

# Incubators

## SELECTION GUIDE

Incubators

Low Temperature Incubators

Incubated Shakers

Mini Incubators

Hybridization Oven

### Incubators

| Description          |           | Operating Temp. Range<br>(°C/°F)    | Chamber Volume<br>(L / cu ft) | Temperature Fluctuation<br>at 37°C [± °C/°F] | Temperature Variation<br>at 37°C [± °C/°F] | Page |
|----------------------|-----------|-------------------------------------|-------------------------------|----------------------------------------------|--------------------------------------------|------|
| General Models       | IB-05G    | Amb. +5 to 70<br>/ Amb. +9 to 158   | 60 / 2.1                      | 0.1 / 0.18                                   | 0.6 / 1.08                                 | 66   |
|                      | IB-15G    |                                     | 102 / 3.6                     |                                              | 0.2 / 0.36                                 |      |
|                      | IB-25G    |                                     | 151 / 5.3                     |                                              | 0.6 / 1.08                                 |      |
| Economy Models       | IB-01E    | Amb. +3 to 60<br>/ Amb. +5.4 to 140 | 65 / 2.3                      | 0.2 / 0.36                                   | 0.6 / 1.08                                 | 67   |
|                      | IB-11E    |                                     | 150 / 5.3                     |                                              | 0.8 / 1.44                                 |      |
|                      | IB-21E    |                                     | 205 / 7.2                     |                                              | 1.1 / 1.98                                 |      |
| 2 & 4-chamber Models | IB-02G-2C | Amb. +5 to 70<br>/ Amb. +9 to 158   | 60 / 2.1 x<br>2 chambers      | 0.1 / 0.18                                   | 0.6 / 1.08                                 | 68   |
|                      | IB-02G-4C |                                     | 60 / 2.1 x<br>4 chambers      |                                              |                                            |      |

### Low Temperature Incubators

| Description              |          | Operating Temp. Range<br>(°C/°F)                | Chamber Volume<br>(L / cu ft) | Temperature Fluctuation<br>at 25°C [± °C/°F] | Temperature Variation<br>at 25°C [± °C/°F] | Page |
|--------------------------|----------|-------------------------------------------------|-------------------------------|----------------------------------------------|--------------------------------------------|------|
| Forced Convection Models | IL-11    | 0 to 60                                         | 150 / 5.3                     | 0.1 / 0.18                                   | 0.5 / 0.9                                  | 70   |
|                          | IL-21    | +32 to 140                                      | 244 / 8.6                     |                                              | 0.4 / 0.72                                 |      |
| Air-jacketed Models      | IL-11A   | +4 to 60                                        | 162 / 5.7                     | 0.2 / 0.36                                   | 0.5 / 0.9                                  | 72   |
|                          | IL-21A   | +39.2 to 140                                    | 254 / 9                       |                                              |                                            |      |
| Personal Models          | ILP-02   | +10°C to 40°C<br>at ambient temperature of 25°C | 14 / 0.5                      | 0.1 / 0.18                                   | 0.5 / 0.9                                  | 73   |
|                          | ILP-12   |                                                 | 48 / 1.7                      |                                              | 0.4 / 0.72                                 |      |
| 2 & 4-chamber Models     | IL-11-2C | *0 to 60<br>/ + 32 to 140*                      | 150 / 5.3 x<br>2 chambers     | 0.1 / 0.18                                   | 0.5 / 0.9                                  | 74   |
|                          | IL-11-4C |                                                 | 150 / 5.3 x<br>4 chambers     |                                              |                                            |      |

### Incubated Shakers

| Description           |           | Operating Temp. Range<br>[°C/°F]                              | Speed Range<br>[RPM]                     | Maximum Amplitude Size (dia) | Page |
|-----------------------|-----------|---------------------------------------------------------------|------------------------------------------|------------------------------|------|
| Benchtop Models       | IST-3075  | Amb. +5 to 80<br>/ Amb. +9 to 176                             | 10 to 500                                | 19.1mm (0.75" dia)           | 76   |
|                       | IST-4075  |                                                               |                                          |                              |      |
|                       | IST-3075R | Amb. -15 (Min. +15°C) to 80<br>/ Amb. -27 (Min. +27°C) to 176 |                                          |                              |      |
|                       | IST-4075R |                                                               |                                          |                              |      |
| Floor Standing Models | ISF-7100  | Amb. +5 to 80<br>/ Amb. +9 to 176                             | 30 to 500                                | 25.4mm (1" dia)              | 78   |
|                       | ISF-7200  |                                                               | 30 to 300                                | 50.8mm (2" dia)              |      |
|                       | ISF-7100R | Amb. -15 (Min. +4°C) to 80<br>/ Amb. -27 (Min. +72°C) to 176  | 30 to 500                                | 25.4mm (1" dia)              |      |
|                       | ISF-7200R |                                                               | 30 to 300                                | 50.8mm (2" dia)              |      |
| Chamber Models        | ISS-3075  | Amb. +5 to 80<br>/ Amb. +9 to 176                             | 10 to 500<br>(Stackable Top: 10 to 250)* | 19 mm dia (0.75" dia)        | 80   |
|                       | ISS-4075  |                                                               |                                          |                              |      |
|                       | ISS-3075R | Amb. -20 (Min. +4°C) to 80<br>/ Amb. -36 (Min. +72°C) to 176  |                                          |                              |      |
|                       | ISS-4075R |                                                               |                                          |                              |      |

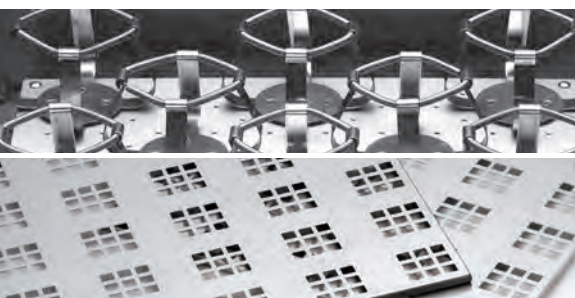
\* If two products are stacked up, the upper one's shaking speed range is from 10 to 250 rpm.

### Mini Incubator & Hybridization Oven

| Description        |        | Operating Temp. Range<br>(°C/°F)  | Chamber Volume<br>(L / cu ft) | Temperature Fluctuation<br>[± °C/°F] | Temperature Variation<br>[± °C/°F] | Page |
|--------------------|--------|-----------------------------------|-------------------------------|--------------------------------------|------------------------------------|------|
| Mini Incubator     | IM-10  | Amb. +5 to 65<br>/ Amb. +9 to 140 | 10 / 0.4                      | 0.5 / 0.9<br>(at 37°C)               | 0.5 / 0.9<br>(at 37°C)             | 82   |
| Hybridization Oven | HO -10 | Amb. +5 to 65<br>/ Amb. +9 to 149 | 10 / 0.4                      | 0.5 / 0.9 (at 50°C<br>with 9RPM)     | 0.5 / 0.9 (at 50°C<br>with 9RPM)   | 83   |



