 cm)	30541636	485
e-G52HS10C	100V-120V~ 15A 50/60Hz	Heating and Stirring	Ambient +5°C–500°C	50.0 rpm–1800.0 rpm	22 L	10×10 in (26×26 cm)	30541637	1010
e-G52HS10C	220V-240V~ 10A 50/60Hz	Heating and Stirring	Ambient +5°C–500°C	50.0 rpm–1800.0 rpm	22 L	10×10 in (26×26 cm)	30541638	1010
e-G52HS07C -K1	100V-120V~ 15A 50/60Hz	Heating and Stirring	Ambient + 5°C–550°C	50.0 rpm–1800.0 rpm	20 L	7×7 in (18×18 cm)	30981778	998
e-G52HS07C -K1	220V-240V~ 7A 50/60Hz	Heating and Stirring	Ambient + 5°C–550°C	50.0 rpm–1800.0 rpm	20 L	7×7 in (18×18 cm)	30981779	998
e-G52HP07C -K1	100V-120V~ 15A 50/60Hz	Heating	Ambient + 5°C–550°C			7×7 in (18×18 cm)	30981780	768
e-G52HP07C -K1	220V-240V~ 7A 50/60Hz	Heating	Ambient + 5°C–550°C			7×7 in (18×18 cm)	30981781	768
e-G52HS10C -K1	100V-120V~ 15A 50/60Hz	Heating and Stirring	Ambient +5°C–500°C	50.0 rpm–1800.0 rpm	22 L	10×10 in (26×26 cm)	30981782	1227
e-G52HS10C -K1	220V-240V~ 10A 50/60Hz	Heating and Stirring	Ambient +5°C–500°C	50.0 rpm–1800.0 rpm	22 L	10×10 in (26×26 cm)	30981783	1227

Accessories continued on next page

GUARDIAN™ 5000 HOTPLATES & STIRRERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Clamp, Holder, CLC-CLMPHA	30392195	31
Clamp, Specialty, Rod, CLS-RODS*	30392233	56
Clamp, Specialty, Column, CLS-COLMNSS	30392314	99
Clamp, Specialty, Column, CLS-COLMNSM	30392315	101
Clamp, Specialty, Column, CLS-COLMNSL	30392316	103
Clamp, Specialty, Column, CLS-COLMNSX	30392317	103
Clamp, Specialty, Nester, CLS-NESTXS	30392318	134
Ultra Flex Support Kit**	30400145	289
Support Rod And Clamp Kit	30400146	211
Spinbar 2.5 cm PTFE	30400147	19
Spinbar 3.8 cm PTFE	30400148	20
Spinbar 7 cm PTFE	30400149	64
Spinbar 10 cm with Pivot Ring PTFE	30400150	117
Base Plate 135 mm	30500570	344
Handles for Base Plate (qty 2)	30500571	274
Sectional Block 9×12 mm 2ml Flat Bottom Vials	30500572	131
Sectional Block 10×15 mm Flat Bottom Vials	30500573	131
Sectional Block Holds 7×17 mm Flat Bottom Vials	30500574	131
Sectional Block Holds 5×21 mm Flat Bottom Vials	30500575	131
Sectional Block Holds 3×28 mm Flat Bottom Vials	30500576	131
Sectional Block 9×12 mm Conical Test Tubes	30500577	266
Sectional Block 8×17 mm Conical Test Tubes	30500578	266

Accessories	Item Number	List Price (USD)
Sectional Block 6×20 mm Conical Test Tubes	30500579	266
Sectional Block 5×25 mm Conical Test Tubes	30500580	266
Uni Block 40×12 mm 2ml Flat Bottom Vials	30500581	377
Uni Block 40×15 mm Flat Bottom Vials	30500582	377
Uni Block Holds 32×17 mm Flat Bottom Vials	30500583	377
Uni Block Holds 24×21 mm Flat Bottom Vials	30500584	377
Uni Block 16×28 mm Flat Bottom Vials	30500585	377
Uni Block 40×12 mm Conical Test Tubes	30500586	425
Uni Block 32×17 mm Conical Test Tubes	30500587	425
Uni Block Holds 32×20 mm Conical Test Tubes	30500588	425
Uni Block 24×25 mm Conical Test Tubes	30500589	425
Probe PT1000(A) -40~400C 20cm SS316/304	30500590	266
Probe PT1000(A) -40~200C 20cm PTFE	30500591	296
Probe PT1000(A) -40~400C 25cm SS316/304	30500592	344
Probe PT1000(A) -40~200C 25cm PTFE	30500593	377
Vessel Clamp	30500597	265
Stir Bar Retriever	30500598	56
Spinbar 3.8 cm with Pivot Ring PTFE (qty 5)	30726783	116
Splashing Shield for e-G52XX07C	30910731	82
Splashing Shield for e-G52HS10C	30910732	97
Splashing Shield for e-G52HSRDA	30910733	76
Silicone Cover for e-G52HSRDA	30910734	60
Holder Probe Kit-1	30973298	97
Probe PT100(A) -40~400C 25cm SS 316/304	30973654	258
Probe PT1000(A) -40~400C 25cm Hastelloy	30973655	373

*30392233 is for use with the 30500570 Base Plate only
**needs a separate double clamp or hook clamp for securing on Guardian 5000
***see datasheet for compatibility with individual models

GUARDIAN™ 3000 HOTPLATES & STIRRERS

Affordable Digital Hotplate Stirrers Designed for Safety, Powerful Stirring and Rapid Heating

Display
Backlit LCD Display for temperature and speed, green indicator lights when unit is heating and stirring, prominent hot top indicator light, probe in use icon, Single Point Calibration icon

Construction
Durable metal housing, PET front panel, control knobs, on/off switch for heater disconnect, built-in support rod holder, easy-to-clean ceramic or ceramic-coated stainless steel tops

Design Features
Hot top indicator light to protect user; green indicator lights illuminate when unit is heating and stirring; temperature probe connector for use with optional temperature probe

Operation
Stirring from 80 to 1600 rpm, ambient temperature range from +5°C to 500°C (ceramic top) or 380°C (ceramic-coated steel top), power cord (included), stirring models include PTFE-coated stir bar

Industry-leading safety at affordable prices. Guardian 3000 units offer safety, controlled heating and powerful stirring for general laboratory use – all at a competitive price point.

SafetyHeat™ protects the lab. An industry-leading early detection system uses two independent safety controls to monitor electronics and stop heating before overheating occurs.

Designed to last: the rugged metal housing has a spill-resistant design for long life in the lab under harsh conditions. The smooth, chemical-resistant ceramic top makes for easy clean-ups.

Model	Power	Function	Temp. Range	Speed Range	Capacity	Plate Size	Item Number	List Price (USD)
E-G31HS07C	100V-120V~ 10A 50/60Hz	Heating & Stirring	Ambient +5°C – 500°C	80 rpm ; 1,600 rpm	15 L	7 in × 7 in (178 mm × 178 mm)	30680267	552
E-G31HS04C	100V-120V~ 5A 50/60Hz	Heating & Stirring	Ambient +5°C – 500°C	80 rpm ; 1,600 rpm	15 L	4 in × 4 in (102 mm × 102 mm)	30680268	492
E-G31HSRDS	100V-120V~ 5A 50/60Hz	Heating & Stirring	Ambient +5°C – 380°C	80 rpm ; 1,600 rpm	15 L	5.3 in (135 mm)	30680266	492

Accessories	Item Number	List Price (USD)
Clamp, Specialty, Rod, CLS-RODS	30392233	56
Clamp, Specialty, Column, CLS-COLMNSS	30392314	99
Clamp, Specialty, Column, CLS-COLMNSM	30392315	101
Clamp, Specialty, Column, CLS-COLMNSL	30392316	103
Clamp, Specialty, Column, CLS-COLMNSX	30392317	103
Clamp, Specialty, Nester, CLS-NESTXS	30392318	134
Spinbar 2.5 cm PTFE	30400147	19
Spinbar 3.8 cm PTFE	30400148	20
Spinbar 7 cm PTFE	30400149	64
Spinbar 10 cm with Pivot Ring PTFE	30400150	117
Base Plate 135 mm	30500570	344
Handles for Base Plate	30500571	274
Sectional Block 12 mm Vials	30500572	131
Sectional Block 15 mm vials	30500573	131
Sectional Block 17 mm Vials	30500574	131
Sectional Block 21 mm Vials	30500575	131
Sectional Block 28 mm Vials	30500576	131
Sectional Block 12 mm Test Tubes	30500577	266

Accessories	Item Number	List Price (USD)
Sectional Block 16 mm Test Tubes	30500578	266
Sectional Block 20 mm Test Tubes	30500579	266
Sectional Block 25 mm Test Tubes	30500580	266
Uni Block 12 mm Vials	30500581	377
Uni Block 15 mm vials	30500582	377
Uni Block 17 mm Vials	30500583	377
Uni Block 21 mm Vials	30500584	377
Uni Block 28 mm Vials	30500585	377
Uni Block 12 mm Test Tubes	30500586	425
Uni Block 16 mm Test Tubes	30500587	425
Uni Block 20 mm Test Tubes	30500588	425
Uni Block 25 mm Test Tubes	30500589	425
Temperature Probe 20 cm S/S	30500590	266
Temperature Probe 20 cm PTFE	30500591	296
Temperature Probe 25 cm S/S	30500592	344
Temperature Probe 25 cm PTFE	30500593	377
Vessel Clamp	30500597	265
Stir Bar Retriever	30500598	56

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Accessories continued on next page

GUARDIAN™ 3000 HOTPLATES & STIRRERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Holder Kit Thermometer e-G31	30692826	99

Accessories	Item Number	List Price (USD)
Spinbar 3.8 cm with Pivot Ring PTFE	30726783	116

GUARDIAN™ 2000 HOTPLATES & STIRRERS

Rugged and Reliable Analog Hotplates and Stirrers for General Purpose Heating and Stirring

Display
Prominent hot top indicator light, green indicator lights when unit is heating and stirring

Construction
Durable metal housing, PET front panel, control knobs, ON/OFF switch for heater disconnect, built-in support rod holder, easy to clean resin, ceramic or ceramic-coated stainless steel tops

Design Features
Hot top indicator light to protect user, green indicator lights illuminate when unit is heating and stirring

Operation
Simple knob control, stirring up to 1600 rpm, temperature up to 500°C (ceramic top) or 380°C (ceramic-coated stainless steel top), power cord (included), stirring models include PTFE-coated stir bar

Powerful stirring and fast heating at an economical price. Safely heat up to 500°C and stir up to 15L with easy to use knob control for simple and reliable everyday heating and stirring in the lab.

Designed to last: The rugged metal housing has a spill resistant design for a long lifetime in the lab under harsh conditions. The smooth, chemical-resistant ceramic top plate is perfect for easy cleanup.

Safety is of utmost importance, and the prominent hot top indicator light illuminates when the heater is above 40°C, keeping the end user safe during all heating applications.

Model	Power	Function	Temp. Range	Speed Range	Capacity	Plate Size	Item Number	List Price (USD)
E-G21HS07C	100V-120V~ 10A 60Hz	Heating and Stirring	70°C - 500°C	200 rpm ; 1,600 rpm	15 L	7 in × 7 in (178 mm × 178 mm)	30680258	446
E-G21HS04C	100V-120V~ 10A 60Hz	Heating and Stirring	70°C - 500°C	200 rpm ; 1,600 rpm	15 L	4 in × 4 in (102 mm × 102 mm)	30680259	409
E-G21HSRDS	100V-120V~ 10A 60Hz	Heating and Stirring	50°C - 380°C	200 rpm ; 1,600 rpm	15 L	5.3 in (135 mm)	30680257	409
E-G21ST07R	100V-120V~ 2A 60Hz	Stirring		200 rpm ; 1,600 rpm	15 L	7 in × 7 in (178 mm × 178 mm)	30680264	298
E-G21ST04R	100V-120V~ 2A 60Hz	Stirring		200 rpm ; 1,600 rpm	15 L	4 in × 4 in (102 mm × 102 mm)	30680265	276
E-G21STRDS	100V-120V~ 2A 60Hz	Stirring		200 rpm ; 1,600 rpm	15 L	5.3 in (135 mm)	30680263	298
E-G21HP07C	100V-120V~ 10A 50/60Hz	Heating	70°C - 500°C		15 L	7 in × 7 in (178 mm × 178 mm)	30680261	293
E-G21HP04C	100V-120V~ 5A 50/60Hz	Heating	70°C - 500°C		15 L	4 in × 4 in (102 mm × 102 mm)	30680262	262
E-G21HPRDS	100V-120V~ 5A 50/60Hz	Heating	50°C - 380°C		15 L	5.3 in (135 mm)	30680260	293

Accessories	Item Number	List Price (USD)
Spinbar 2.5 cm PTFE	30400147	19
Spinbar 3.8 cm PTFE	30400148	20
Spinbar 7 cm PTFE	30400149	64
Spinbar 10 cm with Pivot Ring PTFE	30400150	117

Accessories	Item Number	List Price (USD)
Vessel Clamp	30500597	265
Stir Bar Retriever	30500598	56
Holder Kit Thermometer e-G31	30692826	99
Spinbar 3.8 cm with Pivot Ring PTFE	30726783	116

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MULTI-POSITION STIRRERS

Synchronized and Uniform Mixing

Display

Independent LED displays for speed and time (on digital models); Knob with 1-10 dial markings (on non-digital models)

Construction

Cast aluminum housing, glass filled nylon top plate. Includes stir bars to accommodate each stirring position

Design Features

Speed ramping feature slowly increases motor speed for enhanced coupling & improved stirring. Microprocessor-controlled for precise speed regulation. Timer counts up or when programmed to a set time will turn off stirring & sound alarm when timer reaches zero.

The 318 × 279 mm top plate accommodates up to 9x250 mL or 4 × 1 L flasks. The glass-filled nylon surface has a reflective white color, is chemical-resistant & minimizes unintended heating of samples.

Speed ramping feature slowly increases the motor speed for improved safety and enhanced coupling. Avoids splashing, improves spin bar control and provides excellent low-end speed control.

Digital models have touchpad controls for input of speed & time. Non-digital models have an adjustment knob with dial markings from 1-10. The microprocessor regulates adjustments throughout the range.

