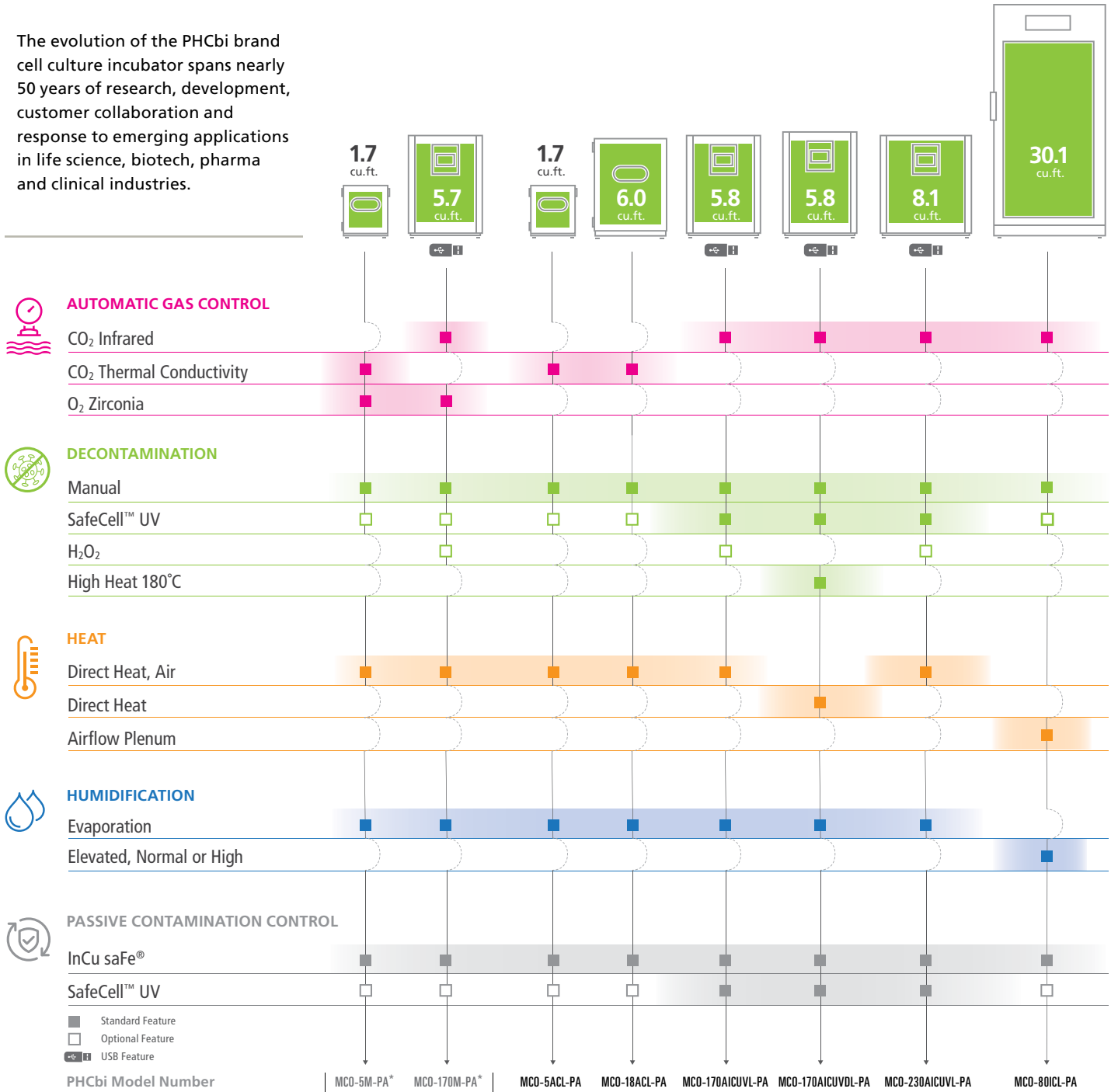


Choosing Your Cell Culture Incubator

The evolution of the PHCbi brand cell culture incubator spans nearly 50 years of research, development, customer collaboration and response to emerging applications in life science, biotech, pharma and clinical industries.



*FDA registered as a Class 2 Assisted Reproduction Device.
 FDA Product Code MQG, approved for in vitro fertilization applications, Registration Number 9616263.