# GENERAL APPLICATIONS



| General Applications                                     | General, Low Temp. & Low Temp. Personal Incubators |    |     | Incubated Shakers |     |
|----------------------------------------------------------|----------------------------------------------------|----|-----|-------------------|-----|
|                                                          | IB                                                 | IL | ILP | IST & ISS         | ISF |
| Antibody Testing                                         | •                                                  | •  | •   |                   |     |
| Bacterial Research                                       | •                                                  |    | •   |                   |     |
| Bacterial Suspensions                                    |                                                    |    |     | •                 | •   |
| Chemical Storage                                         | •                                                  | •  |     |                   |     |
| Chick Embryo Studies                                     | •                                                  |    | •   |                   |     |
| Clinical Science                                         | •                                                  | •  | •   |                   |     |
| Cultivating Low Temperature Microbes and Plant Cells     |                                                    | •  |     |                   |     |
| Crystallization Studies                                  | •                                                  | •  |     |                   |     |
| Cultivating Thermophilic Bacteria                        | •                                                  |    |     |                   |     |
| Drying And Staining Procedures                           | •                                                  | •  |     |                   |     |
| Denaturalizing Tests for Food                            | •                                                  | •  |     |                   |     |
| Environmental Technology (waste water and soil analysis) |                                                    |    |     | •                 | •   |
| Enzyme Digestion Studies                                 | •                                                  | •  |     |                   |     |
| Extraction Procedures                                    |                                                    |    |     | •                 | •   |
| Fermentation (Pharmacy and biotech -DNA and Enzymes)     |                                                    |    |     | •                 | •   |
| General Mixing                                           |                                                    |    |     | •                 | •   |
| Hematological Testing                                    | •                                                  | •  | •   |                   |     |
| Histochemical Procedures                                 | •                                                  | •  |     |                   |     |
| Measuring COD/ BOD                                       |                                                    | •  |     |                   |     |
| Medical Researches. (Diagnostic tests)                   |                                                    |    |     | •                 | •   |
| Microbiological Determinations                           | •                                                  | •  | •   |                   |     |
| Microorganism                                            | •                                                  | •  | •   |                   |     |
| Molecular Biology                                        |                                                    |    |     | •                 | •   |
| Organism Germs for Life Science                          | •                                                  | •  | •   |                   |     |
| Organism Pharmacy                                        | •                                                  | •  | •   |                   |     |
| Paraffin Embedding                                       | •                                                  | •  |     |                   |     |
| Pharmaceutical Stability Testing                         |                                                    | •  |     |                   |     |
| Plasmid Purification                                     |                                                    |    |     | •                 | •   |
| Protein Expression in Bacteria                           |                                                    |    |     | •                 | •   |
| Solubility                                               |                                                    |    |     | •                 | •   |
| Staining and Destaining                                  |                                                    |    |     | •                 | •   |
| Tissue Culturing                                         | •                                                  | •  | •   |                   |     |

\* Above listed applications are for general and storage purpose use.

## TECHNICAL BENEFITS

### Incubators & Low Temp. Incubators

- 1) Microprocessor PID control.
- 2) Temp. calibration and auto-tuning functions.
- 3) Digital timer with Delayed ON/OFF function.
- 4) Automatic run after power interruption.
- 5) Convenient preset function for 3 most commonly used temperature settings.
- 6) Self-diagnostic function identifying errors.
- 7) Bright LED displays as well as splashproof and easy-to-clean keypads.
- 8) Audible and visible open door alarms.
- 9) Protection against overheating and over-current.
- 10) High-quality 304 grade stainless steel chamber interior and dirt-repellent external surface with power coating.
- 11) Perfectly sealed door gasket minimizing heat loss and fully insulated chambers.

### Incubated Shakers

- 1) Intuitive touch LCD controller with easy icons and logical menus.
- 2) Automatic run after power interruption.
- 3) Built-in RS-232 port and USB port for external control and data collection.
- 4) Audible/Visible alarm activated by shaking speed deviation.
- 5) Worry-free operation is guaranteed by automatic shaking speed adjustment in case of excessive workload.
- 6) Microprocessor PID control and autotuning.
- 7) Three point temperature calibration.
- 8) Wide speed range even with heavy workload.
- 9) Repetitive task can be easily performed as the platform stops where it starts.
- 10) Smooth start and smooth stop function prevents chemical spills from flasks or test tubes.

### Mini Incubator & Hybridization Oven

- 1) Over temperature limit protection and open door alert.
- 2) Microprocessor PID control.
- 3) Simple calibration function.
- 4) Ease-of-operation provided by a bright VFD, responsive touch buttons, and a jog dial.
- 5) Memory function of programmed protocols allowing relevant parameters (such as temperature, rocking speed, time, etc) of each protocol step to be stored. (HO-10 only)

# Incubators

## Incubators (General Models)

Versatile air-jacketed natural convection incubators.

Specially designed for uniform temperature distribution and minimal sample contamination caused by external air intrusion.



### IB-05G

- Included Accessories**
- 2 Wire Shelves
- Optional Accessories**
- Perforated Shelves
  - Stacking Kits for Stackable Chambers
- ➔ see page 84

### Operating Features

- Temperature control: +5°C above ambient to 70°C.
- Microprocessor PID control.
- Simple calibration and auto-tuning functions.
- Digital timer with Delayed ON/OFF function : 1 min to 99 hr 59 min.
- High temperature limit setting and open door alarm.
- Convenient preset function for 3 most commonly used temperature settings.
- Intuitive control panel with bright LED display (0.1°C resolution) and touch-sensitive keypad.
- RS-232 interface.

### Constructional Features

- Fully insulated dual-wall door with magnetic rubber gasket.
- Vibration-free design ideal for yeast cultivation.
- Compact and lightweight construction with completely sealed gasket.
- Stackable up to 2 units using the optional stacking kit. (optional)
- Convenient sample monitoring without affecting chamber temperature via the inner tempered-glass door.
- Detachable shelves and round-cornered chamber interior allowing easy cleaning.
- Durable incoloy heating element with radiator fans for efficient heat dissipation.
- Built-in cable port to use other instruments inside the chamber. (dia 38mm/1.5", provided silicon or rubber cap)

## Specifications & Ordering Information



| Model                                     | IB-05G                                       | IB-15G                         | IB-25G                       |
|-------------------------------------------|----------------------------------------------|--------------------------------|------------------------------|
| Chamber Volume (L / cu ft)                | 60 / 2.1                                     | 102 / 3.6                      | 151 / 5.3                    |
| Temperature                               | Range (°C / °F)                              | Amb. +5 to 70 / Amb. +9 to 158 |                              |
|                                           | Fluctuation <sup>1)</sup> at 37°C (±°C / °F) | 0.1 / 0.18                     | 0.2 / 0.36                   |
|                                           | Variation <sup>1)</sup> at 37°C (±°C / °F)   | 0.6 / 1.08                     | 0.6 / 1.08                   |
| Dimension (WxDxH)                         | Interior (mm / inch)                         | 400×360×420 / 15.7×14.2×16.5   | 480×410×520 / 18.9×16.1×20.5 |
|                                           | Exterior (mm / inch)                         | 595×555×745 / 23×22×29         | 610×460×540 / 24×18×21.3     |
|                                           | Net Weight (Kg / lbs)                        | 595×555×745 / 23×22×29         | 675×605×855 / 27×24×34       |
| Electrical Requirements (230V, 50 / 60Hz) | 1.3A                                         | 2.2A                           | 3.1A                         |
| Cat. No.                                  | AAH21162K                                    | AAH21172K                      | AAH21182K                    |
| Electrical Requirements (120V, 50 / 60Hz) | 2.8A                                         | 4.6A                           | 6.4A                         |
| Cat. No.                                  | AAH21166U                                    | AAH21176U                      | AAH21186U                    |

1) Technical data according to DIN 12880.

# Incubators

## Incubators (Economy Models)

Affordable yet exceptionally reliable incubators featuring film type heaters.