Model	Speed Range	Capacity	Dimensions	Timer	Item Number	List Price (USD)
STMP4AL	60 rpm to 1400 rpm	4 × 1L	17 in × 4 in × 11 in (432 mm × 970 mm × 279 mm)	-	30573789	1,679
STMP9AL	60 rpm to 1400 rpm	9 × 250mL	17 in × 4 in × 11 in (432 mm × 970 mm × 279 mm)	-	30573794	2,410
STMP4DG	60 rpm to 1400 rpm	4 × 1L	17 in × 4 in × 11 in (432 mm × 970 mm × 279 mm)	1 second – 160 hours	30573799	1,947
STMP9DG	60 rpm to 1400 rpm	9 × 250mL	17 in × 4 in × 11 in (432 mm × 970 mm × 279 mm)	1 second – 160 hours	30573804	3,152

Accessories	Item Number	List Price (USD)
Spinbar 2.5 cm PTFE	30400147	19

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LARGE VOLUME STIRRERS

Powerful Motor and Magnet Mixes Samples Up To 200 L

Display

Independent LED displays for speed, and time (on digital models); Knob with 1-10 dial markings (on non-digital models)

Construction

High Volume Stirrers feature a cast aluminum housing and glass filled nylon top plate. Large Capacity Stirrers feature both stainless steel housing and top plate. Models include either a 70 mm egg shaped stir bar or 102 mm stir bar with pivot ring.

Design Features

Speed ramping feature slowly increases motor speed for enhanced coupling & improved stirring. Microprocessor-controlled for precise speed regulation. Timer counts up or when programmed to a set time, will turn off stirring & sound alarm when timer reaches 0.

Large Capacity Stirrers with a 100 or 200 L capacity are made with a stainless steel base offering durability and stability, and feature a 54 × 53 cm stainless steel top plate.

Large 32 × 28 cm top plate is chemical-resistant with a white reflective surface that is easy to clean. Digital and non-digital models allow you to choose the right model for your application.

Speed ramping feature slowly increases the motor speed for improved safety and enhanced coupling. Avoids splashing, improves spin bar control and provides excellent low-end speed control.

Model	Control	Speed Range	Capacity	Dimensions	Plate Size	Timer	Item Number	List Price (USD)
STHVAL	Analog	60 rpm - 1400 rpm	25 L	17 in × 4 in × 11 in (432 mm × 97 mm × 279 mm)	12.5 in × 11 in (318 mm × 279 mm)	-	30573809	1,251
STHVDG	Digital	60 rpm - 1400 rpm	25 L	17 in × 4 in × 11 in (432 mm × 97 mm × 279 mm)	12.5 in × 11 in (318 mm × 279 mm)	1 second – 160 hours	30573814	1,457
STLC1DG	Digital	100 rpm - 1800 rpm	100 L	28.5 in × 5.25 in × 26.75 in (724 mm × 133 mm × 680 mm)	21.25 in × 25 in (540 mm × 635 mm)	1 second – 160 hours	30573819	4,022
STLC2DG	Digital	100 rpm - 1800 rpm	200 L	28.5 in × 5.25 in × 26.75 in (724 mm × 133 mm × 680 mm)	21.25 in × 25 in (540 mm × 635 mm)	1 second – 160 hours	30573825	5,768

Accessories	Item Number	List Price (USD)
Spinbar 7 cm PTFE	30400149	64

Accessories	Item Number	List Price (USD)
Spinbar 10 cm with Pivot Ring PTFE	30400150	117

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ACHIEVER™ 5000

Reliable Overhead Stirrers with Excellent Performance for Everyday Use

Display
Bright LED digital display for speed, real-time torque tendency LED indicator bar, and integrated timer

Construction
Sealed aluminum housing with IP54 ingress protection rating. Keyless Chuck for simple, one-hand operation, and brushless motor for quiet operation and main power switch

Design Features
Compact design for easy handling, simple knob control, lock button to prevent unintentional setting changes, and full protection for overload, overtemperature and overcurrent conditions

Operation
Stirring from 6 rpm to 2000 rpm with speed accuracy of 1 rpm and maximum torque from 20 Ncm to 200 Ncm, depending on model. Stable torque at any speed, and volume capacity ranging from 25L to 100L

Powerful mixing and constant speed is assured with the brushless motor and torque compensation technology – delivering accurate, controlled stirring of viscous liquids with quiet operation.

Simplify setup with the Keyless Chuck – no tools required. Change shafts quickly and easily with one-handed operation. This unique design will save time and effort for everyone in the lab.

Designed for safety. The lock button prevents accidental speed changes, and the motor's overload sensing technology simply shuts off stirring before an overload condition occurs to protect the sample.

Model	Speed Range	Speed Accuracy	Stirring Volume (L)	Timer	Max Viscosity (mPas)	Torque @ Max Speed (Ncm)	Chuck Range (Diameter)	Shaft Pass-Through (Diameter)	Item Number	List Price (USD)
e-A51ST020	30 rpm – 2000 rpm	±1 rpm	25 L	1 minute – 99 hours, 59 minutes	maximum 10,000	20 Ncm	1-13 mm	up to 8.5 mm	30586763	1,610
e-A51ST040	30 rpm – 2000 rpm	±1 rpm	25 L	1 minute – 99 hours, 59 minutes	maximum 25,000	40 Ncm	1-13 mm	up to 8.5 mm	30586764	1,780
e-A51ST060	30 rpm – 2000 rpm	±1 rpm	40 L	1 minute – 99 hours, 59 minutes	maximum 50,000	60 Ncm	1-13 mm	up to 8.5 mm	30586765	2,010
e-A51ST100	30 rpm – 1300 rpm	±1 rpm	100 L	1 minute – 99 hours, 59 minutes	maximum 70,000	100 Ncm	1-13 mm	up to 8.5 mm	30586766	2,630
e-A51ST200	6 rpm – 400 rpm; 30 rpm – 2000 rpm	±1 rpm	100 L	1 minute – 99 hours, 59 minutes	maximum 100,000	200 Ncm	1-13 mm	up to 8.5 mm	30586767	2,800

Accessories	Item Number	List Price (USD)
Support Stand Universal-H	30586771	452
Support Stand Telescopic-H	30586772	721
Clamp Double	30586773	98
Clamp Ribbon	30586774	143
Stirrer Shaft 40x0.7 cm Anchor Blade	30586775	157
Stirrer Shaft 40x0.7 cm Fixed Blade	30586776	157
Stirrer Shaft 40x0.7 cm Floating Blade	30586777	163

Accessories	Item Number	List Price (USD)
Stirrer Shaft 40x0.7 cm Folding Blade	30586778	163
Stirrer Shaft 51x0.7 cm Paddle 6 Holes	30586779	163
Stirrer Shaft 40x0.7 cm Propeller	30586780	163
Stirrer Shaft 40x0.7 cm Turbine	30586781	294
Stirrer Shaft 40x0.7 cm Turbo Propeller	30586782	294
Chuck Cover e-A51	30586842	125

Specifications and Prices subject to change without notice.

HT LYSING HOMOGENIZER

Provides Simple and Powerful Solutions for Rapid High-Throughput Grinding

Display
Easy-to-read LED display allows the operator to view speed and time settings

Construction
Polyurethane Elastomer top housing, Cycoloy bottom housing, and Lexan lid

Design Features
Microprocessor-controlled unit includes sample clamp and hex key

Operation
Five pre-set program buttons and touchpad controls for speed and time

For high performance grinding, the HT Lysing Homogenizer is one of the most flexible models on the market. The built-in adjustable holder allows for easy processing of samples - no accessories needed.

This versatile Homogenizer allows high throughput grinding, and is ideal for processing multiple tubes, microplates, deep-well plates, or any sample container that fits in the 10.2x12.7x6.4 cm holder.

Take the guesswork out of sample preparation. Five preset programs optimized for speed and time to process the most common samples, including bacteria, fungi, plant, and animal tissue easily.

Model	Speed Range	Motion	Timer	Capacity	Max Capacity	Dimensions	Item Number	List Price (USD)
HOHTDG	300 rpm – 1600 rpm	Vertical, 31 mm	1 second – 10 minutes	1 Deep Well, 4 Microplates or any sample to 10.2 × 12.7 × 6.4 cm	0.7 lb (300 g)	17.5 in × 20.5 in × 11.5 in (443 mm × 518 mm × 288 mm)	30391393	11,114

Accessories	Item Number	List Price (USD)
2mL Tube, White, Bacteria, 100/box	30391402	460
2mL Tube, Yellow, Yeast, 100/box	30391404	460
2mL Tube, Blue, Fungi, 100/box	30391405	460
2mL Tube, Orange, Soft Sample, 100/box	30391406	460
2mL Tube, Green, Plant, 100/box	30391408	460

Accessories	Item Number	List Price (USD)
2mL Tube, Red, Animal Tissue, 100/box	30391409	460
2mL Tube, Brown, Environmental, 100/box	30391410	473
Tube Rack, 25 × 2ml Tubes, 2 per pack	30391431	20
Sample Tube Kit, 14 Tubes	30391433	55

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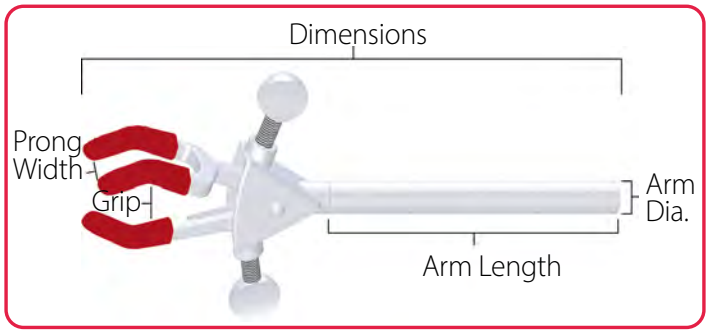

Hosecock - Adjustable Control

Model	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLF-HKRGZ	0 in ; 0.67 in (0 mm ; 17 mm)	2.44 in × 1.46 in (62 mm × 37 mm)	Nickel plated	30392210	37
CLF-HKRGS	0 in ; 0.67 in (0 mm ; 17 mm)	2.44 in × 1.46 in (62 mm × 37 mm)	Stainless Steel	30392221	89

2-Prong Dual Adjust

Model	Size	Grip Range	Prong Width	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLM-MULTI2DZL	Large	0 in ; 3.74 in (0 mm ; 95 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.76 in (248 mm)	Nickel plated	30392207	56
CLM-MULTI2DZM	Medium	0 in ; 2.95 in (0 mm ; 75 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Nickel plated	30392209	52
CLM-MULTI2DSM	Medium	0 in ; 2.95 in (0 mm ; 75 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Stainless Steel	30392220	124
CLM-MULTI2DSL	Large	0 in ; 3.74 in (0 mm ; 95 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.76 in (248 mm)	Stainless Steel	30392223	145

Specifications and Prices subject to change without notice.

2-Prong Single Adjust

Model	Size	Grip Range	Prong Width	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLM-MULTI2SZL	Large	0 in ; 3.62 in (0 mm ; 92 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Nickel plated	30392206	55
CLM-MULTI2SZM	Medium	0 in ; 3.07 in (0 mm ; 78 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	8.5 in (216 mm)	Nickel plated	30392208	50
CLM-SWIVL2SZM	Medium	0 in ; 3 in (0 mm ; 76 mm)	0.91 in (23 mm)			6.42 in (163 mm)	Nickel plated	30392215	52
CLM-SWIVL2SZL	Large	0 in ; 3.74 in (0 mm ; 95 mm)	0.91 in (23 mm)			7.09 in (180 mm)	Nickel plated	30392216	55
CLM-FIXED2SZM	Medium	0 in ; 3.03 in (0 mm ; 77 mm)	0.91 in (23 mm)			5.24 in (133 mm)	Nickel plated	30392218	48
CLM-SWIVL2SSM	Medium	0 in ; 3 in (0 mm ; 76 mm)	0.91 in (23 mm)			6.42 in (163 mm)	Stainless Steel	30392226	143
CLM-FIXED2SSM	Medium	0 in ; 3.03 in (0 mm ; 77 mm)	0.91 in (23 mm)			5.24 in (133 mm)	Stainless Steel	30392230	142

Buret Holder

Model	Size	Dimensions	Material	Item Number	List Price (USD)
CLS-BTDBLS	micro – 100 mL burets	6.8 in × 4.25 in (173 mm × 108 mm)	Stainless Steel	30392227	240
CLS-BTDBLZ	micro – 100 mL burets	4.25 in × 6.8 in (173 mm × 108 mm × 173 mm)	Nickel plated	30392234	91

Double 2-Prong Single Adjust

Model	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLS-DBJAWZ	0 in ; 3 in (0 mm ; 76 mm)	8.74 in (222 mm)	Nickel plated	30392236	65

Thermometer

Model	Grip Range	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-THMSWZ	0.24 in ; 0.32 in (6 mm ; 8 mm)			6.26 in (159 mm)	Nickel plated	30392238	62
CLS-THMEXZ	0.24 in ; 0.47 in (6 mm ; 12 mm)	5 in (127 mm)	0.43 in (11 mm)	8.27 in (210 mm)	Nickel plated	30392239	53

2-Prong Dual Adjust Water Bath

Model	Size	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLS-WBATHZS	Small	0.2 in ; 0.39 in (5 mm ; 10 mm)	3.5 in (89 mm)	Nickel plated	30392240	45

3-Prong Dual Adjust Water Bath

Model	Size	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLS-WBATHZL	Large	0 in ; 1.81 in (0 mm ; 46 mm)	4.61 in (117 mm)	Nickel plated	30392241	65

Electrode

Model	Dimensions	Material	Item Number	List Price (USD)
CLS-ELECTZ	7 in (178 mm)	Nickel plated	30392242	95

Suspension

Model	Dimensions	Material	Item Number	List Price (USD)
CLS-SUSPNB	5.39 in (137 mm)	Nickel plated	30392243	46

2-Prong Dual Adjust Wall Mount

Model	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLS-WALLCZ	0.2 in ; 0.39 in (5 mm ; 10 mm)	3.15 in (80 mm)	Nickel plated	30392244	46

3-Prong Single Adjust

Model	Size	Grip Range	Prong Width	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLM-MULTI3SZL	Large	0 in ; 4.25 in (0 mm ; 108 mm)	1.14 in (29 mm)	5 in (127 mm)	0.43 in (11 mm)	9.76 in (248 mm)	Nickel plated	30392200	69
CLM-MULTI3SZM	Medium	0 in ; 2.8 in (0 mm ; 71 mm)	0.75 mm (19 mm)	5 in (127 mm)	0.43 in (11 mm)	8.58 in (218 mm)	Nickel plated	30392203	67
CLM-MULTI3SZS	Small	0 in ; 1.54 in (0 mm ; 39 mm)	0.43 in (11 mm)	4 in (102 mm)	0.32 in (8 mm)	6.3 in (160 mm)	Nickel plated	30392205	64
CLM-ULTRA3SZL	Large	0 in ; 2.83 in (0 mm ; 72 mm)	1.14 in (29 mm)	5 in (127 mm)	0.43 in (11 mm)	10.24 in (260 mm)	Nickel plated	30392250	80
CLM-ULTRA3SZM	Medium	0 in ; 1.97 in (0 mm ; 50 mm)	0.75 in (19 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Nickel plated	30392252	72
CLM-ULTRA3SZS	Small	0 in ; 0.91 in (0 mm ; 23 mm)	0.24 in (6 mm)	4 in (102 mm)	0.32 in (8 mm)	6.38 in (162 mm)	Nickel plated	30392254	71