Dimensions		MCO-5M-PA	MCO-170M-PA	MCO-230AICU/L-PA	MCO-80ICL-PA
External Dimensions (W x D x H) ¹⁾	inches mm	18.9 x 21.6 x 22.6 480 x 548 x 575	24.4 x 28.7 x 35.6 620 x 730 x 905	30.3 x 28.7 x 35.6 770 x 730 x 905	38.6 x 37.2 x 80.3 986 x 945 x 2040 ²⁾
Internal Dimensions (W x D x H)	inches mm	13.8 x 14.9 x 14.8 350 x 378 x 375	19.3 x 20.6 x 26.2 490 x 523 x 665	25.3 x 20.6 x 27.6 643 x 523 x 700	31.7 x 27.3 x 60.0 806 x 693 x 1524
Volume	cu.ft. liters	1.7 49	5.7 161	8.1 230	30.1 851
Net Weight	lbs kg	110 50	170 77	198 90	606 275
Performance					
Warranty ³⁾		3 years parts and labor	3 years parts and labor	3 years parts and labor, 5 years CO ₂ sensor	3 years parts and labor
Temperature Control Range and Fluctuation ⁴⁾	°C	+5 above ambient to +50, ± 0.1	+5 above ambient to +50, ± 0.1	+5 above ambient to +50, ± 0.1	+5 above ambient to +50, ± 0.1
Temperature Uniformity ⁴⁾	°C	± 0.25	± 0.25	± 0.25	± 0.5 (9 point measurement)
CO ₂ Control Range and Fluctuation ⁴⁾	%	0 to 20, ± 0.15	0 to 20, ± 0.15	0 to 20, ± 0.15	0 to 20, ± 0.15
O ₂ Control Range and Fluctuation ⁴⁾	%	1 to 18 and 22 to 80, ± 0.2	1 to 18 and 22 to 80, ± 0.2	—	—
Humidity Level & Fluctuation	% RH	95 at 37°C, ± 5	95 at 37°C ± 5	95 at 37°C ± 5	Normal mode: over 80 (high mode: over 90)
Control					
Controller with Thermistor Sensor		Microprocessor – softkey 7 button menu	Microprocessor	Microprocessor	Microprocessor
Display	qty	3; LED (temperature, CO ₂ and O ₂) readable to 0.1 increments	Color LCD touchscreen readable to 0.1 increments	Color LCD touchscreen readable to 0.1 increments	2; LED (1 for temperature and 1 for CO ₂) readable to 0.1 increments
Sensor	CO ₂ O ₂	Thermal conductivity (TC) Stabilized zirconia	Dual filter IR Stabilized zirconia	Dual filter IR —	IR —
Construction					
Exterior Material		Painted steel (rear cover coated steel)	Painted steel (rear cover coated steel)	Painted steel (rear cover coated steel)	Painted steel
Interior Material		Stainless steel copper enriched alloy	Stainless steel copper enriched alloy	Stainless steel copper enriched alloy	Stainless steel copper enriched alloy
Outer Door	qty	1	1	1	1; Dual pane heated glass with latch (provision for padlock)
Field Reversible Door		Included	Included	Included	—
Inner Door	qty	1 (sealing tempered glass with positive latch)	1 (stainless steel frame sealing with positive latch + 4 tempered glass sealing with positive latches)	1 (sealing tempered glass with positive latch)	Optional
Humidity Pan	qty	1 (stainless steel)	1 (stainless steel)	1 (stainless steel)	—
Humidity Reservoir Drain	qty	—	—	—	Drain valve – lower side front (tray provided)
Humidity Reservoir Material		—	—	—	Stainless steel
Shelves	qty	3 (stainless steel copper enriched alloy)	3 (stainless steel copper enriched alloy)	4 (stainless steel copper enriched alloy)	5 (stainless steel copper enriched alloy)
Shelf Dimension (W x D x H)	inches mm	12.2 x 12.2 x 0.5 310 x 310 x 12	18.5 x 17.7 x 0.5 470 x 450 x 12	24.4 x 17.7 x 0.5 620 x 450 x 12	30.6 x 25.9 x 0.4 776 x 659 x 10
Max. Load per Shelf	lbs kg	8.8 4	15.4 7	15.4 7	66.1 30
Max. Total Load	lbs kg	26.5 12	45.0 21	61.6 28	330.0 150
Max. Shelf Capacity	qty	6	10	10	18
Access Port / Position	qty	1; rear upper left	1; rear upper left	1; rear upper left	2; right side and left side