Thanks to the film type heaters attached to the inner chamber's external walls, IB-E series incubators are free from noise, vibration, and mechanical troubles.

### ► Operating Features

- Temperature control: +3°C above ambient to 60°C.
- Microprocessor PID control.
- Simple calibration and auto-tuning functions.
- Digital timer with delayed ON/OFF function: 1 min to 99 hr 59 min.
- High temperature limit setting and open door alarm.
- Convenient preset function for 3 most commonly used temperature settings.
- Intuitive control panel with bright LED display (0.1°C resolution) and touch-sensitive keypad.

### ► Constructional Features

- Vibration-free design ideal for yeast cultivation.
- Compact and lightweight design with completely sealed gasket.
- Stackable up to 2 units using the optional stacking kit. (optional)
- Convenient sample monitoring without affecting chamber temperature via the inner tempered-glass door.
- Detachable shelves and round-cornered chamber interior allowing easy cleaning.



### IB-01E

- Included Accessories**
- 2 Wire Shelves
- Optional Accessories**
- Perforated Shelves
  - Stacking Kits for Stackable Chambers
- see page 84

### ► Specifications & Ordering Information



| Model                                     | IB-01E                                       | IB-11E                           | IB-21E                       |
|-------------------------------------------|----------------------------------------------|----------------------------------|------------------------------|
| Chamber Volume (L / cu ft)                | 65 / 2.3                                     | 150 / 5.3                        | 205 / 7.2                    |
| Temperature                               | Range (°C / °F)                              | Amb. +3 to 60 / Amb. +5.4 to 140 |                              |
|                                           | Fluctuation <sup>1)</sup> at 37°C (±°C / °F) | 0.2 / 0.36                       | 0.1 / 0.18                   |
|                                           | Variation <sup>1)</sup> at 37°C (±°C / °F)   | 0.6 / 1.08                       | 1.1 / 1.98                   |
| Dimension (WxDxH)                         | Interior (mm / inch)                         | 423×355×445 / 16.7×14×17.5       | 632×515×630 / 24.9×20.3×24.8 |
|                                           | Exterior (mm / inch)                         | 533×475×725 / 21×18.7×28.5       | 740×630×910 / 29.1×24.8×35.8 |
|                                           | Net Weight (Kg / lbs)                        | 33 / 72.8                        | 57 / 125.7                   |
| Electrical Requirements (230V, 50 / 60Hz) | 1.1A                                         | 2.2A                             | 2.4A                         |
| Cat. No.                                  | AAH26015K                                    | AAH26025K                        | AAH26035K                    |
| Electrical Requirements (120V, 50 / 60Hz) | 2.1A                                         | 4.2A                             | 4.6A                         |
| Cat. No.                                  | AAH26016U                                    | AAH26026U                        | AAH26036U                    |

1) Technical data according to DIN 12880.

# Incubators

## Incubators (2 & 4-chamber Models)



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Information is readily available on our website.



IB-02G-4C

# Incubators

## Incubators (2 & 4-chamber Models)

Suitable for conducting each different experiments in two or four chamber incubators.

Force convection incubating with great temperature variation.

Efficient to use with the limited laboratory environment.

### Operating Features

- Temperature range: Amb. +5 °C to 70 °C
- Independent temperature and timer control of each chamber using microprocessor PID.
- Simple calibration and auto-tuning functions.
- Digital timer with Delayed ON/OFF function: ranging from 1 min to 99 hr 59 min.
- Three most commonly used temperature settings programmable.
- Intuitive control panel with bright LED display (0.1 °C resolution) and touch-sensitive keypad.
- High temperature limit setting and open door alert.

### Constructional Features

- Two or four independently controlled 60L chambers merged into a single unit for space saving.
- Forced air convection generated by a noiseless and powerful sirocco fan ensuring optimal air circulation, temperature uniformity.
- Corrosion-resistant incoloy sheath heating element and stainless steel interior.
- Detachable shelves and rounded inner chamber corners allowing convenient cleaning.
- Built-in cable port to use other instruments inside the chamber.
- Built-in casters for easy transport and installation.



### IB-02G-2C

**Included Accessories**  
**Optional Accessories**  
☞ see page 84

- 2 Wire Shelves per chamber
- Perforated Shelves

### Specifications & Ordering Information



| Model                                     |                                                | IB-02G-2C                                    | IB-02G-4C                                    |
|-------------------------------------------|------------------------------------------------|----------------------------------------------|----------------------------------------------|
| Chamber Volume (L / cu ft)                |                                                | 60 / 2.1 x 2 Chambers                        | 60 / 2.1 x 4 Chambers                        |
| Temperature                               | Range (°C / °F)                                | Amb. +5 to 70 / Amb. +9 to 158               |                                              |
|                                           | Fluctuation <sup>1)</sup> at 37 °C (± °C / °F) | 0.1 / 0.18                                   |                                              |
|                                           | Variation <sup>1)</sup> at 37 °C (± °C / °F)   | 0.6 / 1.08                                   |                                              |
| Dimension (WxDxH)                         | Interior (mm / inch)                           | 400×360×420 / 15.7×14.2×16.5<br>x 2 Chambers | 400×360×420 / 15.7×14.2×16.5<br>x 4 Chambers |
|                                           | Exterior (mm / inch)                           | 570×640×1360 / 22.4×25.2×53.5                | 1170×640×1360 / 46.1×25.2×53.5               |
|                                           | Net Weight (Kg / lbs)                          | 110 / 242.5                                  | 168 / 370.4                                  |
| Electrical Requirements (230V, 50 / 60Hz) |                                                | 4.1A                                         | 4.1A x 2EA                                   |
| Cat. No.                                  |                                                | AAH2A115K                                    | AAH2A015K                                    |
| Electrical Requirements (120V, 50 / 60Hz) |                                                | 7.5A                                         | 7.5A x 2EA                                   |
| Cat. No.                                  |                                                | AAH2A116U                                    | AAH2A016U                                    |

1) Technical data according to DIN 12880.

# Incubators

## Low Temp. Incubators (Forced Convection Models)



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IL-21 / IL-21A

## Low Temp. Incubators (Forced Convection Models)

Superb low temperature incubation performance using a noiseless HBP compressor cooling system which reduces water evaporation within the chambers.

### Operating Features

- Temperature control: 0°C to 60°C.
- Microprocessor PID control.
- Simple calibration and auto-tuning functions.
- Digital timer with Delayed ON/OFF function: 1 min to 99 hr 59 min.
- High temperature limit setting and open door alarm.
- Convenient preset function for 3 most commonly used temperature settings.
- Up to 9 temperature steps and maximum 200 cycles of repetition programmable for each profile.
- Adjustable three-step fan speed with defrosting time and period control.
- Intuitive control panel with bright LED display (0.1°C resolution) and touch-sensitive keypad.
- RS-232 interface.

※ Temperature change may occur during automatic defrost.

### Constructional Features

- Forced air convection using an optimal cross flow fan for chamber temperature uniformity.
- Large chamber volume: maximum 244L. (8.6 cu ft)
- Built-in electrical outlet with a safety cover inside the chamber.
- Convenient sample monitoring without affecting chamber temperature via the inner tempered-glass door.
- Detachable shelves and round-cornered chamber interior allowing easy cleaning.



