

# Incubated Shaker Stackable type

## Double stackable for space efficiency

### Structural Functional Features

- Best space-efficient model with double stacking.
- Up to 80°C, 500rpm enables setting of various experimental conditions.
- Three operating modes: Temperature & Shaking, Temperature, or Shaking.
- Includes internal power outlet.
- Shaking structure with minimized vibration.

### Use Convenience Features

- Accurate rpm and temperature control through temperature auto-tuning / microprocessor PID and calibration.
- Monitor via mobile app anytime, anywhere with LC Connected. (mobile monitoring system) (when purchased LC GreenBox)
- Countdown timer (999 hours 59 minutes) of shaking operation.
- Intuitive operation with color touch display.
- High brightness / low-power LED illumination makes it easy to observe inside.
- Spill drain port for internal cleanliness and easy maintenance.

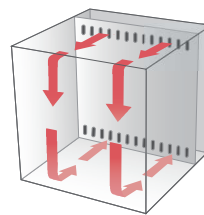
### Outstanding Safety

- Electronic over temperature protection system. (advanced over temperature (A-OT) limiter)  
Independent precision temperature sensor and controller provides more secure and reliable over temperature protection.
- Conventional over-temperature protection system. (B-OT, backup over temperature limiter)  
A backup device against electronic system failure, mechanically preventing over temperature even when there are electronic errors.
- Soft start and stop shaking function.
- Malfunction prevented by controller lock function.
- Displays all information such as device operation and error occurrence.
- Overcurrent protection device restricts operation when objects are caught inside the system and shaking is not possible.



#### ISS-3075R

with Shelf 2ea (standard)  
Universal Platform, Flask Clamp (option)  
Magnetic Stirrer (MS-17G)



Use the stacking kit  
for double stacked (option)



Color touch display



## Smart Self-diagnosis

Real-time self-diagnostics to check equipment for abnormal conditions.

- Alarm is generated by monitoring difference between actual rpm/temperature and set rpm/temperature.
- Automatic rpm adjustment when device instability occurs. (high rpm, overload, weight imbalance, etc.)
- Detects abnormal conditions relating to the platform on which the sample is placed and stops the operation.
- Automatic restart as it was operated after power recovery.