Chain

Model	Size	Grip Range	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-CHAINSL	Large	1.38 in ; 11.02 in (35 mm ; 280 mm)	5 in (127 mm)	0.51 in (13 mm)	8.11 in (206 mm)	Stainless Steel		303
CLS-CHAINZM	Small	1.38 in ; 6.69 in (35 mm ; 170 mm)	5 in (127 mm)	0.51 in (13 mm)	7.4 in (188 mm)	Nickel plated		87
CLS-CHAINZL	Large	1.38 in ; 11.02 in (35 mm ; 280 mm)	5 in (127 mm)	0.51 in (13 mm)	8.11 in (206 mm)	Nickel plated		125
CLS-CHNEXZL	Large	1.38 in ; 11.02 in (35 mm ; 280 mm)	12 in (305 mm)	0.51 in (13 mm)	15.12 in (384 mm)	Nickel plated		133

Column

Model	Size	Grip Range	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-COLMNSS	Small	2.56 in ; 3.5 in (65 mm ; 89 mm)	8.31 in (211 mm)	0.43 in (11 mm)	11.1 in (282 mm)	Stainless Steel	30392314	99
CLS-COLMNSM	Medium	3.58 in ; 4.49 in (91 mm ; 114 mm)	8.31 in (211 mm)	0.43 in (11 mm)	12.41 in (315 mm)	Stainless Steel	30392315	101
CLS-COLMNSL	Large	2.52 in ; 5.51 in (64 mm ; 140 mm)	8.31 in (211 mm)	0.43 in (11 mm)	13.31 in (338 mm)	Stainless Steel	30392316	103
CLS-COLMNSX	Extra Large	3.62 in ; 6.5 in (92 mm ; 165 mm)	8.31 in (211 mm)	0.43 in (11 mm)	14.49 in (368 mm)	Stainless Steel	30392317	103

Nester

Model	Grip Range	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-NESTXS	1.97 in ; 4 in (50 mm ; 102 mm)	5.98 in (152 mm)	0.39 in (10 mm)	10.32 in (262 mm)	Stainless Steel	30392318	134

Open Ring

Model	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-OPENRAS	2.28 in (58 mm)	0.35 in (9 mm)	5.2 in (132 mm)	Aluminum	30392343	45
CLS-OPENRAM	2.28 in (58 mm)	0.35 in (9 mm)	6.22 in (158 mm)	Aluminum	30392344	58
CLS-OPENRAL	2.4 in (61 mm)	0.43 in (11 mm)	7.2 in (183 mm)	Aluminum	30392345	79
CLS-OPENRPS	10 in (254 mm)	0.35 in (9 mm)	12.91 in (382 mm)	PVC	30392346	94
CLS-OPENRPM	12 in (305 mm)	0.35 in (9 mm)	15.91 in (404 mm)	PVC	30392347	104
CLS-OPENRPL	12 in (305 mm)	0.43 in (11 mm)	16.81 in (427 mm)	PVC	30392348	141

3-Prong Dual Adjust

Model	Size	Grip Range	Prong Width	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLM-MULTI3DZL	Large	0 in ; 4.13 in (0 mm ; 105 mm)	1.14 in (29 mm)	5 in (127 mm)	0.43 in (11 mm)	10.75 in (273 mm)	Nickel plated	30392198	69
CLM-MLTEX3DZL	Large	0 in ; 4.13 in (0 mm ; 105 mm)	1.14 in (29 mm)	12 in (305 mm)	0.5 in (13 mm)	17.76 in (451 mm)	Nickel plated	30392199	87
CLM-MULTI3DZM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.75 mm (19 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Nickel plated	30392201	67
CLM-MLTEX3DZM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.75 mm (19 mm)	12 in (305 mm)	0.5 in (13 mm)	16 in (406 mm)	Nickel plated	30392202	81
CLM-MULTI3DZS	Small	0 in ; 1.81 in (0 mm ; 46 mm)	0.43 in (11 mm)	4 in (102 mm)	0.32 in (8 mm)	6.61 in (168 mm)	Nickel plated	30392204	64
CLM-SWIVL3DZM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.79 in (20 mm)			7.01 in (178 mm)	Nickel plated	30392214	71
CLM-FIXED3DZM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.79 in (20 mm)			5.75 in (146 mm)	Nickel plated	30392217	62
CLM-SWIVL3DSM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.79 in (20 mm)			7.01 in (178 mm)	Stainless Steel	30392225	190
CLM-FIXED3DSM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.79 in (20 mm)			5.75 in (146 mm)	Stainless Steel	30392229	176
CLM-ULTRA3DZL	Large	0 in ; 4.06 in (0 mm ; 103 mm)	1.14 in (29 mm)	5 in (127 mm)	0.43 in (11 mm)	10.24 in (260 mm)	Nickel plated	30392249	80
CLM-ULTRA3DZM	Medium	0 in ; 2.76 in (0 mm ; 70 mm)	0.75 in (19 mm)	5 in (127 mm)	0.43 in (11 mm)	8.74 in (222 mm)	Nickel plated	30392251	72
CLM-ULTRA3DZS	Small	0 in ; 1.26 in (0 mm ; 32 mm)	0.24 in (6 mm)	4 in (102 mm)	0.32 in (8 mm)	5.98 in (152 mm)	Nickel plated	30392253	71
CLM-MULTI3DSL	Large	0 in ; 4 in (0 mm ; 102 mm)	1.14 in (29 mm)	5 in (127 mm)	0.51 in (13 mm)	10.75 in (273 mm)	Stainless Steel	30392352	148
CLM-MULTI3DSM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.75 in (19 mm)	5 in (127 mm)	0.51 in (13 mm)	9.02 in (229 mm)	Stainless Steel	30392353	134
CLM-MULTI3DSS	Small	0 in ; 1.9 in (0 mm ; 48 mm)	0.51 in (13 mm)	4 in (102 mm)	0.39 in (10 mm)	6.77 in (172 mm)	Stainless Steel	30392354	114

Kettle

Model	Size	Item Number	List Price (USD)
CLS-KTLCLS	500 mL, 1000 mL Flask	30392365	238
CLS-KTLCLM	2000 mL, 3000 mL, 4000 mL Flask	30392366	240

Airejector

Model	Dimensions	Material	Item Number	List Price (USD)
CLN-AIREJ	140 mm × 5.51 in	Nickel plated	30392367	156

RODS, FRAMES & SUPPORTS

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Lab Frame Rod

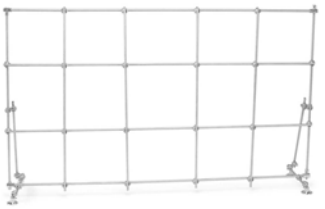
Model	Material	Rod Length	Item Number	List Price (USD)
CLR-RODA004	Aluminum	1.61 in (41 mm)	30392271	12
CLR-RODA005	Aluminum	2 in (51 mm)	30392272	16
CLR-RODA015	Aluminum	6 in (152 mm)	30392273	19
CLR-RODA030	Aluminum	12 in (305 mm)	30392274	25
CLR-RODA046	Aluminum	18 in (457 mm)	30392275	26
CLR-RODA061	Aluminum	24 in (610 mm)	30392276	34
CLR-RODA091	Aluminum	36 in (914 mm)	30392277	37
CLR-RODA122	Aluminum	48 in (1,219 mm)	30392278	56
CLR-RODA152	Aluminum	60 in (1,524 mm)	30392279	63
CLR-RODA183	Aluminum	72 in (1,829 mm)	30392280	68
CLR-RODA244	Aluminum	96 in (2,438 mm)	30392281	87
CLR-RODS004	Stainless Steel	1.61 in (41 mm)	30392293	18
CLR-RODS005	Stainless Steel	2 in (51 mm)	30392294	18
CLR-RODS015	Stainless Steel	6 in (152 mm)	30392295	21
CLR-RODS030	Stainless Steel	12 in (305 mm)	30392296	34
CLR-RODS046	Stainless Steel	18 in (457 mm)	30392297	43
CLR-RODS061	Stainless Steel	24 in (610 mm)	30392298	53
CLR-RODS091	Stainless Steel	36 in (914 mm)	30392299	72
CLR-RODS122	Stainless Steel	48 in (1,219 mm)	30392300	92
CLR-RODS152	Stainless Steel	60 in (1,524 mm)	30392301	107
CLR-RODS183	Stainless Steel	72 in (1,829 mm)	30392302	127
CLR-RODS244	Stainless Steel	96 in (2,438 mm)	30392303	167

Rod with Channel Connector

Model	Material	Dimensions	Grip Range	Connection Angle	Rod Length	Adjustment Type	Maximum Capacity	Item Number	List Price (USD)
CLC-UNSMBA	Aluminum		0 in ; 0.78 in (0 mm ; 20 mm)			Thumbscrew	5 lb (2.27 kg)	30392265	18
CLC-HTZMBA05	Aluminum				2 in (51 mm)	Locking Nut		30392266	42
CLC-HTZMBA10	Aluminum				4 in (102 mm)	Locking Nut		30392267	46
CLC-HTZMBA15	Aluminum				6 in (152 mm)	Locking Nut		30392268	49
CLC-HTZMBA20	Aluminum				8 in (203 mm)	Locking Nut		30392269	53
CLC-SHGRPA	Aluminum	7.75 in (197 mm)		Fixed 90°		Thumbscrew		30392311	317

Buret Holder Kit

Model	Material	Dimensions	Rod Length	Size	Item Number	List Price (USD)
CLS-BTSETS	Stainless Steel	7 in × 1 in × 13 in (178 mm × 25 mm × 330 mm)	22.76 in (578 mm)	micro – 100 mL burets	30392231	495
CLS-BTSETA	Nickel plated	7 in × 1 in × 13 in (178 mm × 25 mm × 330 mm)	22.76 in (578 mm)	micro – 100 mL burets	30392313	347



Lab Frame Kit

Model	Material	Dimensions	Size	Item Number	List Price (USD)
CLR-FRAMEAS	Aluminum	18 in × 24 in × 24 in (457 mm × 610 mm × 610 mm)	Small	30392304	651
CLR-FRAMEAM	Aluminum	18 in × 24 in × 48 in (457 mm × 610 mm × 1,219 mm)	Medium	30392305	814
CLR-FRAMEAL	Aluminum	18 in × 48 in × 48 in (457 mm × 1,219 mm × 1,219 mm)	Large	30392306	1,257
CLR-FRAMEAX	Aluminum	12 in × 48 in × 72 in (305 mm × 1,219 mm × 1,829 mm)	Extra Large	30392307	1,725
CLR-FRAMESS	Stainless Steel	18 in × 24 in × 24 in (457 mm × 610 mm × 610 mm)	Small	30392323	1,112
CLR-FRAMESM	Stainless Steel	18 in × 24 in × 48 in (457 mm × 610 mm × 1,219 mm)	Medium	30392324	1,566
CLR-FRAMESL	Stainless Steel	18 in × 48 in × 48 in (457 mm × 1,219 mm × 1,219 mm)	Large	30392325	2,194
CLR-FRAMESX	Stainless Steel	12 in × 48 in × 72 in (305 mm × 1,219 mm × 1,829 mm)	Extra Large	30392326	2,410
CLR-FHOODSS	Stainless Steel	12 in × 36 in × 38 in (305 mm × 914 mm × 965 mm)		30392329	1,411
CLR-FHOODSM	Stainless Steel	12 in × 36 in × 50 in (305 mm × 914 mm × 1,270 mm)		30392330	1,535
CLR-FHOODSL	Stainless Steel	12 in × 36 in × 62 in (305 mm × 914 mm × 1,575 mm)		30392331	1,648
CLR-FHOODSX	Stainless Steel	12 in × 36 in × 86 in (305 mm × 914 mm × 2,184 mm)		30392332	1,885

Model	Item Number	List Price (USD)
CLR-RODAX	30392333	142

Support Plates

Model	Material	Adjustment Type	Platform Size	Size	Item Number	List Price (USD)
CLR-PLATEAR	Aluminum		6 in (152 mm)		30392342	107
CLR-PLATEAS	Aluminum	Thumbscrew	9.5 in × 6.5 in (241 mm × 165 mm)	Small	30392349	197
CLR-PLATEAL	Aluminum	Thumbscrew	12.75 in × 9 in (324 mm × 229 mm)	Medium	30392350	313
CLR-PLATEAX	Aluminum	Thumbscrew	15.75 in × 12 in (400 mm × 305 mm)	Large	30392351	391

Lab Frame Foot

Model	Material	Dimensions	Grip Range	Adjustment Type	Item Number	List Price (USD)
CLR-LFOOTZ	Nickel plated	1.25 in × 2.3 in (32 mm × 58.4 mm)	0 in ; 0.51 in (0 mm ; 13 mm)	Set Screw	30392263	37
CLR-LFOOTS	Stainless Steel	1.25 in × 2.3 in × 2.3 in (58.4 mm × 32 mm × 58.4 mm)	0 in ; 0.51 in (0 mm ; 13 mm)	Set Screw	30392356	71

Connector

Model	Material	Grip Range	Connection Angle	Adjustment Type	Item Number	List Price (USD)
CLC-RDENDS	Stainless Steel	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392222	52
CLC-LTTCEA	Aluminum	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392255	293
CLC-RDENDZ	Nickel plated	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392256	24
CLC-SCONNZ	Nickel plated	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392257	32
CLC-HOOKCZ	Nickel plated	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Thumbscrew	30392258	21
CLC-MTRODZ	Nickel plated	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Thumbscrew & Set Screw	30392262	53
CLC-EN2ENA	Aluminum	0 in ; 0.51 in (0 mm ; 13 mm)	End to End	Set Screw	30392264	35
CLC-SCONNS	Stainless Steel	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392355	49
CLC-HOOKCS	Stainless Steel	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Thumbscrew	30392358	46

Support Stand Base

Model	Material	Dimensions	Item Number	List Price (USD)
CLR-RBASECS	Cast Iron	4 in × 6 in (102 mm × 152 mm)	30392359	61
CLR-RBASECM	Cast Iron	5 in × 8 in (127 mm × 203 mm)	30392360	93
CLR-RBASECL	Cast Iron	6 in × 9 in (152 mm × 229 mm)	30392361	124
CLR-RBASECX	Cast Iron	8 in × 10 in (203 mm × 254 mm)	30392362	177
CLR-TBASEC	Cast Iron	14.75 in (375 mm)	30392363	113
CLR-UBASEC	Cast Iron	7 in × 7 in (178 mm × 178 mm)	30392364	61

