

Incubated Shaker Floor type

Optimal solution for mass culturing

Structural Functional Features

- Large-capacity incubated shaker model.
- Up to 80°C, 500rpm enables setting of various experimental conditions.
- It is convenient for attaching and detaching a large amount of sample because structure of door is lowering from the rear to the front. (registration: 30-2014-0060254)
- Three operating modes: Temperature & Shaking, Temperature, or Shaking.
- Easy to move/fix the product.
- Stable shaking of high-load samples. (patent registered: 10-1678160)

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.
- Spill drain port for internal cleanliness and easy maintenance.

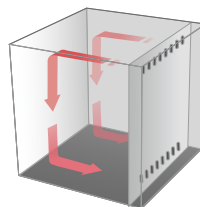
Outstanding Safety

- Electronic over temperature protection system. (A-OT, advanced over temperature 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.

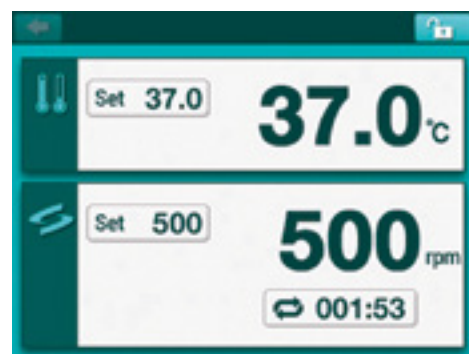


ISF series

with Optional Accessories



Easy to attach and detach large volume sample thanks to the inclined lid structure. (Registered design 30-2014-0060254)



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.



DD Shaking System Patented

Powerful DD motor for large-capacity shaking. The triple cam system provides stable shaking with high load samples.
(patent registration : 10-1678160)

Specification

Model	ISF-7100	ISF-7100R	ISF-7200	ISF-7200R
Temperature				
Range (°C / °F)	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 / 0.90	0.5 / 0.90	0.5 / 0.90	0.5 / 0.90
Refrigerator (Hp)	-	1/6	-	1/6
Shaking system				
Motion type	Orbital	Orbital	Orbital	Orbital
Speed range (rpm)	30 to 500	30 to 500	30 to 300	30 to 300
Max. speed per permissible load (rpm)	500 (max. 15 kg / 33.1 lbs) 400 (max. 25 kg / 55.1 lbs) 350 (max. 35 kg / 77.2 lbs)	500 (max. 15 kg / 33.1 lbs) 400 (max. 25 kg / 55.1 lbs) 350 (max. 35 kg / 77.2 lbs)	300 (max. 20 kg / 44.1 lbs) 200 (max. 35 kg / 77.2 lbs)	300 (max. 20 kg / 44.1 lbs) 200 (max. 35 kg / 77.2 lbs)
Amplitude size (mm / inch, dia.)	25.4 / 1	25.4 / 1	50.8 / 2	50.8 / 2
Speed stability ²⁾ (rpm, %)	±1	±1	±1	±1
Timer (count-down)	999 hr 59 min.	999 hr 59 min.	999 hr 59 min.	999 hr 59 min.
Dimension				
Chamber volume (L / cu ft)	270 / 9.5	270 / 9.5	270 / 9.5	270 / 9.5
Platform (W x D, mm / inch)	755 x 520 / 29.7 x 20.5	755 x 520 / 29.7 x 20.5	755 x 520 / 29.7 x 20.5	755 x 520 / 29.7 x 20.5
Interior (W x D x H, mm / inch)	894 x 634 x 480 / 35.2 x 25 x 18.9	894 x 634 x 480 / 35.2 x 25 x 18.9	894 x 634 x 480 / 35.2 x 25 x 18.9	894 x 634 x 480 / 35.2 x 25 x 18.9
Exterior (W x D x H, mm / inch)	1128 x 854 x 1035 / 44.4 x 33.6 x 40.8	1128 x 854 x 1035 / 44.4 x 33.6 x 40.8	1128 x 854 x 1035 / 44.4 x 33.6 x 40.8	1128 x 854 x 1035 / 44.4 x 33.6 x 40.8
Net weight (Kg / lbs)	277 / 610.7	287 / 632.7	277 / 610.7	287 / 632.7
Electrical requirements (230V, A)	50 / 60Hz, 3.7	60Hz, 5.6 50Hz, 5.6	50 / 60Hz, 3.7	60Hz, 5.6 50Hz, 5.6
Cat. No.	AAH23342K	AAH23542K AAH23541K	AAH23442K	AAH23642K AAH23641K
Electrical requirements (120V, A)	60Hz, 7.3	60Hz, 10	60Hz, 7.3	60Hz, 10
Cat. No.	AAH23375U	AAH23575U	AAH23475U	AAH23675U

1) The temperature control range of the ISF-7100 and ISF-7200 models are from 5°C above the ambient temperature of the equipment. (15°C to 40°C) to 80°C The temperature control range of the ISF-7100R and ISF-7200R models are from 20°C below the ambient temperature (18°C to 35°C) of the device to 80°C. (However, the lowest control temperature is 4°C)

2) 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, LC GreenBox