## Specification

Model	ISS-3075	ISS-3075R	ISS-4075	ISS-4075R
<b>Temperature</b>				
Range (°C / °F) <sup>1)</sup>	Amb. +5 to 80 / Amb. +9 to 176	Amb. -20 (Min. 4) to 80 / Amb. -36 (Min. 7.2) to 176	Amb. +5 to 80 / Amb. +9 to 176	Amb. -20 (Min. 4) to 80 / Amb. -36 (Min. 7.2) to 176
Fluctuation at 37°C in flask (±°C / °F)	0.1 / 0.18	0.1 / 0.18	0.1 / 0.18	0.1 / 0.18
Variation at 37°C in flask (±°C / °F)	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9
Refrigerator (Hp)	-	1/6	-	1/6
<b>Shaking system</b>				
Motion type	Orbital	Orbital	Orbital	Orbital
Speed range (rpm)	20 to 500 (stackable : 20 to 250)	20 to 500 (stackable : 20 to 250)	20 to 500 (stackable : 20 to 250)	20 to 500 (stackable : 20 to 250)
Max. speed per permissible load (rpm)	500 (max. 10 kg / 22.0 lbs) 400 (max. 15 kg / 33.1 lbs) 250 (max. 15 kg / 33.1 lbs) - Stacked	500 (max. 10 kg / 22.0 lbs) 400 (max. 15 kg / 33.1 lbs) 250 (max. 15 kg / 33.1 lbs) - Stacked	500 (max. 10 kg / 22.0 lbs) 400 (max. 21 kg / 46.3 lbs) 250 (max. 21 kg / 46.3 lbs) - Stacked	500 (max. 10 kg / 22.0 lbs) 400 (max. 21 kg / 46.3 lbs) 250 (max. 21 kg / 46.3 lbs) - Stacked
Amplitude size (mm / inch, dia.)	19.1 / 0.75	19.1 / 0.75	19.1 / 0.75	19.1 / 0.75
Speed stability <sup>2)</sup> (rpm, %)	±1	±1	±1	±1
Timer (count-down)	999hr 59min	999hr 59min	999hr 59min	999hr 59min
<b>Dimension</b>				
Chamber volume (L / cu ft)	80 / 2.8	80 / 2.8	150 / 5.3	150 / 5.3
Platform (W x D, mm / inch)	350 x 350 / 13.8 x 13.8	350 x 350 / 13.8 x 13.8	450 x 450 / 17.7 x 17.7	450 x 450 / 17.7 x 17.7
Interior (W x D x H, mm / inch)	440 x 440 x 418 / 17.3 x 17.3 x 16.5	440 x 440 x 418 / 17.3 x 17.3 x 16.5	540 x 540 x 518 / 21.3 x 21.3 x 20.4	540 x 540 x 518 / 21.3 x 21.3 x 20.4
Exterior (W x D x H, mm / inch)	578 x 815 x 854 / 22.8 x 32.1 x 33.6	578 x 815 x 854 / 22.8 x 32.1 x 33.6	678 x 895 x 934 / 26.7 x 35.2 x 36.8	678 x 895 x 934 / 26.7 x 35.2 x 36.8
Quantity of shelves (standard / max.)	2 / 8	2 / 8	2 / 11	2 / 11
Net weight (kg / lbs)	153 / 337.3	160 / 352.7	183 / 403.4	190 / 418.9
<b>Electrical requirements (230V, 50/60Hz, A)</b>	6.2	7.9	6.2	7.9
<b>Cat. No.</b>	<b>AAH23432K</b>	<b>AAH23532K</b>	<b>AAH23632K</b>	<b>AAH23732K</b>
<b>Electrical requirements (120V, 60Hz, A)</b>	9.5	13	9.5	13
<b>Cat. No.</b>	<b>AAH23415U</b>	<b>AAH23515U</b>	<b>AAH23615U</b>	<b>AAH23715U</b>

- The temperature control range of the ISS-3075 and ISS-4075 models are from 5°C above the ambient temperature (15°C to 40°C) to 80°C. The temperature control range of the ISS-3075R and ISS-4075R models is from 20°C lower than the ambient temperature. (18°C to 35°C) of the device to 80°C. (However, the lowest control temperature is 4°C)
- Actual rpm allowable error for set rpm is ±1rpm if setting is less than 100rpm, ±1% if setting is higher than 100rpm.

## Accessories Page 106

Universal Platform, Flask Clamp, Funnel Clamp, Test Tube Rack, Microplate Holder, Lab Sticker, Spring Wire Rack, Dedicated Platform, Rubber Mat, Universal Attachment, Rectangular Foot Caster, Stacking Kit, Wire Shelves, LC GreenBox, Starter Kit

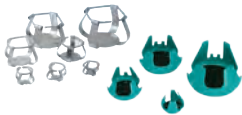
# Accessories

## Universal Platform



**Universal Platform**  
Basic accessories required to use Erlenmeyer flasks, test tubes, separated funnels, etc.

## Accessories for Universal Platform



**Flask Clamp (SS / Plastic)**  
Erlenmeyer flask mounting (50ml – 6L)  
High-strength spring maintains excellent clamping.



**Starter Kit**  
Consisting of plastic clamps that are commonly used on Universal Platforms. 50ml, 100ml, 250ml, 500ml, 1L, 2L.



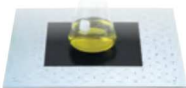
**Funnel Clamp**  
Separated funnel mounting (250 ml - 2L)  
Easy detachment/attachment and stable clamping.