Lab Lift

Model	Material	Height Range	Maximum Capacity	Platform Size	Item Number	List Price (USD)
CLR-LBLFTS008	Stainless Steel	64 mm ; 127	100 lb (45.36 kg)	3 in × 3 in (76 mm × 76 mm)	30400000	260
CLR-LBLFTS010	Stainless Steel	64 mm ; 127	100 lb (45.36 kg)	4 in × 4 in (102 mm × 102 mm)	30400001	315
CLR-LBLFTS015	Stainless Steel	76 mm ; 248	133 lb (60.33 kg)	6 in × 6 in (152 mm × 152 mm)	30400002	323
CLR-LBLFTS020	Stainless Steel	76 mm ; 248	227 lb (102.97 kg)	8 in × 8 in (203 mm × 203 mm)	30400003	432
CLR-LBLFTS025	Stainless Steel	89 mm ; 330	247 lb (112.04 kg)	10 in × 10 in (254 mm × 254 mm)	30400004	472
CLR-LBLFTS030	Stainless Steel	102 mm ; 495	100 lb (45.36 kg)	12 in × 12 in (305 mm × 305 mm)	30400005	1,241
CLR-LBLFTS041	Stainless Steel	102 mm ; 495	100 lb (45.36 kg)	16 in × 16 in (406 mm × 406 mm)	30400006	2,204
CLR-LBLFTA010	Aluminum	64 mm ; 127	66 lb (29.94 kg)	4 in × 4 in (102 mm × 102 mm)	30400007	240
CLR-LBLFTA015	Aluminum	76 mm ; 248	132 lb (59.87 kg)	6 in × 6 in (152 mm × 152 mm)	30400008	296
CLR-LBLFTA020	Aluminum	76 mm ; 248	176 lb (79.83 kg)	8 in × 8 in (203 mm × 203 mm)	30400009	354
CLR-LBLFTA025	Aluminum	89 mm ; 330	186 lb (84.37 kg)	10 in × 10 in (254 mm × 254 mm)	30400010	465

Flex System

Model	Material	Dimensions	Grip Range	Arm Diameter	Arm Length	Item Number	List Price (USD)
CLS-FLEXSM	Nickel plated	5 in × 0.5 in × 5 in (127 mm × 13 mm × 127 mm)		0.51 in (13 mm)	12 in (305 mm)	30400011	393
CLS-FLEXBM	Nickel plated		0 mm ; 43 mm	0.51 in (13 mm)	12 in (305 mm)	30400012	351
CLS-FLEXLM	Nickel plated		0 mm ; 19 mm	0.51 in (13 mm)	12 in (305 mm)	30400013	303
CLS-FLEXSL	Nickel plated	5 in × 0.5 in × 5 in (127 mm × 13 mm × 127 mm)		0.51 in (13 mm)	18 in (457 mm)	30400014	474

Model	Material	Dimensions	Grip Range	Arm Diameter	Arm Length	Item Number	List Price (USD)
CLS-FLEXBL	Nickel plated		0 mm ; 43 mm	0.51 in (13 mm)	18 in (457 mm)	30400015	417
CLS-FLEXLL	Nickel plated		0 mm ; 19 mm	0.51 in (13 mm)	18 in (457 mm)	30400016	364

Gas Cylinder Supports

Model	Material	Dimensions	Cylinder Diameter	Support Type	Item Number	List Price (USD)
CLR-703	Cast Aluminum	6 in × 18.25 in (152 mm × 464 mm)	8 in ; 9 (203 mm ; 229)	Floor Stand	30400018	503
CLR-704	Cast Aluminum	7.5 in × 18.5 in (191 mm × 470 mm)	6 in ; 9.25 (152 mm ; 235)	Floor Stand	30400019	593
CLR-711	Cast Aluminum	3.25 in × 6.25 in × 5.25 in (83 mm × 159 mm × 133 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400020	96
CLR-711M	Cast Aluminum	3.25 in × 6.5 in × 5.25 in (83 mm × 165 mm × 133 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400021	113
CLR-712	Cast Aluminum	3.25 in × 4.5 in × 6 in (83 mm × 152 mm × 152 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400022	101
CLR-713	Cast Aluminum	3 in × 15.5 in (76 mm × 394 mm)	7 in ; 9.25 (178 mm ; 235)	Floor Stand	30400023	572
CLR-715	Cast Aluminum	1.88 in × 4.63 in × 8.1 in (48 mm × 118 mm × 206 mm)	4 in ; 14 (102 mm ; 356)	Wall	30400024	87
CLR-715M	Cast Aluminum	1.88 in × 4.63 in × 8.1 in (48 mm × 118 mm × 206 mm)	4 in ; 14 (102 mm ; 356)	Wall	30400025	104
CLR-716	Cast Aluminum	3.25 in × 6.5 in × 5.25 in (83 mm × 165 mm × 133 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400026	104
CLR-716M	Cast Aluminum	3.25 in × 6.5 in × 5.25 in (83 mm × 165 mm × 165 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400027	126
CLR-717	Cast Aluminum	1.88 in × 4.63 in × 8.1 in (48 mm × 118 mm × 206 mm)	4 in ; 14 (102 mm ; 356)	Wall	30400028	97
CLR-717M	Cast Aluminum	1.88 in × 4.63 in × 8.1 in (48 mm × 118 mm × 206 mm)	4 in ; 14 (102 mm ; 356)	Wall	30400029	119

Support Stand with Rod

Model	Material	Dimensions	Rod Length	Item Number	List Price (USD)
CLS-STRODS	Stainless Steel	7 in × 1 in × 13 in (178 mm × 25 mm × 330 mm)	22.76 in (578 mm)	30392232	274
CLS-STRODA	Aluminum	7 in × 1 in × 13 in (178 mm × 25 mm × 330 mm)	22.76 in (578 mm)	30392312	251
CLR-STRODC046	Stainless Steel	12 in × 16.5 in (305 mm × 419 mm)	18 in (475 mm)	30392334	421
CLR-STRODC058	Stainless Steel	12 in × 16.5 in (305 mm × 419 mm)	23 in (584 mm)	30392335	469
CLR-STRODC071	Stainless Steel	12 in × 16.5 in (305 mm × 419 mm)	28 in (711 mm)	30392336	494
CLR-STRODC091	Stainless Steel	12 in × 16.5 in (305 mm × 419 mm)	36 in (9,144 mm)	30392337	567
CLR-STRODC102	Stainless Steel	12 in × 16.5 in (305 mm × 419 mm)	40 in (1,016 mm)	30392338	598
CLR-STRODC122	Stainless Steel	12 in × 16.5 in (305 mm × 419 mm)	48 in (1,219 mm)	30392339	641
CLR-STRODC152	Stainless Steel	12 in × 16.5 in (305 mm × 419 mm)	60 in (1,524 mm)	30392340	710
CLR-STRODS058	Stainless Steel	10.5 in × 17.75 in (267 mm × 451 mm)	23 in (58.4 cm)	30400030	436
CLR-STRODS071	Stainless Steel	10.5 in × 17.75 in (267 mm × 451 mm)	28 in (71.1 cm)	30400031	454
CLR-STRODS091	Stainless Steel	10.5 in × 17.75 in (267 mm × 451 mm)	36 in (91.4 cm)	30400032	525
CLR-STRODS102	Stainless Steel	10.5 in × 17.75 in (267 mm × 451 mm)	40 in (101.6 cm)	30400033	556
CLR-STRODS122	Stainless Steel	10.5 in × 17.75 in (267 mm × 451 mm)	48 in (121.9 cm)	30400034	582
CLR-STRODS152	Stainless Steel	10.5 in × 17.75 in (267 mm × 451 mm)	60 in (152.4 cm)	30400035	646

Holder

Model	Material	Dimensions	Grip Range	Connection Angle	Adjustment Type	Size	Item Number	List Price (USD)
CLC-CLMPHA	Aluminum	2.75 in (70 mm)	0 in ; 0.66 in (0 mm ; 17 mm)	Fixed 90°	Thumbscrew		30392195	31
CLC-JUMBOA	Aluminum	2.25 in (57.2 mm)	0 in ; 0.83 in (0 mm ; 21 mm)	Fixed 90°	Thumbscrew	Jumbo	30392196	49
CLC-REGLRZ	Nickel plated	1.9 in (48.3 mm)	0 in ; 0.71 in (0 mm ; 18 mm)	Fixed 90°	Thumbscrew	Regular	30392197	34
CLC-SWIVLZ	Nickel plated		0 in ; 0.75 in (0 mm ; 19 mm)	Variable	Thumbscrew		30392213	45
CLC-REGLRS	Stainless Steel	1.9 in (48.3 mm)	0 in ; 0.71 in (0 mm ; 18 mm)	Fixed 90°	Thumbscrew		30392219	80
CLC-SWIVLS	Stainless Steel		0 in ; 0.75 in (0 mm ; 19 mm)	Variable	Thumbscrew		30392228	127
CLC-ALLPSZ	Nickel plated		0 in ; 0.75 in (0 mm ; 19 mm)	Variable	Thumbscrew		30392248	89
CLC-JUMBOS	Stainless Steel	2.25 in (57.2 mm)	0 in ; 0.83 in (0 mm ; 21 mm)	Fixed 90°	Thumbscrew		30392357	80
CLR-HOLDRS	Stainless Steel			Fixed 90°	Oversized Knob		30400043	107
CLC-ULTRAA	Aluminum	4 in × 4 in (102 mm × 102 mm)	0.24 in ; 0.95 in (6 mm ; 24 mm)	Fixed 90°	Oversized Knob	Heavy Duty	30400045	138

Innoculating Turntable

Model	Material	Dimensions	Platform Size	Size	Item Number	List Price (USD)
CLN-INOTTS	Cast Iron	3 in × 4.49 in (76 mm × 114 mm)	4.49 in (114 mm)	Petri Dish size, 100 mm	30400046	231
CLN-INOTTL	Cast Iron	1.26 in × 5.91 in (32 mm × 150 mm)	5.91 in (150 mm)	Petri Dish size, 100 mm, 150 mm	30400047	274

Slide Staining Rack

Model	Material	Dimensions	Item Number	List Price (USD)
CLN-STNRK	Stainless Steel	23.7 in × 3.5 in (603 mm × 89 mm)	30400048	98

Laboratory Instruments

Streamline your water quality analysis applications using the intuitive OHAUS Starter and AquaSearcher™ Series. With the ability to handle applications from pH to Dissolved Oxygen—and everything in between—OHAUS provides powerful performance that goes where you go.

	Bench Meters								Portable Meters						Pen Meters						
	Starter 5000	AquaSearcher AB41	AquaSearcher AB33M1	AquaSearcher AB33PH	AquaSearcher AB33EC	AquaSearcher AB23PH	AquaSearcher AB23EC	Starter 2200	Starter 300	Starter 300C	Starter 300D	Starter ST400	Starter ST400M	Starter ST400D	pH meters	ORP meters	Conductivity meters	DO meters	Salinity meters	TDS meters	Multi meters
Measurement Range	-2.000 to 20.000 pH; -30°C to 130 °C	-2.000 – 20.000 pH; -2000.00 – +2000.00 mV; -10.0 °C – 125.0 °C	-2.00 – 20.00 pH; -2000.00 – +2000.00 mV; -5 °C – 110 °C	-2.00 – 16.00 pH; -2000.00 – +2000.00 mV; -5 °C – 110 °C;	0.001 µS/cm – 1000 mS/cm; -5.0 to 110.0°C,	0.00 – 14.00 pH; -1999 – 1999 mV; 0 – 100°C	00.0 µS/cm – 199.9 mS/cm; 0.0 to 100.0 °C	-2.00 to 16.00 pH, 0 °C to 100 °C	0.00 to 14.00 pH 0°C to 100 °C	0.0 µS/cm to 199.9 mS/cm 0°C to 100 °C	0.0 to 199.9%; 200 to 400% 0°C to 50 °C	-2.00~16.00 pH -1999~1999 mV -5 °C~110 °C	pH -2 ... 16.00 pH ORP -1999 ... 1999 mV Conductivity 0.0 µS/cm ... 199.9 mS/cm TDS 0.1 mg/l ... 199.9 g/l Salinity 0.0 ... 99.9 psu Resistivity 0 ... 20MΩ-cm Temperature -5 °C... 110 °C	0.0 to 200.0% 0°C to 50 °C	0.00 to 14.00 pH*	-1000mV to 1000mV	0.0 to 199.9 µs/cm*	0.0 to 19.9 mg/L	0.0 to 80.0 ppt*	0 to 1000 mg/L*	0.00 to 14.00 pH, 0-1999 µS/cm, 0-19.99 mS/cm, 0-1000 mg/L, 0.0-10.0 ppt
Input	BNC	BNC	BNC	BNC	Mini-Din	BNC	Mini-Din	BNC	BNC	Mini-Din	BNC	BNC	BNC	Mini-DIN							
Automatic Temp. Compensation	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●*	●*	●*	●*	●*	●*	●
Manual Temp. Compensation	●	●	●	●	●	●	●	●	●		●	●	●								
Battery Power									●	●	●	●	●	●	●	●	●	●	●	●	●
1 Pt. Calibration	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●*	●*	●*	●*	●*	●*	●
2 Pt. Calibration	●	●	●	●	●	●	●	●	●		●	●	●	●	●*						
≥3 Pt. Calibration	●	●	●	●	●	●	●		●			●	●		●*						●
Memory	●	●	●	●	●	●	●	●	●	●	●	●	●	●							
Backlit LCD	●	●	●	●	●	●	●	●				●	●	●							
LCD		●	●	●	●	●	●	●	●	●	●				●	●	●	●	●	●	●
Touchscreen	●	●	●	●	●																
Mechanical Keys						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
USB	●	●	●	●	●							●	●								
RS232	●	●	●	●	●																
USB Host	●															●					
GLP / Time / Date	●	●	●	●	●				●												
Multi Languages	●	●	●	●	●							●	●								
IP Protection	IP54	IP54	IP54	IP54	IP54	IP54	IP54		IP54	IP54	IP54	IP67	IP67	IP54	IP67	IP67	IP67	IP67	IP67	IP67	IP67
Stand-alone Electrode Holder	●	●	●	●	●	●	●														
Quick Reference Operation Guide	●	●	●	●	●	●	●	●													
In-Use Cover	●	●	●	●	●	●	●														
Hold Function								●	●	●	●	●	●	●	●*	●	●	●	●	●	●
Auto Shut Off		●	●	●	●	●	●					●	●		●	●	●	●	●	●	●
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***** on specific models

	Bench Meters								Portable Meters						Pen Meters										
	ST5000	AB41PH	AB33M1	AB33PH	AB33EC	AB23PH	AB23EC	ST2200	ST400	ST400M	ST400D	ST300	ST300C	ST300D	ST10	ST20	ST20M-B	ST20M-C	ST10C	ST20C	ST10T	ST20T	ST10S	ST20S	ST10R	ST20R	ST20D
pH	●	●	●	●		●		●	●	●		●			●	●	●	●									
Cond.			●		●		●			●			●				●	●	●	●							
TDS			●		●		●			●			●				●				●	●					
ORP	●	●	●	●		●		●	●	●		●													●	●	
Salinity			●		●		●			●								●					●	●			
Resistivity			●		●					●																	
DO											●			●													●
Temp.	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●		●		●		●		●	●

AQUASEARCHER™ AB41PH BENCH METER

An Advanced, Research-Grade Benchtop pH Meter Offering Accurate, Repeatable Results

Display
6.5" Segment & Dot matrix LCD with backlight

Communication
RS232, USB Device (included), GLP/GMP data output with real-time clock

Construction
AC adapter (included)

Design Features
i-Steward, 3 endpoint modes, calibration due alarm, 1,000 measurement memory, ten most recent calibrations, password management

Operation
Capacitive touch, ABS top housing, standalone electrode holder

With selectable resolution from 0.1 to 0.001 and an intelligent i-Steward system, AB41PH is an excellent pH bench meter with high resolution and consistent accuracy.