### IL-21

- Included Accessories**
- 2 Wire Shelves for IL-11
  - 3 Wire Shelves for IL-21
- Optional Accessories**
- Perforated Shelves
- ☞ see page 84

### Specifications & Ordering Information



| Model                          |                                              | IL-11                        |  | IL-21                       |  |
|--------------------------------|----------------------------------------------|------------------------------|--|-----------------------------|--|
| Chamber Volume (L / cu ft)     |                                              | 150 / 5.32                   |  | 244 / 8.6                   |  |
| Refrigerator (Hp)              |                                              | 1 / 8 HBP                    |  | 1 / 6 HBP                   |  |
| Temperature                    | Range (°C / °F)                              | 0 to 60 / +32 to 140         |  |                             |  |
|                                | Fluctuation <sup>1)</sup> at 25°C (±°C / °F) | 0.1 / 0.18                   |  |                             |  |
|                                | Variation <sup>1)</sup> at 25°C (±°C / °F)   | 0.5 / 0.9                    |  | 0.4 / 0.72                  |  |
| Dimension (WxDxH)              | Interior (mm / inch)                         | 600×500×500<br>/ 24×20×20    |  | 500×520×940<br>/ 20×20.5×37 |  |
|                                | Exterior (mm / inch)                         | 735×742×1010<br>/ 28.9×29×40 |  | 635×740×1630<br>/ 25×29×64  |  |
|                                | Net Weight (Kg / lbs)                        | 100 / 220                    |  | 135 / 297                   |  |
| Electrical Requirements (230V) |                                              | 60Hz, 4.5A                   |  | 60Hz, 6.4A                  |  |
| Cat. No.                       |                                              | AAH22041K                    |  | AAH22051K                   |  |
| Electrical Requirements (120V) |                                              | 60Hz, 8.3A                   |  | 60Hz, 10.6A                 |  |
| Cat. No.                       |                                              | AAH22046U                    |  | AAH22056U                   |  |

1) Technical data according to DIN 12880.

# Incubators

## Low Temp. Incubators (Air-jacketed Models)

Specially designed for optimal temperature control as well as minimal sample contamination caused by external air intrusion.

Superb low temperature incubation performance thanks to the silent HBP compressor cooling system which also reduces water evaporation within the chamber.



### Operating Features

- Temperature control: +4°C to 60°C.
- Microprocessor PID control.
- Simple calibration and auto-tuning functions.
- Digital timer with Delayed ON/OFF function: 1 min to 99 hr 59 min.
- High temperature limit setting and open door alarm.
- Convenient preset function for 3 most commonly used temperature settings.
- Up to 9 temperature steps and maximum 200 cycles of repetition programmable for each profile.
- Adjustable three-step fan speed with defrosting time and period control.
- Intuitive control panel with bright LED display (0.1°C resolution) and touch-sensitive keypad.
- RS-232 interface.

※ Temperature change may occur during automatic defrost.

### IL-11A

**Included Accessories**

- 2 Wire Shelves for IL-11A
- 3 Wire Shelves for IL-21A

**Optional Accessories**

- Perforated Shelves

➔ see page 84

### Constructional Features

- Natural convection within the chamber induced by the heater and the fan located inside the air jacket.
- Large chamber volume: maximum 244L. (8.6 cu ft)
- Built-in electrical outlet with a safety cover inside the chamber.
- Convenient sample monitoring without affecting chamber temperature via the inner tempered-glass door.
- Detachable shelves and round-cornered chamber interior allowing easy cleaning.

### Specifications & Ordering Information



| Model                          |                                              | IL-11A                   |            | IL-21A                   |            |
|--------------------------------|----------------------------------------------|--------------------------|------------|--------------------------|------------|
| Chamber Volume (L / cu ft)     |                                              | 162 / 5.7                |            | 254 / 9                  |            |
| Refrigerator (Hp)              |                                              | 1 / 6 HBP                |            | 1 / 4 HBP                |            |
| Temperature                    | Range (°C / °F)                              | +4 to 60 / +39.2 to 140  |            |                          |            |
|                                | Fluctuation <sup>1)</sup> at 25°C (±°C / °F) | 0.2 / 0.36               |            |                          |            |
|                                | Variation <sup>1)</sup> at 25°C (±°C / °F)   | 0.5 / 0.9                |            |                          |            |
| Dimension (WxDxH)              | Interior (mm / inch)                         | 600×540×500 / 24×21.3×20 |            | 500×540×940 / 20×21.3×37 |            |
|                                | Exterior (mm / inch)                         | 770×772×1060 / 30×30×42  |            | 670×760×1680 / 26×30×66  |            |
|                                | Net Weight (Kg / lbs)                        | 108 / 238.1              |            | 145 / 319.7              |            |
| Electrical Requirements (230V) |                                              | 60Hz, 6.9A               | 50Hz, 6.9A | 60Hz, 8.4A               | 50Hz, 8.4A |
| Cat. No.                       |                                              | AAH22061K                | AAH22062K  | AAH22071K                | AAH22072K  |
| Electrical Requirements (120V) |                                              | 60Hz, 10.2A              |            | 60Hz, 12.3A              |            |
| Cat. No.                       |                                              | AAH22063U                |            | AAH22073U                |            |

1) Technical data according to DIN 12880.

# Incubators

## Low Temp. Incubators (Personal Models)

Compact, stackable, energy-efficient, and yet exceptionally reliable low temperature incubators using Peltier technology.

Contrary to conventional compressor-cooled incubators, Peltier Low Temperature Incubators generate little vibration, noise, and heat.

### Operating Features

- Temperature control: +10 °C to 40 °C at ambient temperature of 25 °C.
- Microprocessor PID control.
- Simple calibration and auto-tuning functions.
- Digital timer with Delayed ON/OFF function: 1 min to 99 hr 59 min.
- High temperature limit setting and open door alarm.
- Convenient preset function for 3 most commonly used temperature settings.
- Up to 9 temperature steps and maximum 200 cycles of repetition programmable for each profile.
- Adjustable 3-step fan speed with defrosting time and period control.
- Intuitive control panel with bright LED display (0.1 °C resolution) and touch-sensitive keypad.
- RS-232 interface.



### Constructional Features

- Convenient sample monitoring without affecting chamber temperature via the inner tempered-glass door.
- Environment-friendly insulation material (EPDM) used for safety and convenience. (compliant with ASTM-C534 specification)
- Space-saving design allowing even the smaller (14L) unit to hold two 1000mL Erlenmeyer flasks.

### ILP-02 stackable chambers

- Included Accessories**
- 1 Wire Shelf for ILP-02
  - 2 Wire Shelves for ILP-12

- Optional Accessories**
- Perforated Shelves

see page 84

### Specifications & Ordering Information



| Model                          |                                              | ILP-02                                               |            | ILP-12                        |            |
|--------------------------------|----------------------------------------------|------------------------------------------------------|------------|-------------------------------|------------|
| Chamber Volume (L / cu ft)     |                                              | 14 / 0.5                                             |            | 48 / 1.7                      |            |
| Temperature                    | Range (°C / °F)                              | 10 to 40°C (50–104°F) at ambient temperature of 25°C |            |                               |            |
|                                | Fluctuation <sup>1)</sup> at 25°C (±°C / °F) | 0.1 / 0.18                                           |            |                               |            |
|                                | Variation <sup>1)</sup> at 25°C (±°C / °F)   | 0.5 / 0.9                                            |            | 0.4 / 0.72                    |            |
| Dimension (WxDxH)              | Interior (mm / inch)                         | 315×200×230<br>/ 12.4×7.9×9.1                        |            | 334×334×430<br>/ 13.1×13.1×17 |            |
|                                | Exterior (mm / inch)                         | 430×495×400<br>/ 17×19.4×15.7                        |            | 430×665×620<br>/ 17×26.2×24.4 |            |
|                                | Net Weight (Kg / lbs)                        | 27.5 / 60.6                                          |            | 49 / 108                      |            |
|                                | Electrical Requirements (230V)               | 60Hz, 1.8A                                           | 50Hz, 1.8A | 60Hz, 3.5A                    | 50Hz, 3.5A |
| Cat. No.                       |                                              | AAH24031K                                            | AAH24032K  | AAH24041K                     | AAH24042K  |
| Electrical Requirements (120V) |                                              | 60Hz, 3.4A                                           |            | 60Hz, 6.7A                    |            |
| Cat. No.                       |                                              | AAH24033U                                            |            | AAH24043U                     |            |

1) Technical data according to DIN 12880.