**Test Tube Rack**  
Test tube mounting (Φ8 mm - Φ35 mm)  
Easily adjustable angle.



**Microplate Holder**  
Various options for Microplate Single, Tower, Flat A (Large), Flat B (Small)



**Lab Sticker**  
Excellent adhesion as size is 200x200mm, allowing for application to petri dishes, culture bottles, etc.  
Temp. Range (°C): 15 to 60 Max. Speed (rpm): 250

## LC GreenBox



**LC GreenBox**  
Monitor the operation status of the device in real time via the mobile app with a simple internet connection.

## Set Accessories



**Spring Wire Rack**  
Fixed with 2-stage grid springs to accommodate various sample container shapes.



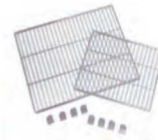
**Dedicated Platform**  
Accessories (250 ml, 500 ml) installed on platform with maximum quantity of flask clamps.



**Rubber Mat**  
Convenient for use with culture bottles and petri dishes with rubber mat to prevent slipping on the bottom.



**Universal Attachment**  
Rubber mat on the bottom and adjustable clamping rod make it a convenient structure for a wide range of applications.



**Wire Shelf**  
Shelf and its bracket enabling sample loading.  
(applied to ISS-3075(R)/4075(R) series)



**Retractable Foot Caster**  
Device that makes it easy to move/fix.  
(applied to ISS-3075(R)/4075(R) series)



**Stand 1 & 2**  
When using 1 unit of the ISS-7000 model or when using more than 2 units stackable, different height of stands provide convenient access to a platform.



**Stacking Kit**  
Fixing tool for stacked units.  
Applied to ISS series models.

Description	IST-3075 Series	IST-4075 Series	ISS-3075 Series	ISS-4075 Series	ISF-7000 Series	ISS-7000 Series
Dedicated Platform (250 ml)	AAA23611-V1	AAA23623-V1	AAA23611-V1	AAA23621-V1	AAA23634	AAA23637
Dedicated Platform (500 ml)	AAA23612-V1	AAA23622-V1	AAA23612-V1	AAA23622-V1	AAA23635	AAA23636
Rubber Mat	AAA23531	AAA23532	AAA23531-V1	AAA23532-V1	AAA23534	AAA23537
Universal Attachment	AAA23511-V1	AAA23512-V1	AAA23511-V1	AAA23512-V1	AAA23505	AAA23517
Lab Sticker	AAA30551	AAA30551	AAA30551	AAA30551	AAA30551	AAA30551
Wire Shelf	-	-	00EDA0008235	00EDA0008233	-	-
Stand 1 with Stacking kit (600 mm height for stacking 1 unit)	-	-	-	-	-	AAA23571
Stand 2 with Stacking kit (300 mm height for stacking 2 unit)	-	-	-	-	-	AAA23572
Retractable Foot Caster	-	-	AAA23801	AAA23802	-	-
Stacking Kit	-	-	AAA23811	AAA23812	-	AAA23573

## LC GreenBox

Description	Dimension (W x D x H, mm/inch)	IST-3075 Series	IST-4075 Series	ISS-3075 Series	ISS-4075 Series	ISF-7000 Series	ISS-7000 Series
LC GreenBox	156 x 94 x 34 / 6.1 x 3.7 x 1.3						AAHQ1011K