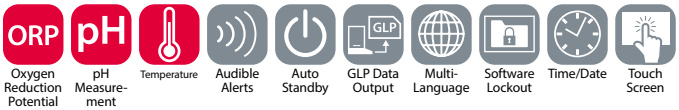
Equipped with a 6.5-inch large LCD display and a touch keypad, AB41PH offers a simple and precise control experience.

The AB41PH features a 1000-item memory and password management for GLP documentation. Provides connectivity and data output capabilities with RS232 and USB interface.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB41PH-B	-	-2.000 – 20.000 pH; -10.0 °C – 125.0 °C; -2000.00 – +2000.00 mV	0.1 mV; 0.1 °C; 0.001 pH	30589830	1,151
AB41PH-F	ST410 pH Electrode and STTEMP Probe included	-2.000 – 20.000 pH; -10.0 °C – 125.0 °C; -2000.00 – +2000.00 mV	0.1 mV; 0.1 °C; 0.001 pH	30589831	1,306

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
pH sensor protect bottle(10 in bag)	30064800	64
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
pH Electrode, ST350, EN	30129354	236
pH Electrode, ST260, EN	30129357	221

Accessories	Item Number	List Price (USD)
pH Electrode, STSURF, EN	30129470	216
pH Electrode, ST270	30240974	391
pH electrode ST272	30393265	229
pH Electrode ST410	30656037	237
ECS Special accessories	30658042	122
Electrode holder AB33/AB41	30661423	122
Stirrer Compact AS20	30661425	227
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32



AQUASEARCHER™ AB33PH BENCH METER

Highly Reliable and User-Friendly pH Benchtop Meter for Standard Laboratory Applications

Display
6.5" Segment & Dot matrix LCD with backlight

Communication
RS232, USB Device (included)

Construction
AC adapter (included)

Design Features
i-Steward, Calibration due alarm, 1,000 measurement memory

Operation
Capacitive touch, ABS top housing, standalone electrode holder

With multifunctional touch keypads, AB33PH makes measurement simple and fast within 3 steps. The intelligent i-Steward monitors the condition of electrodes, ensuring the accuracy of the results.

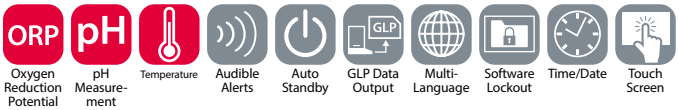
Auto endpoint mode and auto buffer recognition makes calibration easy. A 1000-item memory for pH measurements and calibration trail makes for efficient data documentation.

A user-friendly bench meter with an innovative design, including 6.5 in. large LCD display & adjustable stand-alone electrode holder. Multiple connectivity capabilities include RS232 & USB interface.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB33PH-B	-	-5 °C – 110 °C; -2.00 – 16.00 pH; -2000.00 – +2000.00 mV	0.1 °C; 0.01 pH; 1 mV	30589826	687
AB33PH-F	ST310 (Included)	-5 °C – 110 °C; -2.00 – 16.00 pH; -2000.00 – +2000.00 mV	0.1 °C; 0.01 pH; 1 mV	30589827	778

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
pH sensor protect bottle(10 in bag)	30064800	64
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
pH Electrode, ST350, EN	30129354	236
pH Electrode, ST260, EN	30129357	221

Accessories	Item Number	List Price (USD)
pH Electrode, STSURF, EN	30129470	216
pH Electrode, ST270	30240974	391
pH electrode ST272	30393265	229
pH Electrode ST410	30656037	237
ECS Special accessories	30658042	122
Electrode holder AB33/AB41	30661423	122
Stirrer Compact AS20	30661425	227
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32



Specifications and Prices subject to change without notice.

AQUASEARCHER™ AB33MI BENCH METER

Easy-to-Use and Accurate Multi-Parameter Benchtop Meter

Display
6.5" Segment & Dot matrix LCD with backlight

Communication
RS232, USB Device (included)

Construction
AC adapter (included)

Design Features
i-Steward, Two Independent Channels, Calibration due alarm, 1,000 measurement memory

Operation
Capacitive touch, ABS top housing, standalone electrode holder

Capable of measuring up to 7 parameters including pH, ORP, conductivity, TDS, salinity, resistivity and temperature, the AB33M1 utilizes 2 independent measuring channels which can work simultaneously.

With multifunctional touch keypads, AB33M1 makes measurement simple and fast. The intelligent i-Steward monitors the condition of electrodes, ensuring the accuracy of the results.

A 1000-item memory for measurement and calibration allows for efficient data documentation. Records are kept with date/time for traceability. RS232 and USB enable connection to external devices.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB33M1-B	-	-2.00 – 20.00 pH; -5 °C – 110 °C; -2000.00 – +2000.00 mV	0.1 mV; 0.1 °C; 0.01 pH	30589824	977
AB33M1-F	ST310 (Included); STCON3 (Included)	-2.00 – 20.00 pH; -5 °C – 110 °C; -2000.00 – +2000.00 mV	0.1 mV; 0.1 °C; 0.01 pH	30589825	1,140

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
pH sensor protect bottle(10 in bag)	30064800	64
Cond Electrode STCON7	30080693	732
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
Standard Conduct 84µS/cm 250ml	30100442	30
Standard Conduct 1413µS/cm 250ml	30100443	30
Standard Conduct 12.88mS/cm 250ml	30100444	30
pH Electrode, ST350, EN	30129354	236
pH Electrode, ST260, EN	30129357	221
pH Electrode, STSURF, EN	30129470	216

Accessories	Item Number	List Price (USD)
pH Electrode, ST270	30240974	391
pH electrode ST272	30393265	229
Conductivity Electrode STCON3 IP67	30468962	529
pH Electrode ST410	30656037	237
ECS Special accessories	30658042	122
Electrode holder AB33/AB41	30661423	122
Stirrer Compact AS20	30661425	227
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
Conductivity Electrode STCON5	30681116	231
Conductivity Electrode STCON8	30681117	315
Cond Electrode STCON8 w Flow chamber	30681235	506
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32
Conductivity Electrode, STCON3	83033972	402

AQUASEARCHER™ AB33EC BENCH METER

Highly Reliable Conductivity/TDS/Salinity/Resistivity Benchtop Meter for Standard Laboratory Applications

Display
6.5" Segment & Dot matrix LCD with backlight

Communication
RS232, USB Device (included)

Construction
AC adapter (included)

Design Features
i-Steward, Calibration due alarm, 1,000 measurement memory

Operation
Capacitive touch, ABS top housing, standalone electrode holder

Selectable reading reference temperatures of 20 or 25 °C with linear curve options and automatic temperature compensation ensures accurate results.

Features such as auto-stop, auto temperature compensation, adjustable TDS factor, 2- or 4-cell conductivity probe compatibility make AB33EC well suited for universal laboratory applications.

A 1000-item memory for conductivity measurements and calibration trail allows for efficient data documentation. Standard RS232 and USB interface allows connection to external devices.

Model	Electrode	Measurement Range	Conductivity accuracy (±)	Item Number	List Price (USD)
AB33EC-B	-	0.001 µS/cm – 1000 mS/cm	0.5 %	30589828	628
AB33EC-F	STCON7(Included)	0.001 µS/cm – 1000 mS/cm	0.5 %	30589829	783

Accessories	Item Number	List Price (USD)
Cond Electrode STCON7	30080693	732
Standard Conduct 84µS/cm 250ml	30100442	30
Standard Conduct 1413µS/cm 250ml	30100443	30
Standard Conduct 12.88mS/cm 250ml	30100444	30
Cond standard 500µS/cm, 250ml	30393269	31
ECS Special accessories	30658042	122

Accessories	Item Number	List Price (USD)
Electrode holder AB33/AB41	30661423	122
Stirrer Compact AS20	30661425	227
Conductivity Electrode STCON5	30681116	231
Conductivity Electrode STCON8	30681117	315
Cond Electrode STCON8 w Flow chamber	30681235	506
Conductivity Electrode, STCON3	83033972	402

Specifications and Prices subject to change without notice.

AQUASEARCHER™ AB23PH BENCH METER

Simple to Use Benchtop Meter for Easily Measuring pH and ORP

Display
5 inch segment LCD with backlight

Construction
ABS housing, mechanical keys, Stand-Alone electrode holder

Design Features
Auto buffer recognition, two point calibration, electrode condition icon

Operation
AC adapter (included)

With an intuitive design and auto buffer recognition, AB23PH is an easy and straightforward meter for pH measurement.

Large bright LCD display with complete measurement information simplifies operation and allows you to monitor the results from a distance.

Featuring a compact stand-alone electrode holder, AB23PH increases the flexibility of experiments and fits ideally in any lab.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB23PH-B	-	0 – 100°C; 0.00 – 14.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	30589820	482
AB23PH-F	ST322 (Included)	0 – 100°C; 0.00 – 14.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	30589821	549

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
pH sensor protect bottle(10 in bag)	30064800	64
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
pH Electrode, ST350, EN	30129354	236
pH Electrode, ST260, EN	30129357	221

Accessories	Item Number	List Price (USD)
pH Electrode, STSURF, EN	30129470	216
pH Electrode, ST270	30240974	391
pH electrode ST272	30393265	229
pH Electrode ST410	30656037	237
Electrode holder AB23	30661424	122
Stirrer Compact AS20	30661425	227
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32

ORP Oxygen Reduction Potential
pH pH Measure-ment
Temperature

AQUASEARCHER™ AB23EC BENCH METER

Simple-to-Use Benchtop Meter Designed to Easily Measure Conductivity, TDS and Salinity

Display
5 inch segment LCD with backlight

Construction
ABS housing, mechanical keys, standalone electrode holder

Design Features
99 measurement memory, automatic and manual endpoint functions, automatic and manual temperature compensation

Operation
AC adapter (included)

With six instructional menu buttons and auto temperature compensation, the AB23EC is an easy and straightforward meter for measurement.

A large 5-inch backlit LCD display with complete measurement information simplifies operation and allows you to monitor the results from a distance.

Featuring a compact stand-alone electrode holder, the AB23EC increases the flexibility of the experiment and fits ideally in any lab.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB23EC-B	-	00.0 µS/cm – 199.9 mS/cm	0.01 µS/cm	30589822	508
AB23EC-F	STCON3 (Included)	00.0 µS/cm – 199.9 mS/cm	0.01 µS/cm	30589823	650

Accessories	Item Number	List Price (USD)
Cond Electrode STCON7	30080693	732
Standard Conduct 84µS/cm 250ml	30100442	30
Standard Conduct 1413µS/cm 250ml	30100443	30
Standard Conduct 12.88mS/cm 250ml	30100444	30
Electrode holder AB23	30661424	122

Accessories	Item Number	List Price (USD)
Stirrer Compact AS20	30661425	227
Conductivity Electrode STCON5	30681116	231
Conductivity Electrode STCON8	30681117	315
Cond Electrode STCON8 w Flow chamber	30681235	506
Conductivity Electrode, STCON3	83033972	402

Specifications and Prices subject to change without notice.

STARTER 5000 PH BENCH

High Performance Benchtop pH Meter Ideal for Accurate Everyday Measurements in the Laboratory

Display
Backlit liquid crystal display (LCD), touchscreen

Communication
RS232 and USB (included). GLP/GMP data output with real-time clock.

Construction
ABS housing, standalone electrode holder, replaceable in-use cover

Design Features
3 endpoint modes, continuous measurement mode, up to 9 point calibration, 1,000 measurement memory

Operation
AC adapter (included)

A 1000-item library allows for easy recall from data storage. Flexible pH analysis from 10 sensors for calibration storage, 1 self-defined and 8 pre-defined buffer groups, 3 endpoint modes & GLP mode.

A user-friendly bench meter with an innovative design, including an adjustable standalone electrode holder and large touch-screen, backlit LCD display.

Featuring a USB port, IP54 housing and in-use-cover, this flexible and smooth-operating bench meter is built to last.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST5000-B	-	-2.00 – 20.00 pH; -30 – 130°C; -2000.00 – +2000.00 mV	0.1 °C; 0.001 pH; 0.01 mV	30129895	1,712
ST5000-F	ST350 (Included)	-2.00 – 20.00 pH; -30 – 130°C; -2000.00 – +2000.00 mV	0.1 °C; 0.001 pH; 0.01 mV	30129896	1,811

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
Holder, Stand Alone, Electrode	30058733	121
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
Adapter Cable 9 Pin-9 Pin PC-SF40A	30059316	56
Printer, Impact, SF40A, AM	30064203	1,342
pH sensor protect bottle(10 in bag)	30064800	64
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30

Accessories	Item Number	List Price (USD)
pH Electrode, ST350, EN	30129354	236
pH Electrode, ST260, EN	30129357	221
pH Electrode, STSURF, EN	30129470	216
In-Use-Cover, ST5000	30129897	38
pH Electrode, ST270	30240974	391
Cable, 4m, BNC, STARTER electrodes	30282603	119
pH electrode ST272	30393265	229
pH Electrode ST410	30656037	237
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32

Oxygen Reduction Potential | pH Measure-ment | Temperature | Audible Alerts | Auto Standby | GLP Data Output | Multi-Language | Software Lockout | Time/Date | Touch Screen

STARTER™ 2200 PH BENCH METER

Affordable Benchtop pH Meter for Basic Laboratory Applications

Display
3.5 inch segment LCD with backlight

Construction
ABS housing, mechanical keys, built-in electrode holder

Design Features
Auto buffer recognition, two point calibration, electrode condition icon

Operation
AC adapter (included)

ST2200 is a user-friendly bench meter that clearly displays critical information - with five distinctly marked keys which allow users to operate the instrument with minimal training.