# Incubators

## Low Temp. Incubator (2 & 4-chamber Models)



Please visit [JEIOTECH.com](http://JEIOTECH.com)

For further information on Jeio Tech's Incubator products  
Information is readily available on our website.



IL-11-4C

# Incubators

## Low Temp. Incubator (2 & 4-chamber Models)

Featuring two or four incubation chambers in a single unit, this Low Temperature Incubator is designed to offer an ideal and cost-effective solution for laboratories with limited space and budget.

Superb low temperature incubation performance thanks to the silent HBP compressor cooling system which also reduces water evaporation within the chamber.

### ► Operating Features

- Temperature range: 0°C to 60°C.
- Independent temperature and timer control of each chamber using microprocessor PID.
- Simple calibration and auto-tuning functions
- Digital timer with Delayed ON/OFF function: ranging from 1 min to 99 hr 59 min.
- Three most commonly used temperature settings programmable.
- Up to 9 temperature steps and maximum 200 cycles of repetition programmable for each profile.
- Adjustable 3 step fan speed with defrosting time and period control.
- Intuitive control panel with bright LED display (0.1°C resolution) and touch-sensitive keypad.

※ Temperature change may occur during automatic defrost.



### ► Constructional Features

- Two or four independently controlled 150L chambers (Model IL-11) merged into a single unit for space saving.
- Convenient sample monitoring without affecting chamber temperature via the inner tempered-glass door.
- Detachable shelves and rounded inner chamber corners allowing convenient cleaning.
- Built-in casters for easy transport and installation.

#### IL-11-4C

**Included Accessories**  
**Optional Accessories**  
➤ see page 84

- 2 wire shelves per chamber
- Perforated Shelves

### ► Specifications & Ordering Information



| Model                                |                                              | IL-11-2C                                     | IL-11-4C                                     |
|--------------------------------------|----------------------------------------------|----------------------------------------------|----------------------------------------------|
| Chamber Volume (L / cu ft)           |                                              | 150 / 5.3 x 2 Chambers                       | 150 / 5.3 x 4 Chambers                       |
| Refrigerator (Hp)                    |                                              | 1/8 HBP x 2EA                                | 1/8 HBP x 4EA                                |
| Temperature                          | Range (°C / °F)                              | 0 to 60°C / +32 to 140°F                     |                                              |
|                                      | Fluctuation <sup>1)</sup> at 25°C (±°C / °F) | 0.1 / 0.18                                   |                                              |
|                                      | Variation <sup>1)</sup> at 25°C (±°C / °F)   | 0.5 / 0.9                                    |                                              |
| Dimension (WxDxH)                    | Interior (mm / inch)                         | 600x500x500 / 23.6x19.7x19.7<br>x 2 Chambers | 600x500x500 / 23.6x19.7x19.7<br>x 4 Chambers |
|                                      | Exterior (mm / inch)                         | 760x760x1690<br>/ 29.9x29.9x66.1             | 1500x760x1690<br>/ 59.1x29.9x66.1            |
|                                      | Net Weight (Kg / lbs)                        | 180 / 397                                    | 350 / 772                                    |
| Electrical Requirements (230V, 60Hz) |                                              | 9A                                           | 9A x 2EA                                     |
| Cat. No.                             |                                              | AAH28111K                                    | AAH28011K                                    |
| Electrical Requirements (230V, 50Hz) |                                              | 9A                                           | 9A x 2EA                                     |
| Cat. No.                             |                                              | AAH28112K                                    | AAH28012K                                    |
| Electrical Requirements (120V, 60Hz) |                                              | 16.5A                                        | 16.5A x 2EA                                  |
| Cat. No.                             |                                              | AAH28113U                                    | AAH28013U                                    |

1) Technical data according to DIN 12880.

# Incubators

## Incubated Shakers (Benchtop Models)

### 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

#### Optional Accessories

➔ see page 85-87

- Universal / Dedicated Platforms, Rubber Mats, Universal Attachments
- Flask Clamps, Funnel Clamps
- Test Tube Racks, Spring Wire Racks

※ Above products design can be changed without prior notice.

#### Control Display



# Incubators

## Incubated Shakers (Benchtop Models)

### Operating Features

#### General Control

- Intuitive touch screen LCD controller with easy icons and logical menus.
- Automatic run is available with non-volatile set point memory after power interruption.
- Built-in RS-232 port and USB port for external control and data collection.

#### Shaking Control

- Speed range: 10 to 500 rpm.
- Orbit diameter: 19mm.
- Timer range: 1 min. to 999 hr 59 min.
- Audible/Visible alarm activated by shaking speed deviation.
- Worry-free operation.
  - Automatic shaking speed adjustment in case of excessive workload such as unbalanced load placement, unusual vibrations caused from unstable floor or external shock.
- Shaker protection system against over-current, stalled platform check.

#### Temperature Control

- Temperature range:
  - Amb. +5°C to 80 °C (for IST-3075 / 4075)
  - Amb. -15°C (Min. +15) to 80°C (for IST-3075R / 4075R)
- Microprocessor PID control and auto-tuning.
- Three point temperature calibration.
- Mechanical over-temperature protection device.

### Constructional Features

- Wide speed range even with heavy workload.
  - Equipped with a maintenance-free BLDC motor to generate smooth, quiet, uniform, and yet powerful shaking motion.
- 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.
- Pleasant test environment by the smooth acceleration and deceleration control.
  - Smooth start and smooth stop function prevents chemical spills from flasks or test tubes.
- 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.
- Air-tight silicone door seal to provide excellent temperature uniformity.
- Corrosion resistance stainless steel interior.
- Three step adjustable high-velocity fan ensuring uniform temperature distribution and rapid thermal recovery after door open.
- Environment-friendly CFC-free refrigerant. (for IST-3075R / 4075R)