Description		Model	IST-3075 Series	IST-4075 Series	ISS-3075 Series	ISS-4075 Series	ISF-7000 Series	ISS-7000 Series
		Platform Size (mm/inch)	350 x 350 / 13.8 x 13.8	450 x 450 / 17.7 x 17.7	350 x 350 / 13.8 x 13.8	450 x 450 / 17.7 x 17.7	755 x 520 / 29.7 x 20.5	755 x 520 / 29.7 x 20.5
<b>Universal Platform</b>		<b>Cat. No.</b>	<b>AAA23501-V3</b>	<b>AAA23502-V3</b>	<b>AAA23501-V3</b>	<b>AAA23502-V3</b>	<b>AAA23503-V3</b>	<b>AAA23507</b>
<b>Flask Clamp for Erlenmeyer Flask (Stainless Steel)</b>	50 ml	AAA23550	36	49	36	49	88	88
	100 ml	AAA23551	24	39	24	39	68	68
	250 ml	AAA23552	14	20	14	24	39	39
	300 ml	AAA23556	14	20	14	24	39	39
	500 ml	AAA23553	9	16	9	16	28	28
	1 L	AAA23554	6	9	6	9	18	18
	2 L	AAA23555	4	5	4	6	11	11
	2.8 L	AAA23557	2	4	2	5	8	8
	4 L	AAA23558	-	-	-	4	6	6
	6 L	AAA23559	-	-	-	2	5	-
<b>Flask Clamp for Erlenmeyer Flask (Plastic)<sup>1)</sup></b>	50 ml	AAA30570	36	49	36	49	88	88
	100~125 ml	AAA30571	19	29	19	29	48	48
	200 ml	AAA30572	13	21	13	21	35	35
	250 ml	AAA30573	13	19	13	19	35	34
	300 ml	AAA30574	12	19	12	19	35	34
	500 ml <sup>2)</sup>	AAA30575	9	12	9	12	24	21
	1 L <sup>2)</sup>	AAA30576	4	9	5	9	12	11
	2 L <sup>2)</sup>	AAA30577	2	4	4	5	8	6
<b>Funnel Clamp</b>	250 ml	AAA23562	4	6	4	6	15	15
	500 ml	AAA23563	2	4	3	4	10	10
	1 L	AAA23564	-	3	-	3	7	7
	2 L	AAA23565	-	-	-	-	5	5
<b>Test Tube Rack<sup>3)</sup></b>	Ø8 mm (86ea)	AAA23581	2	4	2	4	7	7
	Ø10 mm (86ea)	AAA23582	2	4	2	4	7	7
	Ø12 mm (58ea)	AAA23583	2	4	2	4	7	7
	Ø14 mm (58ea)	AAA23584	2	4	2	4	7	7
	Ø17 mm (32ea)	AAA23585	2	4	2	4	7	7
	Ø25 mm (19ea)	AAA23586	2	4	2	4	7	7
	Ø30 mm (10ea)	AAA23587	2	4	2	4	7	7
	Ø35 mm (10ea)	AAA23594	2	4	2	4	7	7
<b>Microplate Holder</b>	Single	AAA23654	8	15	8	15	25	25
	Tower	AAA23651	5	8	6	10	21	21
	Flat A (Large)	AAA23652	-	2	-	2	4	4
	Flat B (Small)	AAA23653	2	2	2	3	6	6

1) In the case of plastic flask clamps mounting, deformation may occur at temperatures over 40°C. Stainless steel flask clamps are recommended when using over 40°C and high temperature environment.

2) Possible to use under 300rpm

3) Maximum quantity on each platform. (no angle condition for test tube rack), it is the maximum quantity that does not cause the rack to tilt.

Description	IST-3075 Series	IST-4075 Series	ISS-3075 Series	ISS-4075 Series	ISF-7000 Series	ISS-7000 Series
<b>Spring Wire Rack (Cat. No.)</b>	<b>AAA23521-V1</b>	<b>AAA23522-V2</b>	<b>AAA31521-V1</b>	<b>AAA31522-V1</b>	<b>AAA23514</b>	<b>AAA23527</b>
<b>Quantity of Erlenmeyer Flask</b>	50 ml	16	25	16	25	45
	100 ml	9	16	9	16	28
	250 ml	4	9	4	9	18
	300 ml	4	9	4	9	18
	500 ml	4	5	4	5	15
	1 L	2	4	2	4	10
	2 L	1	2	1	2	6
2.8 L	1	2	1	2	4	

## Starter Kit

Description	Composition of Clamp	Cat. No.
<b>Starter Kit I</b>	50 ml (2), 100 ml (2), 250 ml (4), 500 ml (4), 1L (2), 2L (2)	<b>AAA30581</b>
<b>Starter Kit II</b>	50 ml (3), 100 ml (3), 250 ml (6), 500 ml (6)	<b>AAA30582</b>