Auto buffer recognition and auto-endpoint mode make calibration and measurement simple and ideal for routine pH measurement.

The built-in electrode holder provides straightforward and convenient all-in-one operation, while the attached quick guide clearly explains the operating steps.

Model	Electrode	Measurement Range	Measurement Resolution	Temperature compensation	Item Number	List Price (USD)
ST2200-B	ST320 (Included)	0 – 100°C; 0.00 – 14.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	Yes	30656033	393
ST2200-F	ST320 (Included)	0 – 100°C; 0.00 – 14.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	Yes	30655944	446

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
pH sensor protect bottle(10 in bag)	30064800	64
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
pH Electrode, ST350, EN	30129354	236
pH Electrode, ST260, EN	30129357	221

Accessories	Item Number	List Price (USD)
pH Electrode, STSURF, EN	30129470	216
pH Electrode, ST270	30240974	391
pH electrode ST272	30393265	229
pH Electrode ST410	30656037	237
Electrode holder AB23	30661424	122
Stirrer Compact AS20	30661425	227
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32

ORP Oxygen Reduction Potential
pH pH Measure-ment
Temperature

Specifications and Prices subject to change without notice.

STARTER 400 PH PORTABLE

Durable, Waterproof Battery-Operated pH Meters Ideal for Field Testing!

Display
Backlit Liquid Crystal Display (LCD)

Communication
Built-in micro-USB port

Construction
IP67 waterproof housing, IP67 probes, rubber cover

Design Features
Data storage of up to 1000 items

Operation
Rechargeable lithium battery

Built with IP67 waterproof housing as well as a rubber cover and IP67 probes, the ST400 is ideal for prolonged use in any field environment.

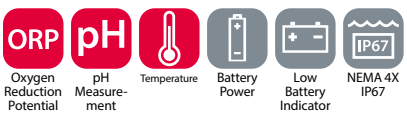
Rechargeable lithium battery provides 40 hours of uninterrupted use and more than 300 charge cycles - eliminating the need to change out batteries often.

The ST400 features intuitive software which guides the user through operation. All necessary information to run tests successfully such as electrode condition is displayed clearly on the large LCD.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST400-B	-	-5 °C – 110 °C; -2.00 – 16.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	30468964	628
ST400-F	ST320 IP67 3m (Included)	-5 °C – 110 °C; -2.00 – 16.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	30468965	731
ST400-G	ST320 IP67 3m (Included)	-5 °C – 110 °C; -2.00 – 16.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	30468966	767

Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	83
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
pH sensor protect bottle(10 in bag)	30064800	64
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
pH Electrode, ST350, EN	30129354	236

Accessories	Item Number	List Price (USD)
pH Electrode, ST260, EN	30129357	221
pH Electrode, STSURF, EN	30129470	216
pH Electrode, ST270	30240974	391
pH electrode ST272	30393265	229
pH Electrode ST320 IP67 3m	30468960	243
pH Electrode ST410	30656037	237
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32



STARTER 400M PH & CONDUCTIVITY PORTABLE

Durable, Waterproof Battery-Operated Multi-Parameter Meters Ideal for Field Testing!

Display
Backlit Liquid Crystal Display (LCD)

Communication
Built-in micro-USB port

Construction
IP67 waterproof housing, IP67 probes, rubber cover

Design Features
Data storage of up to 1000 items

Operation
Rechargeable lithium battery

Built with IP67 waterproof housing as well as a rubber cover and IP67 probes, the ST400 is ideal for prolonged use in any field environment.

Rechargeable lithium battery provides 40 hours of uninterrupted use and more than 300 charge cycles - eliminating the need to change out batteries often.

The ST400M features intuitive software which guides the user through operation. All necessary information to run tests successfully such as electrode condition is displayed clearly on the large LCD.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST400M-B	-	0-20 MΩ•cm; -5 °C – 110 °C; -2.00 – 16.00 pH; 00.0 µS/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); -1999 – 1999 mV; 0-99.9 psu	0.01 mg/L; 0.01 psu; 0.1 °C; 0.1 µs/cm; 0.01 pH; 0.01 Ω•cm; 1 mV	30468990	966
ST400M-F	ST320 IP67 3m (Included); STCON3 IP67 3m (Included)	0-20 MΩ•cm; -5 °C – 110 °C; -2.00 – 16.00 pH; 00.0 µS/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); -1999 – 1999 mV; 0-99.9 psu	0.01 mg/L; 0.01 psu; 0.1 °C; 0.1 µs/cm; 0.01 pH; 0.01 Ω•cm; 1 mV	30468991	1,204
ST400M-G	ST320 IP67 3m (Included); STCON3 IP67 3m (Included)	0-20 MΩ•cm; -5 °C – 110 °C; -2.00 – 16.00 pH; 00.0 µS/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); -1999 – 1999 mV; 0-99.9 psu	0.01 mg/L; 0.01 psu; 0.1 °C; 0.1 µs/cm; 0.01 pH; 0.01 Ω•cm; 1 mV	30468992	1,231

Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	83
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
pH sensor protect bottle(10 in bag)	30064800	64
Cond Electrode STCON7	30080693	732
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
Standard Conduct 84µS/cm 250ml	30100442	30

Accessories continued on next page

Accessories	Item Number	List Price (USD)
Standard Conduct 1413µS/cm 250ml	30100443	30
Standard Conduct 12.88mS/cm 250ml	30100444	30
pH Electrode, ST350, EN	30129354	236
pH Electrode, ST260, EN	30129357	221
pH Electrode, STSURF, EN	30129470	216
pH Electrode, ST270	30240974	391
pH electrode ST272	30393265	229
Cond standard 500µS/cm, 250ml	30393269	31
pH Electrode ST320 IP67 3m	30468960	243
Conductivity Electrode STCON3 IP67	30468962	529
pH Electrode ST410	30656037	237
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
Conductivity Electrode STCON5	30681116	231
Conductivity Electrode STCON8	30681117	315
Cond Electrode STCON8 w Flow chamber	30681235	506

Specifications and Prices subject to change without notice.

STARTER 400M PH & CONDUCTIVITY PORTABLE ACCESSORIES

Accessories	Item Number	List Price (USD)
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183

Accessories	Item Number	List Price (USD)
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32
Conductivity Electrode, STCON3	83033972	402

STARTER 400D DO PORTABLE

High-Performance, Low-Maintenance Dissolved Oxygen (DO) Meter with Optical Technology for Accurate Measurements

Display
Backlit Color Liquid Crystal Display (LCD)

Construction
ABS Housing

Design Features
99 measurement memory, last calibration data recall, auto barometric pressure measurement, auto temperature compensation with manual salinity compensation

Operation
4 AAA batteries (included)

Optical DO probe requires minimal maintenance and offers immediate measurement readings. No warm up or sample preparation needed.

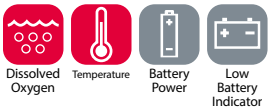
Large backlit LCD screen provides easy to read results - even in low light environments. Ideal for secure field use with a meter stand, wrist strap and durable IP54 housing.

The 99-measurement library stores data for future reference and allows for easy one-touch recall of the last calibration data.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST400D-B	-	0.00 – 20.0 mg/L(ppm); 0 – 50°C	0.01 mg/L; 0.1%; 0.1 °C	30378541	766
ST400D	STDO21 (Included)	0.00 – 20.0 mg/L(ppm); 0 – 50°C	0.01 mg/L; 0.1%; 0.1 °C	30378543	1,795
ST400D-G	STDO21 (Included)	0.00 – 20.0 mg/L(ppm); 0 – 50°C	0.01 mg/L; 0.1%; 0.1 °C	30378542	1,838

Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	83
Zero Oxygen Chemicals, STARTER	30059257	31
DO Probe Cap, STDO21	30253566	256

Accessories	Item Number	List Price (USD)
DO Electrode, STDO21, 1m Cable	30378544	1,478
DO Electrode, STDO21, 5m Cable	30378545	1,524
Temperature Electrode STTEMP30	83033970	109



Specifications and Prices subject to change without notice.

STARTER 300 PH PORTABLE

Convenient Portable pH Meter for Wherever Your Work Takes You

Display
Liquid crystal display (LCD)

Construction
ABS housing, wrist strap

Design Features
Automatic and manual temperature compensation, auto buffer recognition, calibration icon

Operation
4 AAA batteries (included)

Auto buffer recognition with four different buffer groups makes it easy to avoid errors during the calibration process.

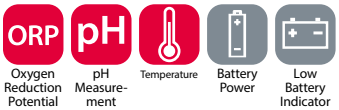
Easy-to-use and accurate with a simple calibration process, automatic temperature compensation and fast results. Ideal for secure field use with a meter stand, wrist strap and durable IP54 housing.

The 30-measurement library stores data for future reference and allows the user to easily recall the last calibration data with one quick touch.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST300-B	-	0 – 100°C; 0.00 – 14.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	83033962	415
ST300	ST322 (Included)	0 – 100°C; 0.00 – 14.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	83033961	555
ST300-G	ST322 (Included)	0 – 100°C; 0.00 – 14.00 pH; -1999 – 1999 mV	0.1 °C; 0.01 pH; 1 mV	30219114	581

Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	83
ORP electrode STORP2	30038553	332
ORP electrode STORP1	30038555	127
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
pH sensor protect bottle(10 in bag)	30064800	64
pH Electrode STMICRO5	30087566	337
pH Electrode STMICRO8	30087569	359
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
pH Electrode, ST350, EN	30129354	236

Accessories	Item Number	List Price (USD)
pH Electrode, ST260, EN	30129357	221
pH Electrode, STSURF, EN	30129470	216
pH Electrode, ST270	30240974	391
Cable, 4m, BNC, STARTER electrodes	30282603	119
pH electrode ST272	30393265	229
pH Electrode ST410	30656037	237
pH Electrode ST322	30681113	172
pH Electrode ST280	30681114	314
pH Electrode ST420	30681115	369
Seal kit, STARTER portables	83032962	65
pH Electrode ST310	83033965	191
pH Electrode ST320	83033967	191
pH Electrode ST230	83033968	166
pH Electrode STPURE	83033969	183
Temperature Electrode STTEMP30	83033970	109
Buffer Powder pH4.01,7.00,10.01	83033971	32



STARTER 300C CONDUCTIVITY PORTABLE

Convenient Portable Conductivity Meter for Wherever Your Work Takes You

Display
Liquid crystal display (LCD)

Construction
ABS housing, wrist strap

Design Features
Automatic temperature compensation, adjustable temperature coefficient

Operation
4 AAA batteries (included)

Four-pole linear electrode with temperature sensor safeguards the unit from polarization and pollution effects to ensure accurate readings.

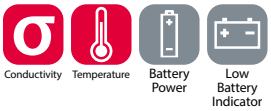
Easy-to-use and accurate with a simple calibration process, automatic temperature compensation and fast results.

The 30-measurement library stores data for future reference and allows the user to easily recall the last calibration data with one quick touch.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST300C-B	-	00.0 µS/cm – 199.9 mS/cm; 0 – 100°C; 0.1 mg/L – 199.9 g/L (TDS)	0.1 °C; 0.01 µS/cm; 0.1 mg/L	30092000	510
ST300C	STCON3 (Included)	00.0 µS/cm – 199.9 mS/cm; 0 – 100°C; 0.1 mg/L – 199.9 g/L (TDS)	0.1 °C; 0.01 µS/cm; 0.1 mg/L	83033964	640
ST300C-G	STCON3 (Included)	00.0 µS/cm – 199.9 mS/cm; 0 – 100°C; 0.1 mg/L – 199.9 g/L (TDS)	0.1 °C; 0.01 µS/cm; 0.1 mg/L	30219115	682

Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	83
Cond Electrode STCON7	30080693	732
Standard Conduct 84µS/cm 250ml	30100442	30
Standard Conduct 1413µS/cm 250ml	30100443	30
Standard Conduct 12.88mS/cm 250ml	30100444	30

Accessories	Item Number	List Price (USD)
Conductivity Electrode STCON5	30681116	231
Conductivity Electrode STCON8	30681117	315
Cond Electrode STCON8 w Flow chamber	30681235	506
Seal kit, STARTER portables	83032962	65
Conductivity Electrode, STCON3	83033972	402



Specifications and Prices subject to change without notice.

STARTER 300D DO PORTABLE

Convenient Portable Dissolved Oxygen (DO) Meter for Wherever Your Work Takes You

Display
Liquid crystal display (LCD)

Construction
ABS housing, wrist strap

Design Features
30 measurement memory

Operation
4 AAA batteries (included)

The galvanic electrode can be used immediately after being powered on without the typical wait time associated with dissolved oxygen meters.

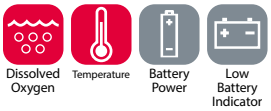
Easy-to-use and accurate with a simple calibration process, automatic temperature compensation and fast results.

The 30-measurement library stores data for future reference and allows the user to easily recall the last calibration data with one quick touch.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST300D-B	-	20.0 – 45.0 mg/L; 0.00 – 19.99; 200 – 400%; 0 – 50°C	0.1%; 1%; 1 mg/L; 0.1 °C; 0.1 ppm; 1 ppm; 0.1 mg/L	30031656	492
ST300D	STTEMP30 (Included); STDO11 (Included)	20.0 – 45.0 mg/L; 0.00 – 19.99; 200 – 400%; 0 – 50°C	0.1%; 1%; 1 mg/L; 0.1 °C; 0.1 ppm; 1 ppm; 0.1 mg/L	30031655	877
ST300D-G	STTEMP30 (Included); STDO11 (Included)	20.0 – 45.0 mg/L; 0.00 – 19.99; 200 – 400%; 0 – 50°C	0.1%; 1%; 1 mg/L; 0.1 °C; 0.1 ppm; 1 ppm; 0.1 mg/L	30219116	935

Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	83
DO Electrode, STDO11	30031639	485
Zero Oxygen Chemicals, STARTER	30059257	31

Accessories	Item Number	List Price (USD)
Seal kit, STARTER portables	83032962	65
Temperature Electrode STTEMP30	83033970	109



STARTER PEN METERS

Compact Design for Fast, Convenient Electrochemistry Measurement At Your Fingertips

Display
Liquid crystal display (LCD) display with secondary information line (on select models)

Construction
ABS Housing

Design Features
Easily replaceable electrodes, automatic shut off feature

Operation
4 1.5V batteries (included)

Small, economical pen meters offer simple, fast, and straightforward operation.