### Specifications & Ordering Information



| Model                          |                                        | IST-3075                                     |                                                  | IST-3075R                                              |   | IST-4075                                     |                                                  | IST-4075R                                              |  |
|--------------------------------|----------------------------------------|----------------------------------------------|--------------------------------------------------|--------------------------------------------------------|---|----------------------------------------------|--------------------------------------------------|--------------------------------------------------------|--|
| Temperature                    | Min. Temp. (°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 / 8 HBP (220V, 230V)<br>1 / 6 HBP (100V, 120V) |                                                        | - |                                              | 1 / 8 HBP (220V, 230V)<br>1 / 6 HBP (100V, 120V) |                                                        |  |
| Shaking System                 | Motion Type                            | Orbital                                      |                                                  |                                                        |   |                                              |                                                  |                                                        |  |
|                                | Amplitude Size (mm / inch, dia.)       | 19.1 / 0.75                                  |                                                  |                                                        |   |                                              |                                                  |                                                        |  |
|                                | Speed Range (RPM)                      | 10 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<br>15 / 33.1 at 400 rpm |                                                  |                                                        |   | 14 / 30.9 at 500 rpm<br>21 / 46.3 at 400 rpm |                                                  |                                                        |  |
|                                | Volume (L / cu ft)                     | 53 / 1.9                                     |                                                  |                                                        |   | 83 / 2.9                                     |                                                  |                                                        |  |
|                                | Platform (WxD) (mm / inch)             | 350×350 / 13.8×13.8                          |                                                  |                                                        |   | 450×450 / 17.7×17.7                          |                                                  |                                                        |  |
|                                | Internal (WxDxH) (mm / inch)           | 410×410×320 / 16.1×16.1×12.6                 |                                                  |                                                        |   | 510×510×320 / 20.1×20.1×12.6                 |                                                  |                                                        |  |
|                                | Overall (WxDxH) (mm / inch)            | 440×785×510 / 17.3×30.9×20.1                 |                                                  |                                                        |   | 540× 890 ×510 / 21.3×35×20.1                 |                                                  |                                                        |  |
| 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                                            |   | 50/60Hz, 7.5A                                |                                                  | 60Hz, 10.1A                                            |  |
| Cat. No.                       |                                        | AAH23465U                                    |                                                  | AAH23565U                                              |   | AAH23665U                                    |                                                  | AAH23765U                                              |  |

※ Permissible environmental conditions: temperature (15-40°C).

※ Above specifications can be changed without prior notice.

# Incubators

## Incubated Shakers (Floor Standing Models)

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.

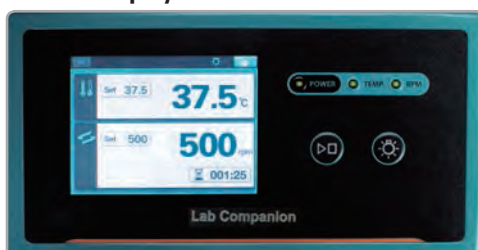


### ISF-7100R

**Optional Accessories** • Universal / Dedicated Platforms, Rubber Mats, Universal Attachments  
 see page 85-87

※ Above products design can be changed without prior notice.

#### Control Display



#### Com. Ports & Temp. Limiters



# Incubators

## Incubated Shakers (Floor Standing Models)

### Operating Features

#### General Control

- Intuitive touch screen LCD controller with easy icons and logical menus.
- Automatic run is available with non-volatile set point memory after power interruption.
- Built-in RS-232 port and USB port for external control and data collection.

#### Shaking Control

- Speed range: 30 to 500 rpm.
- Orbit diameter:
  - 25.4mm for ISF-7100/R
  - 50.8mm for ISF-7200/R
- Timer range: 1 min. to 999 hr 59 min.
- Audible/Visible alarm activated by shaking speed deviation.
- Worry-free operation.
  - Automatic shaking speed adjustment in case of excessive workload such as unbalanced load placement, unusual vibrations caused from unstable floor or external shock.
- Shaker protection system against over-current.

#### Temperature Control

- Temperature range:
  - Amb. +5°C to 80 °C (for ISF-7100 / 7200)
  - Amb. -15°C (Min. +4) to 80°C (for ISF-7100R / 7200R)
- Microprocessor PID control and auto-tuning.
- Three point temperature calibration.
- Triple independent temperature monitor system.
  - Temperature deviation alarm (High/Low)
  - Electronic temperature limiter (High/Low)
  - Mechanical over-temperature limiter (High)

※ Temp. change may occur during automatic defrost. (for ISF-7100R/7200R)

### Constructional Features

- 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.
- 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.
- Pleasant test environment by the smooth acceleration and deceleration control.
  - Smooth start and smooth stop function prevents chemical spills from flasks or test tubes.
- 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 loading and unloading samples in the chamber.
  - Gas spring lid supports providing smooth motion, soft opening and closing.
- Easy-access drain system with a quick disconnect valve offers great convenience to clean up of spills.
- Air-tight silicone door seal with lockable door for safe storage of samples.
- Corrosion resistance stainless steel interior.
- Three step adjustable high-velocity fan ensuring uniform temperature distribution and rapid thermal recovery after door open.
- Sturdy foot caster, beneficial for easy mobility during installation or relocation.
- Environment-friendly CFC-free refrigerant. (for ISF-7100R / 7200R)

### Specifications & Ordering Information



| Model                          |                                        | ISF-7100                                                             |       | ISF-7100R                                              |   | ISF-7200                                     |       | ISF-7200R                                              |  |
|--------------------------------|----------------------------------------|----------------------------------------------------------------------|-------|--------------------------------------------------------|---|----------------------------------------------|-------|--------------------------------------------------------|--|
| Temperature                    | Range (°C / °F)                        | Amb. +5 to 80 / Amb. +9 to 176                                       |       | Amb. -15 (Min. +4) to 80 / Amb. -27 (Min. +7.2) to 176 |   | Amb. +5 to 80 / Amb. +9 to 176               |       | Amb. -15 (Min. +4) to 80 / Amb. -27 (Min. +7.2) 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)                      | -                                                                    | 1/6Hp |                                                        | - |                                              | 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<br>28 / 61.7 at 400 rpm<br>45 / 99.2 at 300 rpm |       |                                                        |   | 23 / 50.7 at 300 rpm<br>35 / 77.2 at 250 rpm |       |                                                        |  |
| Dimension                      | Volume (L / cu ft)                     | 270 / 9.5                                                            |       |                                                        |   |                                              |       |                                                        |  |
|                                | Platform (WxD) (mm / inch)             | 755x520 / 29.7x20.5                                                  |       |                                                        |   |                                              |       |                                                        |  |
|                                | Internal (WxDxH) (mm / inch)           | 894x634x480 / 35.2x25x18.9                                           |       |                                                        |   |                                              |       |                                                        |  |
|                                | Overall (WxDxH) (mm / inch)            | 1128x854x1035 / 44.4x33.6x40.8                                       |       |                                                        |   |                                              |       |                                                        |  |
|                                | 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                                              |  |

※ Permissible environmental conditions: temperature (15-40°C).

※ Above specifications can be changed without prior notice.

# Incubators

## Incubated Shakers (Chamber Models)

Specially designed to be double-stacked on the floor or located on the lab benches for space saving.

Multi-purpose incubated shakers feature a wide range of temperature control and large chamber volume.



### ISS-4075R / ISS-3075

#### Included Accessories

#### Optional Accessories

☛ see page 85-87

- 2 Wire Shelves
- Retractable Foot Caster
- Universal / Dedicated Platforms
- Rubber Mats, Universal Attachments



※ Above products design can be changed without prior notice.

### Control Display



# Incubators

## Incubated Shakers (Chamber Models)

### Operating Features

#### General Control

- Intuitive touch screen LCD controller with easy icons and logical menus.
- Automatic run is available with non-volatile set point memory after power interruption.
- Built-in RS-232 port and USB port for external control and data collection.

#### Shaking Control

- Speed range: 10 to 500 rpm. (10 to 250rpm for the top unit of a stack)
- Orbit diameter: 19.1mm.
- Timer range: 1 min. to 999 hr 59 min.
- Audible/Visible alarm activated by shaking speed deviation.
- Worry-free operation.
  - Automatic shaking speed adjustment in case of excessive workload such as unbalanced load placement, unusual vibrations caused from unstable floor or external shock.
- Shaker protection system against over-current, stalled platform check.

