Large capacity up to five 6L flasks and heavy workload shaking with rapid heating and cooling performance.

Exclusive drive mechanism with ergonomic design delivers years of trouble-free service.

ISF-7100R

Optional accessories
see page 89-91

• Universal/Dedicated platforms
• Spring wire racks, Microplate holders

※ Above products design can be changed without prior notice.

Control display

Com. ports & Temp. limiters

Performance

- Temperature range:
  - Ambient +5°C to 80 °Cfor ISF-7100 / 7200
  - Ambient -20°C (Min. +4) to 80°C for ISF-7100R / 7200R

- Competitive high shaking speed up to 500 rpm.
  - Speed range: 30 to 500 rpm.

- Orbital shaking motion in various diameter.
  - 25.4mm for ISF-7100/R
  - 50.8mm for ISF-7200/R

- Microprocessor PID control.

- Three point temperature calibration / Automatic tuning.

- Wide speed range even with heavy workload.
  - Ideal DD(Direct Drive) brushless motor and triple cam system support heavy load, quiet, maintenance free operation and deliver high torque at high speeds and smooth rotation.

- 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 with lockable door for safe storage of samples.

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.)

- Easy sample monitoring and convenient sample loading.
  - Clear observation of samples without affecting inner chamber's environment thanks to the transparent top viewing window with bright LED lamps.
  - The lid is inclined gently towards the front for easy observation of samples in the chamber.
  - 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.

- Easy-access drain system with a quick disconnect valve offers great convenience to clean up of spills.

- Built-in RS-232 port and USB port for external control and data collection.

- Sturdy foot caster, beneficial for easy mobility during installation or relocation.
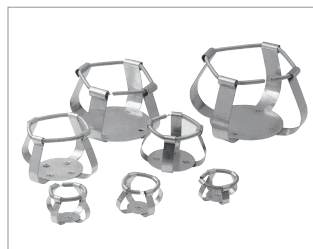
Safety

- Automatic run after power interruption.

- Temperature and shaking speed deviation alarm.

- Over-current protection.

- Triple independent temperature monitor system.
  - Temperature deviation alarm (High/Low)
  - Electronic temperature limiter (High/Low)
  - Mechanical over-temperature limiter (High)

- Environment-friendly CFC-free refrigerant. (for ISF-7100R / 7200R)

Model		ISF-7100	ISF-7100R	ISF-7200	ISF-7200R
Temperature	Range (℃ / ℉)	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℃ in flask (±℃ / ℉)	0.1 / 0.18			
	Variation at 37℃ in flask (±℃ / ℉)	0.5 / 0.90			
	Refrigerator (Hp)	-	1/6Hp	-	1/6Hp
Shaking system	Motion type	Orbital			
	Amplitude size (mm / inch, dia.)	25.4 / 1		50.8 / 2	
	Speed range (rpm)	30 to 500		30 to 300	
	Accuracy	±1% of set speed (≥100rpm) / ±1 (≤100rpm)			
	Timer	1 min. to 999 hr 59 min.			
	Max. load (kg / lbs)	15 / 33.1 at 500 rpm 25 / 55.1 at 400 rpm 35 / 77.2 at 300 rpm		20 / 44.1 at 300 rpm 35 / 77.2 at 200 rpm	
Dimension	Volume (L / cu ft)	270 / 9.5			
	Platform (W×D) (mm / inch)	755×520 / 29.7×20.5			
	Interior (W×D×H) (mm / inch)	894×634×480 / 35.2×25×18.9			
	Exterior (W×D×H) (mm / inch)	1128×854x1035 / 44.4x33.6×40.8			
	Net weight (Kg / lbs)	277 / 610.7	287 / 632.7	277 / 610.7	287 / 632.7
Electrical requirements (230V)		50 / 60Hz, 5A	60Hz, 7.2A 50Hz, 7.2A	50 / 60Hz, 5A	60Hz, 7.2A 50Hz, 7.2A
Cat. No.		AAH23342K	AAH23542K AAH23541K	AAH23442K	AAH23642K AAH23641K
Electrical requirements (120V)		60Hz, 9.5A	60Hz, 13.9A	60Hz, 9.5A	60Hz, 13.9A
Cat. No.		AAH23375U	AAH23575U	AAH23475U	AAH23675U

