

Digital incubating/ refrigerating benchtop shakers.

Transparent lid offers great visibility and gas spring supports ensure hand-down handling of the samples by allowing immediate and easy access to your samples.



Gas spring lid

IST-3075 / IST-4075R

with optional dedicated platform and universal attachment

Optional accessories see page 89-91

- Universal platforms, Rubber mats
- Flask clamps, Funnel clamps, Test tube racks

* Above products design can be changed without prior notice.

Control display





Performance

- Temperature range:
 - Ambient +5°C to 80°C for IST-3075 / 4075.
 - Ambient -15°C (Min. +15) to 80°C for IST-3075R / 4075R.
- Competitive high shaking speed up to 500 rpm.
- Orbital shaking motion in 19mm diameter.
- Microprocessor PID control.
- Three point temperature calibration / Automatic tuning.
- Wide speed range even with heavy workload.
 - Equipped with a maintenance-free BLDC motor to generate smooth, quiet, uniform, and yet powerful shaking motion.
- Best effort run function intelligently manages its rpm to keep shaking even workload is out of its capacity.
 - Automatic shaking speed adjustment in case of excessive workload such as unbalanced load placement, unusual vibrations caused from unstable floor or external shock.
- Pleasant test environment by the smooth acceleration and deceleration control.
 - Smooth start and smooth stop function prevents chemical spills from flasks or test tubes.
- High-velocity fan ensures uniform temperature distribution and rapid thermal recovery after door open.
- Air-tight silicone door seal to provide excellent temperature uniformity.

Convenience

- Intuitive touch screen LCD controller with easy icons and logical menus.
- Easy-set digital timer for shaking operation. (1 min. to 999 hr. 59 min.)
- Wide sample monitoring and convenient sample loading.
 - Convenient sample monitoring without affecting inside environment thanks to the three side transparent acrylic lid with bright LED lamps.
 - Gas spring lid supports providing smooth motion, soft opening and closing.
- Repetitive task can be easily performed as the platform stops where it starts.
 - Stopping the shaking platform always at the same position is highly beneficial for automated dosing or sampling process.
- Corrosion resistance stainless steel interior.
- Built-in RS-232 port and USB port for external control and data collection.

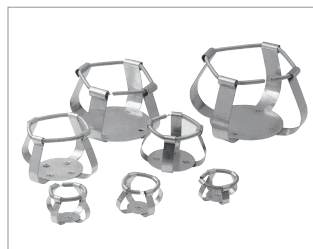
Safety

- Automatic run after power interruption.
- Temperature and shaking speed deviation alarm.
- Over-current protection, Stalled platform check.
- Mechanical over-temperature protection device.
- Environment-friendly CFC-free refrigerant. (for IST-3075R / 4075R)

Model		IST-3075		IST-3075R		IST-4075		IST-4075R	
Temperature	Range (°C / °F)	Amb. +5 to 80 / Amb. +9 to 176		Amb. -15 (Min. +15) to 80 / Amb. -27 (Min. +27) to 176		Amb. +5 to 80 / Amb. +9 to 176		Amb. -15 (Min. +15) to 80 / Amb. -27 (Min. +27) to 176	
	Fluctuation at 37°C in flask (±°C / °F)	0.1 / 0.18							
	Variation at 37°C in flask (±°C / °F)	0.5 / 0.90							
	Refrigerator (Hp)	-		1 / 6 HBP		-		1 / 6 HBP	
Shaking system	Motion type	Orbital							
	Amplitude size (mm / inch, dia.)	19.1 / 0.75							
	Speed range (RPM)	20 to 500							
	Accuracy	±1% of set speed (≥100rpm) / ±1 (≤100rpm)							
	Timer	1 min. to 999 hr 59 min.							
Dimension	Max. load (kg / lbs)	10 / 22.0 at 500 rpm 15 / 33.1 at 400 rpm				14 / 30.9 at 500 rpm 21 / 46.3 at 400 rpm			
	Volume (L / cu ft)	53 / 1.9				83 / 2.9			
	Platform (WxD) (mm / inch)	350x350 / 13.8x13.8				450x450 / 17.7x17.7			
	Interior (WxDxH) (mm / inch)	410x410x320 / 16.1x16.1x12.6				510x510x320 / 20.1x20.1x12.6			
	Exterior (WxDxH) (mm / inch)	440x785x510 / 17.3x30.9x20.1				540x 890 x510 / 21.3x35x20.1			
Net weight (Kg / lbs)	65 / 143.3		73 / 160.9		81 / 178.6		90 / 198.4		
Electrical requirements (230V)	60Hz, 4A	50Hz, 4A	60Hz, 5.5A	50Hz, 5.5A	60Hz, 4A	50Hz, 4A	60Hz, 5.5A	50Hz, 5.5A	
Cat. No.	AAH23411K	AAH23422K	AAH23511K	AAH23522K	AAH23611K	AAH23622K	AAH23711K	AAH23722K	
Electrical requirements (120V)	60Hz, 7.5A		60Hz, 10.1A		60Hz, 7.5A		60Hz, 10.1A		
Cat. No.	AAH23465U		AAH23565U		AAH23665U		AAH23765U		