Access Port Diameter	inches mm	1.2 30 (with silicone (non-VOC) stopper)	1.2 30 (with silicone (non-VOC) stopper)	1.2 30 (with silicone (non-VOC) stopper)	1.6 40 (with silicone (non-VOC) stopper)
Leveling Feet and Casters	qty	4 leveling feet	4 leveling feet	4 leveling feet	4 leveling feet, 4 casters (swivel)
Decontamination Control					
InCu-saFe Chamber, Air Plenum and Shelves	passive	Included (stainless steel copper enriched alloy)	Included (stainless steel copper enriched alloy)	Included (stainless steel copper enriched alloy)	Included (stainless steel copper enriched alloy)
SafeCell UV Light System	passive/active	Optional	Optional	Included	Optional
Hydrogen Peroxide (H ₂ O ₂) Vapor	active	—	Optional	Optional	—
Alarms (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)					
Power Failure		R	R	R	R
Temperature or Gas Deviation	high	V-B-R	V-B-R	V-B-R	V-B-R
Supply Empty		V-B-R	V-B-R	V-B-R	V-B-R
Door Open		V-B	V-B	V-B	V-B
Low Water in Humidity Reservoir		—	—	—	V
Electrical and Noise Level					
Power Supply		115V, 10, 60Hz, NEMA 5-15P requires NEMA 5-15R receptacle	115V, 10, 60Hz, NEMA 5-15P requires NEMA 5-15R receptacle	115V, 10, 60Hz, NEMA 5-15P requires NEMA 5-15R receptacle	115V, 10, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle
Noise Level ⁵⁾	dB(A)	24	29	25	33
Outlet, Chamber Duplex – Vapor Proof Cover		—	—	—	1; 115V 3 amps max rating
Outlet, Cabinet Outlet		—	—	—	1; 115V 1 amps max rating
Options					
SafeCell UV Light System		MCO-190UVS-PA	MCO-170UVS-PA	MCO-170UVS-PA (included)	MCO-80UVS-PA
Humidity Reservoir–Auto Fill System		—	—	—	MCO-80AS-PW
Hydrogen Peroxide (H ₂ O ₂) Vapor Board		—	MCO-170HB-PA ⁶⁾	MCO-170HB-PA ⁶⁾	—
Outer Door–Password Access Electronic Lock		—	MCO-170EL-PW ⁶⁾	MCO-170EL-PW ⁶⁾	—
H ₂ O ₂ Vapor Generator		—	MCO-HP-PW ⁶⁾	MCO-HP-PW ⁶⁾	—
H ₂ O ₂ Reagent	package of 6	—	MCO-H2O2-PV	MCO-H2O2-PV	—
CO ₂ Gas Pressure Regulator	psi	0 – 15; MCO-100L	0 – 15; MCO-100L	0 – 15; MCO-100L	0 – 15; MCO-100L
Automatic CO ₂ Cylinder Changeover System		MCO-5GC-PW	MCO-21GC-PW	MCO-21GC-PW	MCO-80GC-PW
4-20mA Analog Output		MCO-420MA-PW	MCO-420MA-PW	MCO-420MA-PW	MCO-420MA-PW
InCu-saFe Shelf		MCO-30ST-PW	MCO-170ST-PW	MCO-230ST-PW	MCO-80ST-PW
InCu-saFe Shelf–Reinforced		—	MCO-170RT-PW	MCO-230RT-PW	MCO-80AICRSLF (Max 3 Shelves)
Double Stacking Bracket ⁶⁾		Included	MCO-170SB-PW	MCO-230SB-PW	—
Roller Base		MCO-5RB-PW	MCO-170RB-PW	MCO-230RB-PW	—
Inner Door Kit		—	Included	MCO-230ID-PW	MCO-80ID-PW
Cell Roller Mounting Ramp Kit		—	—	—	MCO-80RBS-PW

¹⁾ Exterior dimensions of main cabinet only, excluding handle and other external projections

²⁾ Exterior dimensions of cabinet excluding handle, rear stand-off brackets and other external projections. Consult sales rep for doorway entry instructions, less than 37.2".

³⁾ Current warranty offered at time of printing and may be subject to change; US and Canada only

⁴⁾ Ambient temperature 23°C, setting 37°C, CO₂ 5%, no load, air temperature measured at incubator center

⁵⁾ Nominal value – Background noise 20dB(A)

⁶⁾ MCO-170M and MCO-230AIC series requires MCO-170HB-PA, MCO-170EL-PW, MCO-170UVS-PW and MCO-HP-PW for H₂O₂ Decontamination

Note: Additional options available.

Specifications are subject to change without notice.

For latest specification information contact PHC Corporation of North America at info@us.phcd.com. Performance data herein is based on independent testing at time of publication.