#### Temperature Control

- Temperature range:
  - Amb. +5°C to 80 °C (for ISS-3075 / 4075)
  - Amb. -20°C (Min. +4) to 80°C (for ISS-3075R / 4075R)
- Microprocessor PID control and auto-tuning.
- Three point temperature calibration.
- Triple independent temperature monitor system.
  - Temperature deviation alarm (High/Low)
  - Electronic temperature limiter (High/Low)
  - Mechanical over-temperature limiter (High)

※ Temp. change may occur during automatic defrost. (for ISS-3075R/4075R)

### Constructional Features

- Chambers stackable, up to two levels.
- Wide speed range even with heavy workload.
  - Equipped with a maintenance-free BLDC motor to generate smooth, quiet, uniform, and yet powerful shaking motion.
- 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.
- Pleasant test environment by the smooth acceleration and deceleration control.
  - Smooth start and smooth stop function prevents chemical spills from flasks or test tubes.
- Wide sample monitoring.
  - Clear observation of samples without affecting inner chamber's environment thanks to the transparent viewing window with bright LED lamps.
- Easy-access drain system with a quick disconnect valve offers great convenience to clean up of spills.
- Two adjustable-height shelves provided allow static incubation or refrigeration, which increase storage capacity.
- Air-tight silicone door seal to provide excellent temperature uniformity.
- Corrosion resistance stainless steel interior.
- Three step adjustable high-velocity fan ensuring uniform temperature distribution and rapid thermal recovery after door open.
- Retractable foot caster, beneficial for easy mobility during installation or relocation. (optional)
- Built-in electrical outlet with a safety cover inside the chamber.
- Environment-friendly CFC-free refrigerant. (for ISS-3075R / 4075R)

### Specifications & Ordering Information



| Model                          |                                       | ISS-3075                                     |  | ISS-3075R                                             |  | ISS-4075                       |  | ISS-4075R                                             |  |
|--------------------------------|---------------------------------------|----------------------------------------------|--|-------------------------------------------------------|--|--------------------------------|--|-------------------------------------------------------|--|
| Temperature                    | Min.Temp. (°C / °F)                   | Amb. +5 to 80 / Amb. +9 to 176               |  | Amb. -20 (Min. +4) to 80 / Amb. -36 (Min. +72) to 176 |  | Amb. +5 to 80 / Amb. +9 to 176 |  | Amb. -20 (Min. +4) to 80 / Amb. -36 (Min. +72) 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)                     | -                                            |  | 1/6Hp                                                 |  | -                              |  | 1/6Hp                                                 |  |
| Shaking System                 | Motion Type                           | Orbital                                      |  |                                                       |  |                                |  |                                                       |  |
|                                | Amplitude Size (mm / inch, dia.)      | 19.1 / 0.75                                  |  |                                                       |  |                                |  |                                                       |  |
|                                | Speed Range (RPM)                     | 10 to 500 (Stackable Top :10 to 250)         |  |                                                       |  |                                |  |                                                       |  |
|                                | Accuracy                              | ±1 % of set speed (>100rpm) / ±1 (<100rpm)   |  |                                                       |  |                                |  |                                                       |  |
|                                | Timer                                 | 1 min. to 999 hr 59 min.                     |  |                                                       |  |                                |  |                                                       |  |
|                                | Max. Load (kg / lbs)                  | 10 / 22.0 at 500 rpm<br>21 / 46.3 at 400 rpm |  |                                                       |  |                                |  |                                                       |  |
| Dimension                      | Volume (L / cu ft)                    | 80 / 2.8                                     |  |                                                       |  | 150 / 5.3                      |  |                                                       |  |
|                                | Platform (WxD, mm / inch)             | 350×350 / 13.8×13.8                          |  |                                                       |  | 450×450 / 17.7×17.7            |  |                                                       |  |
|                                | Interior (WxDxH, mm / inch)           | 440×440×418 / 17.3×17.3×16.5                 |  |                                                       |  | 540×540×518 / 21.3×21.3×20.4   |  |                                                       |  |
|                                | Exterior (WxDxH, mm / inch)           | 578×812×854 / 22.8×31.9×33.6                 |  |                                                       |  | 678×892×934 / 26.7×35.1×36.8   |  |                                                       |  |
|                                | Shelves (Standard / Max)              | 2 / 8                                        |  |                                                       |  | 2 / 11                         |  |                                                       |  |
|                                | Net Weight (kg / lbs)                 | 153 / 337.3                                  |  | 160 / 352.7                                           |  | 183 / 403.4                    |  | 190 / 418.9                                           |  |
| Electrical Requirements (230V) |                                       | 60Hz, 5.2A 50Hz, 5.2A                        |  | 60Hz, 7A 50Hz, 7A                                     |  | 60Hz, 5.2A 50Hz, 5.2A          |  | 60Hz, 76A 50Hz, 76A                                   |  |
| Cat. No.                       |                                       | AAH23431K AAH23432K                          |  | AAH23531K AAH23532K                                   |  | AAH23631K AAH23632K            |  | AAH23731K AAH23732K                                   |  |
| Electrical Requirements (120V) |                                       | 60Hz, 9.9A                                   |  | 60Hz, 13.5A                                           |  | 60Hz, 9.9A                     |  | 60Hz, 14.7A                                           |  |
| Cat. No.                       |                                       | AAH23415U                                    |  | AAH23515U                                             |  | AAH23615U                      |  | AAH23715U                                             |  |

※ Permissible environmental conditions: temperature (15-40°C).

※ Above specifications can be changed without prior notice.

# Incubators

## Mini Incubator

Compact design for efficient lab space use.  
Maximum 8 microplates can be inserted to inner chamber for ELISA.



### Operating Features

- Temperature range: from ambient +5 to 65 °C.
- Door opening alarm
- Protection of the main body and the circuit board against overheating.
- Microprocessor PID feedback control of the heater and the fan ensuring temperature uniformity.
- Automatic temperature calibration.
- Ease-of-operation provided by a bright VFD (vacuum fluorescent display), responsive touch buttons, and a jog dial.

### IM-10 with the included Wire Shelves

- Included Accessories** • 2 Wire Shelves  
**Optional Accessories** • Perforated Shelves  
 ➔ see page 84

### Constructional Features

- Compact design for space saving of laboratory of the chamber interior.
- Wire shelves are provided for space saving of inner chamber. Maximum 4 wire shelves supporting 8 microplates is especially suitable for ELISA.
- Push buttons for easy opening of door.
- Transparent polycarbonate window providing a clear view of the chamber interior.

### Specifications & Ordering Information

| Model                                   |                                | IM-10                                |
|-----------------------------------------|--------------------------------|--------------------------------------|
| Temperature                             | Range (°C / °F)                | Amb. +5 to 65 / Amb. +9 to 149       |
|                                         | Fluctuation at 37°C (±°C / °F) | 0.5 / 0.9                            |
|                                         | Variation at 37°C (±°C / °F)   | 0.5 / 0.9                            |
| Dimension                               | Volume (L / cu ft)             | 10 / 0.4                             |
|                                         | Wire Shelf (WxD) (mm / inch)   | 247 x 247 / 9.7 x 9.7                |
|                                         | Internal (WxDxH) (mm / inch)   | 278 x 262 x 160 / 11 x 10.4 x 6.3    |
|                                         | External (WxDxH) (mm / inch)   | 400 x 410 x 264 / 15.7 x 16.1 x 10.4 |
|                                         | Net Weight (Kg / lbs)          | 12.8 / 28.2                          |
| Electrical requirements (230V, 50/60Hz) |                                | 1.0A                                 |
| Cat. No.                                |                                | AAH24315K                            |
| Electrical requirements (120V, 50Hz)    |                                | 2.1A                                 |
| Cat. No.                                |                                | AAH24316U                            |

1) Technical data according to DIN 12880.