* FDA establishment registered company. FDA listed products.

for Incubated Shakers



Flask clamps



Plastic clamps (plastic)



Funnel clamps



Dedicated platforms

Universal platforms / Flask clamps / Funnel clamps

Universal platforms provide flexibility for mixing assortments of test tubes and glassware of varying sizes on a single platform. Various clamps for Erlenmeyer flasks and separatory funnels are available.

Description		IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Cat. No.	Universal platform	AAA23501-V3	AAA23502-V3	AAA23503-V3	AAA23501-V3	AAA23502-V3
-	Erlenmeyer flask size	Max. mountable flask clamps				
AAA23550	for 50 mL	36	49	88	36	49
AAA23551	for 100 mL	24	39	68	24	39
AAA23552	for 250 mL	14	20	39	14	24
AAA23556	for 300 mL	14	20	39	14	24
AAA23553	for 500 mL	9	16	28	9	16
AAA23554	for 1L	6	9	18	6	9
AAA23555	for 2L	4	5	11	4	6
AAA23557	for 2.8L	2	4	8	2	5
AAA23558	for 4L	-	-	6	-	4
AAA23559	for 6L	-	-	5	-	2
-	Erlenmeyer flask size	Max. mountable flask clamps				
AAA30570	for 50 mL	36	49	88	36	49
AAA30571	for 100 ~ 125 mL	19	29	48	19	29
AAA30572	for 200 mL	13	21	35	13	21
AAA30573	for 250 mL	13	19	35	13	19
AAA30574	for 300 mL	12	19	35	12	19
AAA30575	for 500 mL	9	12	24	9	12
AAA30576	for 1L	4	9	12	5	9
AAA30577	for 2L	2	4	8	4	5
-	separatory funnel size	Max. mountable funnel clamps				
AAA23562	for 250 mL	4	6	15	4	6
AAA23563	for 500 mL	2	4	10	3	4
AAA23564	for 1L	-	3	7	-	3
AAA23565	for 2L	-	-	5	-	-

* Above accessories need to be mounted on a universal platform which is sold separately.

Dedicated platforms

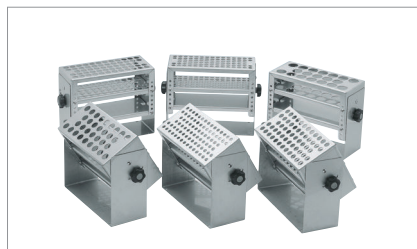
When using a single flask size only, the dedicated platforms with pre-installed clamps provide maximum capacity. 250mL and 500mL clamps are standard but other sizes can be available.

Description	IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Universal platform & 250mL flask clamps	AAA23611-V1	AAA23623-V1	AAA23634	AAA23611-V1	AAA23623-V1
No. of flask clamps	14	20	39	14	20
Universal platform & 500mL flask clamps	AAA23612-V1	AAA23622-V1	AAA23635	AAA23612-V1	AAA23622-V1
No. of flask clamps	9	16	28	9	16

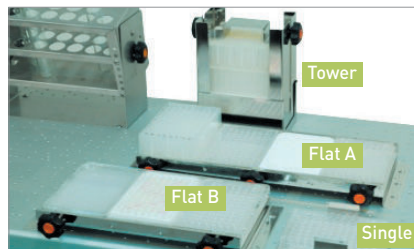
* A dedicated platform is sold with setting each max. mountable amount of flask clamps on.

Accessories & Options

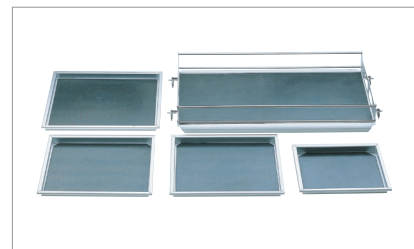
for Incubated Shakers



Test tube racks



Microplate holders



Rubber mats

Test tube racks

Easy to release and mount racks made of durable stainless steel with adjustable angle and tube height support. Test tube racks are used with an optional universal platform.