※ Temp. change may occur during automatic defrost. (for ISF-7100R/7200R)
※ 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	Flask clamps (Stainless steel)	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	Flask clamps (plastic)	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	Funnel clamps	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.
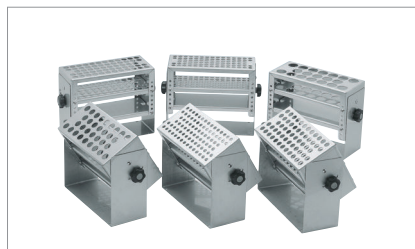
Dedicated platforms

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.

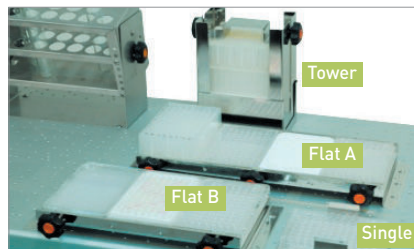| Description	IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Universal platform &250mL flask clamps	AAA23611-V1	AAA23623-V1	AAA23634	AAA23611-V1	AAA23623-V1
No. of flask clamps	14	20	39	14	20
Universal platform &500mL flask clamps	AAA23612-V1	AAA23622-V1	AAA23635	AAA23612-V1	AAA23622-V1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

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

Incubators

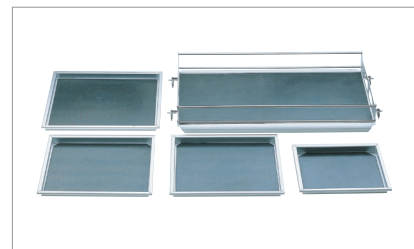# Accessories & Options

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, ⌀8mm / ⌀0.3″					
AAA23582	for 86 test tubes, ⌀10mm / ⌀0.4″					
AAA23583	for 58 test tubes, ⌀12mm / ⌀0.5″					
AAA23584	for 58 test tubes, ⌀14mm / ⌀0.6″					
AAA23585	for 32 test tubes, ⌀17mm / ⌀0.7	2	4	7	2	4
AAA23586	for 19 test tubes, ⌀25mm / ⌀1.0″					
AAA23587	for 10 test tubes, ⌀30mm / ⌀1.2″					
AAA23594	for 10 test tubes, ⌀35mm / ⌀1.4″					
AAA23593	for 4 test tubes, ⌀50mm / ⌀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.
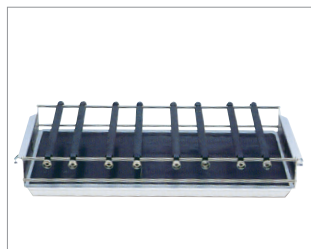
Rubber mats

Designed for low-speed applications, non-skid rubber mats allow quick addition or removal of flasks, plates or tubes.
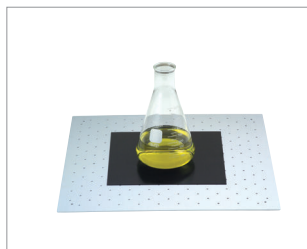
Description	IST-3075/R	IST-4075/R	ISF-7100/R ISF-7200/R	ISS-3075/R	ISS-4075/R
Cat. No.	AAA23531	AAA23532	AAA23534	AAA31531	AAA31532

Lab Companion

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 (W×D×H) (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 (W×D×H) (mm / inch)	Suitable for
AAA23801	700x733x145 / 27.6x28.9x5.7	ISS-3075 / 3075R
AAA23802	800x813x225 / 31.5x32x8.9	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