With durable IP67 waterproof ABS housing, protective sensor cap, and an automatic shutdown feature that preserves battery life, OHAUS pen meters can endure consistent use in rough, wet environments.

Equipped with a wrist strap to prevent accidental drop and damage.

Model	Meter Type	Measurement Range	Measurement Resolution	Temperature Display	Item Number	List Price (USD)
ST10	pH	0.00 – 14 pH	0.1 pH	Not Applicable	30073970	76
ST20	pH	0.0 – 99.0 °C; 0.00 – 14 pH	0.01 pH	Yes	30073971	130
ST20M-B	TDS; Conductivity; pH	0.0 – 1000 mg/L; 0.0 – 99.0 °C; 0.00 – 14 pH; 0 – 1999 µs/cm	1µs/cm; 0.01 pH	Yes	30393199	167
ST20M-C	Conductivity; pH; Salinity	0.0 – 10.0 ppt; 0.0 – 99.0 °C; 0.00 – 14 pH; 0.00 – 19.99 ms/cm	0.1 °C; 0.1 ppt; 0.01 pH; 0.01ms/cm	Yes	30393200	167
ST10C-A	Conductivity	0.00 – 199.9 µs/cm	0.1 µs/cm	Not Applicable	30073972	100
ST10C-B	Conductivity	0 – 1999 µs/cm	1µs/cm	Not Applicable	30073973	100
ST10C-C	Conductivity	0.00 – 19.99 ms/cm	10 µs/cm	Not Applicable	30073974	100
ST20C-A	Conductivity	0.00 – 199.9 µs/cm; 0.0 – 99.0 °C	0.1 µs/cm	Yes	30073975	147
ST20C-B	Conductivity	0.0 – 99.0 °C; 0 – 1999 µs/cm	1µs/cm	Yes	30073976	147
ST20C-C	Conductivity	0.0 – 99.0 °C; 0.00 – 19.99 ms/cm	10 µs/cm	Yes	30073977	147
ST10T-A	TDS	0.0 – 100.0 mg/L	0.1 mg/L	Not Applicable	30073978	113
ST10T-B	TDS	0.0 – 1000 mg/L	1 mg/L	Not Applicable	30073979	113
ST20T-A	TDS	0.0 – 100.0 mg/L; 0.0 – 99.0 °C	0.1 mg/L	Yes	30073980	147
ST20T-B	TDS	0.0 – 1000 mg/L; 0.0 – 99.0 °C	1 mg/L	Yes	30073981	147
ST10S	Salinity	0.0 – 10.0 ppt	0.1 ppt	Not Applicable	30073982	100
ST20S	Salinity	0.0 – 80.0 ppt; 0.0 – 99.0 °C	0.1 ppt	Yes	30073983	147
ST10R	ORP	-1000 – 1000 mV	1 mV	Not Applicable	30073984	164
ST20R	ORP	-1000 – 1000 mV; 0.0 – 99.0 °C	1 mV	Yes	30073985	219
ST20D	Dissolved Oxygen	0.0 – 19.9 mg/L	0.1 mg/L	Yes	30073986	509

Accessories on next page

Conductivity · Dissolved Oxygen · Oxygen Reduction Potential · pH Measurement · Salinity · Temperature · Auto Shut-Off · Battery Power · NEMA 4X IP67

Specifications and Prices subject to change without notice.

STARTER PEN METERS ACCESSORIES

Accessories	Item Number	List Price (USD)
pH electrode protection solution(3M KCl)	30059256	37
Pen Electrode, ST10	30087992	53
Pen Electrode, ST20	30087993	94
Pen Electrode, ST10C-A ST10T-A	30087994	77
Pen Electrode, ST10C-B ST10T-B	30087995	77
Pen Electrode, ST10C-C ST10S	30087996	77
Pen Electrode, ST20C-A ST20T-A	30087997	77
Pen Electrode, ST20C-B ST20T-B	30087998	77
Pen Electrode, ST20C-C ST20S	30087999	77
Pen Electrode, ST10R	30088020	113
Pen Electrode, ST20R	30088021	147

Accessories	Item Number	List Price (USD)
Buffer pH4.01 250ml	30100425	26
Buffer pH7.00 250ml	30100427	26
Buffer pH10.01 250ml	30100429	26
Standard Conduct 84µS/cm 250ml	30100442	30
Standard Conduct 1413µS/cm 250ml	30100443	30
Standard Conduct 12.88mS/cm 250ml	30100444	30
Pen Electrode, ST20D	30222083	315
Membrane Kit Replaceable, ST20D	30222084	143
Pen Electrode, ST20M-B	30393203	84
Pen Electrode, ST20M-C	30393204	84

STARTER ELECTRODES

OHAUS Precision Powers the Starter Electrodes

Construction

Metal, glass, or plastic shaft

Design Features

Suitable for Various Applications

All sturdy and durable electrodes are constructed of either plastic or glass shafts and built to withstand daily use.

Most electrodes include a temperature sensor, which powers automatic temperature compensation and ensures accurate measurements.

All electrodes fit perfectly in the electrode holders on OHAUS bench meters and electrode clips on all OHAUS portable meters.

Model	Electrode Type	Shaft Material	Item Number	List Price (USD)
ST210	pH	Plastic	83033966	89
ST230	pH	Glass	83033968	166
ST260	pH	Glass	30129357	221
ST270	pH	Glass	30240974	391
ST272	pH	Plastic	30393265	229
ST280	pH	Glass	30681114	314
ST310	pH	Plastic	83033965	191
ST320	pH	Plastic	83033967	191
ST320 IP67 3m	pH	Plastic	30468960	243
ST322	pH	Plastic	30681113	172
ST350	pH	Glass	30129354	236
ST410	pH	Glass	30656037	237
ST420	pH	Glass	30681115	369
STMICRO5	pH	Glass	30087566	337
STMICRO8	pH	Glass	30087569	359
STPURE	pH	Glass	83033969	183
STCON3	Conductivity	Plastic	83033972	402
STCON3 IP67 3m	Conductivity	Plastic	30468962	529
STCON5	Conductivity	Glass	30681116	231
STCON7	Conductivity	Plastic	30080693	732
STCON8	Conductivity	Glass	30681117	315
STCON8C	Conductivity	Glass	30681235	506
STDO11	DO	Plastic	30031639	485
STDO21-1	DO	Plastic	30378544	1,478
STDO21-5	DO	Plastic	30378545	1,524

Continued on next page

Conductivity | Dissolved Oxygen | Oxygen Reduction Potential | pH Measurement | Salinity | Temperature | Accumulation

STARTER ELECTRODES

Model	Electrode Type	Shaft Material	Item Number	List Price (USD)
STORP1	ORP	Plastic	30038555	127
STORP2	ORP	Glass	30038553	332
STSURF	pH	Plastic	30129470	216
STTEMP30	Temperature	Stainless Steel	83033970	109
STREF1	Reference	Glass	30059253	196

Accessories	Item Number	List Price (USD)
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	47
pH electrode protection solution(3M KCl)	30059256	37
Zero Oxygen Chemicals, STARTER	30059257	31
pH sensor protect bottle(10 in bag)	30064800	64
Buffer pH1.68 250ml	30100424	30
Buffer pH4.01 250ml	30100425	26
Buffer pH6.86 250ml	30100426	26
Buffer pH7.00 250ml	30100427	26
Buffer pH9.18 250ml	30100428	26

Accessories	Item Number	List Price (USD)
Buffer pH10.01 250ml	30100429	26
Buffer pH12.45 250ml	30100440	30
Standard Conduct 84µS/cm 250ml	30100442	30
Standard Conduct 1413µS/cm 250ml	30100443	30
Standard Conduct 12.88mS/cm 250ml	30100444	30
DO Probe Cap, STDO21	30253566	256
Cable, 4m, BNC, STARTER electrodes	30282603	119
Cond standard 500µS/cm, 250ml	30393269	31
Buffer Powder pH4.01,7.00,10.01	83033971	32

AQUASEARCHER™ AP50MM PHOTOMETER PORTABLE

Multi-function portable Photometer is designed intuitively to provide fast, reliable colorimetric and turbidity measurements.

Instrument only-B models

Display
Backlit Graphical LCD, 160 × 240 pixels

Construction
ABS housing

Design Features
Auto-off, light-touch keyboard and rugged single-handed design for field applications.

Operation
4 AA (LR6) Batteries (Included)

Field Kit
-F models

Fast and reliable tests—equipped with a real-time dynamic display for each measurement, to provide fast, reliable results. It can record up to 30,000 datapoints with time and date stamp.

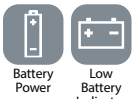
Intuitive operation—built-in calibration curves provide automatic selection of appropriate wavelengths from the long-lasting LED light source. Store commonly used tests for efficient field use.

User-Friendly—large, backlit display makes it easier to read real-time results. Comes with a hard-shell carrying case with all accessories needed to perform tests in the field (-F version).

Model	Measurement Range	Accuracy	Resolution	Item Number	List Price (USD)
a-AP50MM-F	0 – 200 NTU; 0 – 1.0 Abs	± 0.1 nm; ± 0.005 Abs @1.0 Abs Nominal	0.1	30853393	1,854
a-AP50MM-B	0 – 200 NTU; 0 – 1.0 Abs	± 0.1 nm; ± 0.005 Abs @1.0 Abs Nominal	0.1	30853394	1,648

Accessories	Item Number	List Price (USD)
COD Adapter a-AP50MM	30853488	187
Cleaning brush pk/5	30727772	12
Cloth pk/4	30727773	12
Cylinder 5mL pk/2	30727776	12

Accessories	Item Number	List Price (USD)
Briefcase AQUASEARCHER	30744416	206
24 mm replacement vials, 10mL, pk/6	30853486	113
24 mm replacement vials, 25mL, pk/6	30853487	144



Specifications and Prices subject to change without notice.

AQUASEARCHER™ AP30TUR TURBIDITY PORTABLE

Easy Turbidity Measurement for a Range of Applications from Drinking Water to Wastewater

Display
Graphic OLED

Construction
ABS housing

Design Features
5,000 measurement memory, IP65 Rating, Auto-off and light-touch keyboard

Operation
4 AAA batteries (included)

Meter only-B version

Field Kit
-F version

Combines the nephelometric method and transmitted method and compliant with ISO 7027 standard and EPA method 180.1.

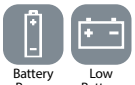
Equipped with dual optic paths and detectors with NIR light sources that eliminate color interferences and stray light to ensure great accuracy.

Water-resistant, has a long battery life and can store up to 5000 measurements. Users can easily transfer data to a PC with USB connection without requiring additional software.

Model	Measurement Range	Accuracy	Resolution	Item Number	List Price (USD)
AP30TURL–F	0 – 200 NTU	≤ ± 0.2, (0 – 5); ± 5%, (5 – 200)	0.01 (0 – 9.99); 0.1 (10 – 99.9); 1 (100 – 200)	30853395	1,164
AP30TURL–B	0 – 200 NTU	≤ ± 0.2, (0 – 5); ± 5%, (5 – 200)	0.01 (0 – 9.99); 0.1 (10 – 99.9); 1 (100 – 200)	30853397	927
AP30TURH–F	0 – 1000 NTU	≤ ± 0.3, (0 – 10); ± 8%, (10 – 1000	0.01 (0 – 9.99); 0.1 (10 – 99.9); 1 (100 – 1000)	30853396	1,102
AP30TURH–B	0 – 1000 NTU	≤ ± 0.3, (0 – 10); ± 8%, (10 – 1000	0.01 (0 – 9.99); 0.1 (10 – 99.9); 1 (100 – 1000)	30853478	886

Accessories	Item Number	List Price (USD)
24 mm replacement vials, 10mL, pk/6	30853486	113
24 mm replacement vials, 25mL, pk/6	30853487	144
Replacement vials 5 pack a-AP30 25mm	30727771	41
Cleaning brush pk/5	30727772	12

Accessories	Item Number	List Price (USD)
Cloth pk/4	30727773	12
Micro USB cable pk/2 a-AP30	30727775	18
Cylinder 5mL pk/2	30727776	12
Turbidity Standard	30853479	288



NOTES

Standard Terms and Conditions of Sale and Service

Payment terms are net 30 days from date of shipment or as per mutual agreement, EXW 2010 Incoterms or FCA Worthington, Ohio USA depending on destination. • A service charge of 1.5% will be applied on invoice amounts that are not paid within 30 days. • All orders are for immediate release. • No order cancellations within 48 hours of acknowledged ship date. • Prices, terms & specifications are subject to change without prior notice. • Drop shipments are not available outside of the United States.

Warranty Policy

OHAUS Corporation's products are warranted against defects in materials & workmanship from date of delivery through duration of the warranty period listed below. • During the warranty period, OHAUS Corporation (OHAUS) will at its sole discretion, decide whether to repair or replace any component(s) that proves to be defective at no charge, provided that the product is returned, freight prepaid, to an authorized service facility. • Products must be deemed to have a manufacturer defect by OHAUS Technical Support or an OHAUS authorized service facility in order for warranty repair or replacement to be authorized or approved. • If the defect is found within 30 days of delivery, the product will be considered an out of box failure and is subject to a return and replacement. Any time after 30 days from delivery and within the warranty period, the product will be referred to an OHAUS authorized service facility to be repaired at no cost if determined eligible based on terms of warranty • The warranty period for OHAUS products shall begin at the date of shipment to the end-user, or 3 months from the date of shipment to the dealer by OHAUS, whichever occurs first. • This warranty does not apply where the OHAUS products have been subject to: accident, alteration, misuse, abuse, damage by accident or otherwise, exposed to radioactive or corrosive materials, has foreign material penetrating the inside of the product, failure on the part of the dealer or end-user to ensure proper storage, operation and/or maintenance, installation or servicing or modification by other than OHAUS or authorized service facility, or the addition or supply or products or parts not approved for incorporation into OHAUS' products or software or interfacing. • This warranty only covers products shipped within the United States and Canada by OHAUS to the dealer, or to the end-user within the United States. • No other expressed or implied warranty is given by OHAUS. • IN NO EVENT WILL OHAUS BE LIABLE TO BUYER OR ANY OTHER PARTY FOR ANY TYPE OF SPECIAL, CONSEQUENTIAL, INDIRECT, INCIDENTAL, EXEMPLARY, OR PUNITIVE DAMAGES, REGARDLESS OF WHETHER THE CONTRACT WOULD FAIL OF ITS ESSENTIAL PURPOSE. Such damages include but are not limited to loss of profits or revenue, damage to reputation, loss of customers, or claims of Buyer's customers or contractors for such damages. In no event will OHAUS' aggregate liability for any and all types of damages or losses related to the equipment, software, or services sold, licensed, or delivered pursuant hereto exceed the cost of the item giving rise to the claim, whether based in contract, warranty, indemnity, or tort (including negligence). And any suit arising hereunder must be commenced within one year from the date on which the cause of action accrues.