Description		IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Cat.No.	Universal platform	AAA23501-V3	AAA23502-V3	AAA23053-V3	AAA31501-V3	AAA23502-V3
-	Test tube size	Mountable capacity of rack*				
AAA23581	for 86 test tubes, $\varnothing 8\text{mm} / \varnothing 0.3''$	2	4	7	2	4
AAA23582	for 86 test tubes, $\varnothing 10\text{mm} / \varnothing 0.4''$					
AAA23583	for 58 test tubes, $\varnothing 12\text{mm} / \varnothing 0.5''$					
AAA23584	for 58 test tubes, $\varnothing 14\text{mm} / \varnothing 0.6''$					
AAA23585	for 32 test tubes, $\varnothing 17\text{mm} / \varnothing 0.7''$					
AAA23586	for 19 test tubes, $\varnothing 25\text{mm} / \varnothing 1.0''$					
AAA23587	for 10 test tubes, $\varnothing 30\text{mm} / \varnothing 1.2''$					
AAA23594	for 10 test tubes, $\varnothing 35\text{mm} / \varnothing 1.4''$					
AAA23593	for 4 test tubes, $\varnothing 50\text{mm} / \varnothing 1.9''$					

* No declination

** We can manufacture other size of test tube racks to meet your specific requirements. Contact us for details.

Microplate holders

Available in three styles: tower type, flat type (small and large), and single type. Tower type holder is for 10 standard or deep well plates. Large flat holder is for 4 standard or deep well plates. Small flat holder is for 3 standard or deep well plates. Single type holder is for 1 standard or deep well plate. (standard well plates' height: 14.7mm)

Description		IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Cat.No.	Universal platform	AAA23501-V3	AAA23502-V3	AAA23053-V3	AAA31501-V3	AAA23502-V3
-	Microplate holder type	Max. mountable microplate holders				
AAA23654	Single	8	15	25	8	15
AAA23651	Tower	5	8	21	6	10
AAA23652	Flat A(large)	-	2	4	-	2
AAA23653	Flat B(small)	2	2	6	2	3

* Microplate holders need to be mounted on an universal platform which is sold separately.

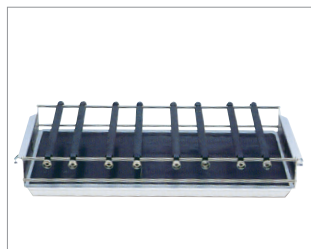
Rubber mats

Designed for low-speed applications, non-skid rubber mats allow quick addition or removal of flasks, plates or tubes.

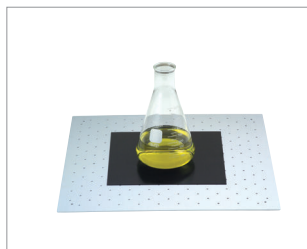
Description	IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Cat. No.	AAA23531	AAA23532	AAA23534	AAA31531	AAA31532



Spring wire racks
(two tier rack with flexible crossed spring)



Universal attachments



Lab sticker



Retractable foot caster

Spring wire racks

Ideal for holding a wide variety of tubes, flasks, and other glassware. All components are made of stainless steel.

Description	IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Cat.No.	AAA23521-V1	AAA23522-V2	AAA23514	AAA31521-V1	AAA31522-V1
-	Erlenmeyer flask size	Max. inserting flasks			
for 50 mL	16	25	45	16	25
for 100 mL	9	16	28	9	16
for 250 mL	4	9	18	4	9
for 300 mL	4	9	18	4	9
for 500 mL	4	5	15	4	5
for 1L	2	4	10	2	4
for 2L	1	2	6	1	2
for 2.8L	1	2	4	1	2

Universal attachments (utility carriers)

Several adjustable clamping bars for quickly securing a variety of glassware or tubes on non-skid rubber mats. Suitable for flat-bottomed flasks of various sizes.

Description	IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Cat. No.	AAA23511-V1	AAA23512-V1	AAA23505	AAA23511-V1	AAA23512-V1

Lab sticker

An alternative method for securing vessels to a shaker platform. Ideal for containers such as bottles and dishes that cannot be held on the universal platform with conventional flask clamps. For safe operation, gradual RPM increase is recommended.

Cat. No.	Description (WxDxH) (mm / inch)
AAA30551	200×200×5 / 7.9×7.9×0.2

Retractable foot caster

Highly beneficial for easy mobility during installation or relocation.

Cat. No.	Description (WxDxH) (mm / inch)	Suitable for
AAA23801	700×733×145 / 27.6×28.9×5.7	ISS-3075 / 3075R
AAA23802	800×813×225 / 31.5×32×8.9	ISS-4075 / 4075R

Stacking kits

Stackable up to 2 units using exclusive stacking kits for space saving. (only for ISS)

Cat. No.	Description	Suitable for
AAA23811	Stacking kits for stackable chambers	ISS-3075 / 3075R
AAA23812	Stacking kits for stackable chambers	ISS-4075 / 4075R