6 Month Warranty		
AquaSearcher and Starter Series Electrodes		
1 Year Warranty		
Accessories	Frontier Mini Centrifuge	Courier Scales
CX and CR Scales	Defender® Scales and Bases	DFD Drum, DF Floor Scales & Bases
Indicators, all models	Spring Scales	
JE Emerald & JR Ruby Scales	MB23 & MB32	AquaSearcher and Starter Series Meters
Navigator® Scales	Primer® Balance	
PS Scales	Ranger® Scales	TAJ Scales
Valor® Scales	Weights and Weight Sets	Y Series Scales
2 Year Warranty		
Adventurer® Balances	Homogenizers	Pioneer® Balances
Dry Block Heaters	Incubating & Incubating Cooling Shakers	PR Series Balances
Explorer® Balances	Labjaws Clamps and Supports	Scout® STX , SPX & SJX Balances
Frontier Micro & Multi Centrifuges	MB62 & MB92 & MB120	Specialty Stirrers
Guardian™ Hotplates & Stirrers	Open Air Shakers	Vortex Mixers
Heavy Duty Incubating/Cooling Shakers	Achiever™ Overhead Stirrers	

3 Year Warranty
Harvard Junior® Balances
TJ611 Balance
5 Year Warranty
All Other Mechanical Balances
10 Year Warranty
Triple Beam Pro® Balances

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Return Policy

OHAUS Customer Service must be contacted for a Return Authorization Number (RAN) within 30 days of shipment to the dealer from OHAUS to be eligible for return credit. • OHAUS products returned for convenience or goodwill (not for product or part failure or warranty issues) will be subject to a 20% restocking fee, minimum $100. • OHAUS products may only be returned if they are in new and unused condition, packed in original packaging and container, and include all manuals, peripherals and accessories. Used products will not be accepted and not eligible for credit. • OHAUS products will be inspected once they are returned and a credit will not be issued if the product does not have a RAN, completed decontamination form, original packaging and original parts, or is used or damaged. • Returns must be sent to and received by our Ohio facility (AM Hub, 1150 Dearborn Drive, Worthington OH 43085) as specified in the Return Order Confirmation, or as specified otherwise by OHAUS, to be eligible for return credit. • Authorized returns not received by OHAUS within 90 days will be cancelled.

OHAUS MINIMUM ADVERTISED PRICE (MAP) POLICY

Section 1. Purpose and Applicability:

a) OHAUS Corporation ("OHAUS") has adopted this Minimum Advertised Price (MAP) policy to protect the reputation of its brand name, better serve our customers, and to properly position the OHAUS brand in the marketplace. OHAUS products which are subject to this MAP policy are defined in the Appendix.

b) This Policy has been unilaterally adopted and will be enforced strictly and uniformly.

c) The minimum advertised prices (MAPs) effective December 1, 2021are set forth in the schedule below, exclusive of all state and local taxes.

Section 2. Geographic Scope and Modification:

a) OHAUS has unilaterally established this Minimum Advertised Price ("MAP") Policy and it is applicable to its United States and Canadian based resellers. It may be modified at any time by OHAUS, and the minimum advertised price may be affected by promotional periods designated by OHAUS.

b) No dealer's consent or agreement to this Policy is sought and no such consent or agreement will be accepted by OHAUS. OHAUS is providing this Policy to dealers strictly as notice.

Section 3. Minimum Advertised Pricing Rules and Violations:

a) Resellers shall not post OHAUS products for sale in any online or other marketplace if such a posting will result in the advertisement, by the Reseller or by the marketplace, of prices below the MAPs set by OHAUS.

b) Resellers are free to establish their own resale prices; however, they should not advertise OHAUS products below the minimum advertised prices (MAP) set by OHAUS.

c) Advertising includes any form of providing information about pricing that is not associated with the act of purchasing or negotiating the purchase of a product. Examples of advertising include, but are not limited to, signage, catalogs, displays, mailings, flyers, internet advertisements, internet price lists, and internet "click here" links or pop-ups and similar web-based techniques. For purposes of this policy, advertising does not include responses to email inquiries, verbal communications, or prices displayed in internet "shopping carts" or "baskets."

d) It is a violation of this MAP policy for any reseller to state or suggest in advertising or on a web site that a price lower than the MAP for an OHAUS product may be available during an online checkout or purchase process, including but not limited to the following: "click here for lower price," "add to cart for discounted price," "price too low to advertise", or a line through the price which indicates a lower price is available. If the customer moves a product to the online shopping cart and establishes the intent to purchase, then those further negotiations are outside this MAP Policy.

e) It is not a violation of this MAP Policy to advertise that a customer may "call for price" or "email for price," "Request a Quote", specifically with respect to MAP Products, so long as no price is listed below MAP level.

f) OHAUS will monitor the resale market to ensure dealers are in compliance with the MAPs set by OHAUS.

g) This Policy does not apply to refurbished or discontinued OHAUS products.

Section 4. Penalties and Administration:

a) Upon verification that a dealer has advertised any of OHAUS Corporation's products at a price less than the minimum advertised price established and announced by OHAUS Corporation, OHAUS will, without assuming any liability, take unilateral action including but not limited to: (1) sending warning letters to notify dealers of violations; (2) revoking buying privileges for products in violation of this policy for 30 days, 90 days and up to one year based on number of warnings (3) and indefinitely refusing to accept any new orders from any reseller. OHAUS may take any of these actions in any order.

b) If a reseller with multiple websites or store locations violates this MAP Policy at any one website or store location, OHAUS will consider this to be a violation by the reseller.

c) OHAUS has established an internal MAP manager. All communication regarding MAP Policy should be directed to ohausbrandprotection@ohaus.com and not to any other representative of OHAUS. The Manager is responsible for monitoring pricing and for MAP enforcement. OHAUS will not respond to any communication reporting a violation of this policy.

d) In addition to other methods, OHAUS may use a third party to monitor pricing on the internet. Any third party who monitors OHAUS pricing has no authority to make any decisions about enforcement or application of this Policy or any other OHAUS business

Appendix

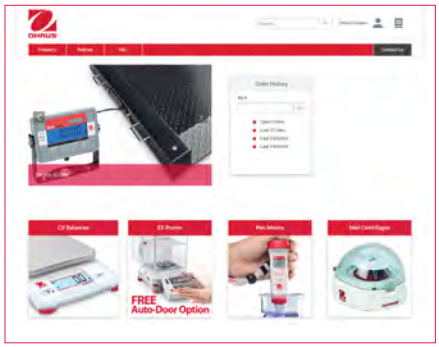
- **The minimum advertised prices (MAPs)** effective December 1, 2021 are set forth below, exclusive of all state and local taxes.

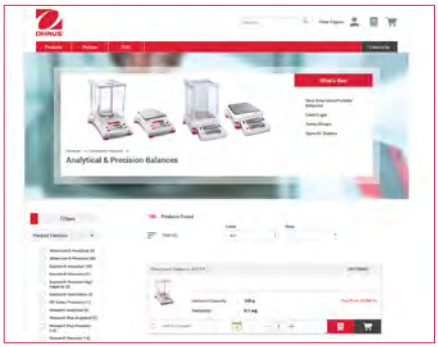
Product Series	MAP Price % off List Price
Valor® 7000	15%
Ranger® 7000	20%
Defender® 6000	10%
Defender® 5000 (D52 Models)	10%
Drum Scales (DFD models)	30%
Explorer®	15%
Adventurer®	15%
Pioneer™	15%
PR Series	15%
Moisture Analyzers (MB Series)	15%
Scout® (SKX Series Only)	30%

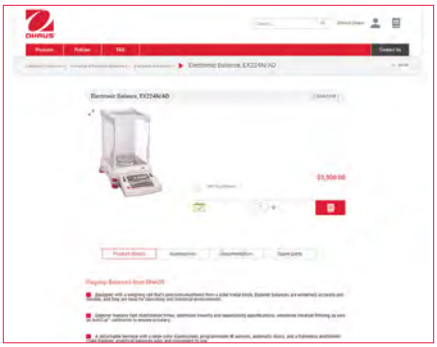
Download the complete MAP Product Listing

www.OHAUS.com/MAP-Policy

DEALER RESOURCES







OHAUS Partner Shop

The OHAUS Partner Shop is purposefully aimed at delivering a better shopping experience. We've added some great new features, making it easier to use and quicker to navigate. With advanced search capabilities, a convenient comparison function, and an order template designed to help you anticipate and quickly execute all of your ordering needs, the OHAUS Partner Shop was designed with you and your customers in mind.

Why Use OHAUS Partner Shop?

- Online Ordering
- View Product Availability and Pricing
- View Order Status
- Track Shipments
- View Invoices

Contact your OHAUS representative today to experience our Partner Shop!

Contact Us

Ordering

We welcome your orders however you choose to place them!

- Email your order to sales@ohaus.com or
- Order online through the OHAUS Partner Shop

Dealer Support

We are here to support your sales! Our Customer Service Team is happy to help with any of your questions.

- Email your inquiries to cs@ohaus.com or
- Call us at 1-800-672-7722 and press 1 to reach a Customer Service Representative

Technical Support

Need troubleshooting or have questions on how to operate your OHAUS equipment?

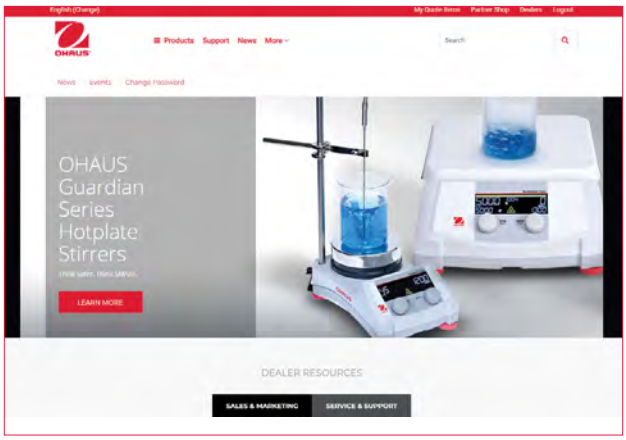
Contact one of our Technical Support Specialists to assist you with your technical needs.

- Visit www.ohaus.com/Support/Frequently-Asked-Questions/Technical-FAQ for frequently asked questions, or
- Visit www.ohaus.com/Support/Contact-Us/Technical-Inquiry to submit your question, or
- Email your question to TechSupport@OHAUS.com, or
- Call us at 1-800-672-7722 and press 3 to reach a Technical Support Agent

DEALER SUPPORT

Dealer Zone

OHAUS.com's Dealer Zone is your one-stop resource center for marketing, sales, and service support designed to help you grow your business. Featuring a comprehensive collection of e-launch kits, product information and photos, service and support assistance, promotions, events, and much more, the OHAUS Dealer Zone is a fully-loaded, constantly updated website that allows access to every kind of marketing support. From customizable marketing email templates to product pricing and specifications, the OHAUS Dealer Zone takes the guesswork out of your sales and marketing experience, and gives you the tools you need to keep your own OHAUS materials as up-to-date and effective as possible.



Why Use OHAUS Dealer Zone?

Update your website and catalog with simple access to

- Product photos in a variety of formats (jpg, tif, 360° spins)
- Web banners for products and promotions
- Product videos for both overview tutorials as well as popular applications
- The OHAUS Magic Spreadsheet for in-depth product specifications

Downloadable content for marketing assistance, such as

- Promotional flyers
- Customizable email templates to send your customers
- Product-related infographics for a wide range of industries and applications
- Up-to-date OHAUS catalogs and brochures

One-click access to essential documents, including

- Service and instruction manuals
- Up-to-date documents and software for OHAUS products
- Service and support FAQ
- Comprehensive adapter lists and cable guides for OHAUS products

OHAUS Service Training Seminars

OHAUS offers service training to our authorized servicing dealers that covers a mix of troubleshooting, load cell repair/replacement, solutions to common service issues, customized topics and access to available service resources. The emphasis is placed on the practical side of equipment repair. As our weighing and non-weighing portfolio continues to expand, this is also a refresher for those who have attended past sessions or latest training for any new service personnel.

Please contact us at TechService@ohaus.com to find out more about these service training opportunities.

OHAUS Webinar Series

The OHAUS Webinar Series features a variety of brief webinars designed to cover a broad range of products and topics. Courses are added continuously, and offer real-time expertise with OHAUS professionals across a variety of features, industries, and applications.

If you are interested in finding out more about our Webinar Series, please contact your regional OHAUS representative.

Applications

Weighing

Check-weighing

Conduct-ivity

Density Determin-ation

Differential Weighing

Display Hold

Dissolved Oxygen

Dynamic Weighing

Filling

Formula-tion

Resistivity

Gross/ Net/Tare

Ingredient Costing

Moisture Analysis

Oxygen Reduction Potential

pH Measure-ment

Parts Counting

Total/ Accumulation

Specific Gravity

SQC

Statistics

Percent Weighing

Temper-ature

Truck Weighing

Peak Hold

Percent Moisture Regain

Percent Moisture

Percent Solid

Pipette Calibration

Salinity

Total Dissolved Solids

Batch Printing

Features

Audible Alerts

Auto Shut-Off

Auto Standby

Backlight

Battery Power

Environ-mental Filters

External Analog Base Input

GLP Data Output

GMP/GLP

Hinged Cover

Security Bracket

Software Lockout

Stability Indicator

Stackable

Time/Date

Touch Screen

Touchless Sensors

Weigh Below Hook

NEMA 4X IP65

NEMA 4X IP66

NEMA 4X IP67

Shipping Lock

Overload Protection

Internal Calibration

IPX8

LED Check-weighing Indicator

Level Indicator

Leveling Feet

Low Battery Indicator

Multi-Language

Overload/ Underload Indicators

Recharge-able Battery

Approvals

Measurement Canada Approved

NSF Listed

NTEP Certified

USDA-AMS Accepted

TUV Certified

CE Certified

Laboratory Weighing

Laboratory Equipment

Laboratory Instruments

Industrial Weighing

Portable Balances

Calibration Weights

From sophisticated, semi-micro balances all the way to large capacity industrial floor scales, the OHAUS portfolio has weighing solutions to fit every workplace, as well as a wide variety of essential laboratory equipment including centrifuges, clamps and supports, and more, as well as OIML and ASTM certified weights and weight sets. Whether your applications include sample preparation, advanced formulation, or bulk packaging and checkweighing, OHAUS does it all!

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www.ohaus.com

ISO 9001:2015
Registered Quality
Management System

ISO 9001:2015
BUREAU VERITAS
Certification

Certificate No: US015459

Ingeniously Practical

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