# Incubators

## Hybridization Oven

Equipped with a precise rocker, this unit is offering ideal reproducibility for various molecular biology applications such as nucleic acid hybridization, Western, immunoblotting, immunoprecipitation, etc.

### ► Shaking Features

- Rocking motion: Tilt 8.5°.
- Speed range: 5 to 50 rpm.

### ► Operating Features

- Temperature range: from ambient +5 to 65 °C
- Audible and visual alarms are activated:
  - When preset temperature limit is reached.
  - When each step of any programmed mode is terminated.
  - When low humidity level is detected by the sensor.
  - When the door is open.
- Door opening and low humidity alarm.
- Over temperature limit protection.
- Microprocessor PID feedback control of the heater and the fan ensuring temperature uniformity.
- Automatic temperature calibration.
- Ease-of-operation provided by a bright VFD, responsive touch buttons, and a jog dial.
- Memory function of programmed protocols allowing relevant parameters (such as temperature, rocking speed, time, etc.) of each protocol step to be stored.
  - Up to 10 protocols allowed for memory storage.
  - Up to 10 steps allowed for each protocol.



HO-10 with the included Water Tray

### ► Constructional Features

- Compact design for efficient lab space utilization.
- Transparent polycarbonate window providing a clear view of the chamber interior.
- Built-in sliding shelf for quick and convenient insertion or removal of samples.
- Sticky pad on sliding shelf for preventing accidental movement or spills of samples during operation.
- Drying function for the hybridization and washed membranes or strips.

### ► Specifications & Ordering Information

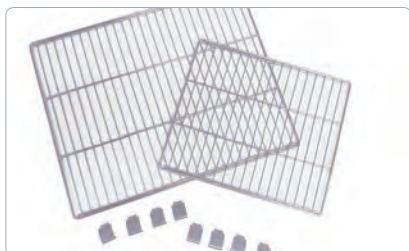
| Model                                             |                                        | HO-10                                |
|---------------------------------------------------|----------------------------------------|--------------------------------------|
| Temperature                                       | Range (°C / °F)                        | Amb. +5 to 65 / Amb. +9 to 149       |
|                                                   | Fluctuation at 50 °C, 9RPM (± °C / °F) | 0.5 / 0.9                            |
|                                                   | Variation at 50 °C, 9RPM (± °C / °F)   | 0.5 / 0.9                            |
| Shaking System                                    | Motion Type                            | Rocking Motion                       |
|                                                   | Speed Range (RPM)                      | 5 to 50                              |
|                                                   | Tilt Angle                             | 8.5°±1                               |
|                                                   | Max. Load (kg / lbs)                   | 1 / 2.2                              |
| Dimension                                         | Volume (L / cu ft)                     | 10 / 0.4                             |
|                                                   | Sliding Shelf (WxD) (mm / inch)        | 256 x 198 / 10.1 x 7.8               |
|                                                   | Internal (WxDxH) (mm / inch)           | 278 x 262 x 160 / 11 x 10.4 x 6.3    |
|                                                   | External (WxDxH) (mm / inch)           | 400 x 410 x 264 / 15.7 x 16.1 x 10.4 |
|                                                   | Net Weight (Kg / lbs)                  | 14 / 30.9                            |
| Electrical requirements (230V, 60 <sup>Hz</sup> ) |                                        | 1.2A                                 |
| Cat. No.                                          |                                        | AAH1B011K                            |
| Electrical requirements (230V, 50 <sup>Hz</sup> ) |                                        | 2.4A                                 |
| Cat. No.                                          |                                        | AAH1B012K                            |

1) Technical data according to DIN 12880.

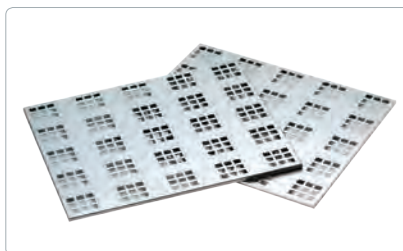
# Incubators

## Accessories & Options

### for Incubators



Wire Shelves



Perforated Shelves



Universal Platforms

### Wire Shelves

Stainless steel and electropolished shelves are readily removed without using tools for easy cleaning.

| Cat. No. | Description |         |                     | Suitable for |
|----------|-------------|---------|---------------------|--------------|
|          | Included    | Maximum | WxL (mm / inch)     |              |
| EDA8136  | 2           | 8       | 366×316 / 14.4×12.4 | IB-05G       |
| EDA8135  | 2           | 12      | 446×366 / 17.6×14.4 | IB-15G       |
| EDA8137  | 2           | 12      | 576×419 / 22.7×16.5 | IB-25G       |
| EDA8136  | 2           | 11      | 366×316 / 14.4×12.4 | IB-01E       |
| EDA8220  | 2           | 14      | 466×490 / 17.6×19.3 | IB-11E       |
| EDA8219  | 2           | 15      | 566×466 / 22.3×17.6 | IB-21E       |
| EDA8136  | 4           | 16      | 366×316 / 14.4×12.4 | IB-02G-2C    |
|          | 8           | 32      |                     | IB-02G-4C    |
| EDA8219  | 2           | 12      | 566×466 / 22.3×17.6 | IL-11 / 11A  |
|          | 4           | 24      |                     | IL-11-2C     |
|          | 8           | 48      |                     | IL-11-4C     |
| EDA8220  | 3           | 26      | 466×490 / 17.6×19.3 | IL-21 / 21A  |
| EDA8223  | 1           | 6       | 195×310 / 7.7×12.2  | ILP-02       |
| EDA8221  | 2           | 11      | 305×299 / 12×11.8   | ILP-12       |
| EDA8235  | 2           | 8       | 416×406 / 16.4×16.0 | ISS-3075 / R |
| EDA8233  | 2           | 11      | 516×506 / 20.3×19.9 | ISS-4075 / R |
| EDA8244  | 2           | 5       | 247×247 / 9.7×9.7   | IM-10        |

### Perforated Shelves

Stainless steel shelves are readily removed without using tools for easy cleaning.

| Cat. No. | Description |                     | Suitable for |
|----------|-------------|---------------------|--------------|
|          | Maximum     | WxL (mm / inch)     |              |
| AAA12531 | 8           | 366×316 / 14.4×12.4 | IB-05G       |
| AAA12532 | 12          | 446×366 / 17.6×14.4 | IB-15G       |
| AAA12535 | 12          | 576×419 / 22.7×16.5 | IB-25G       |
| AAA12531 | 11          | 366×316 / 14.4×12.4 | IB-01E       |
| AAA22522 | 14          | 466×490 / 17.6×19.3 | IB-11E       |
| AAA22521 | 15          | 566×466 / 22.3×17.6 | IB-21E       |
| AAA12531 | 16          | 366×316 / 14.4×12.4 | IB-02G-2C    |
|          | 32          |                     | IB-02G-4C    |
| AAA22521 | 12          | 566×466 / 22.3×17.6 | IL-11 / 11A  |
|          | 24          |                     | IL-11-2C     |
|          | 48          |                     | IL-11-4C     |
| AAA22522 | 26          | 466×490 / 17.6×19.3 | IL-21 / 21A  |
| AAA24501 | 6           | 195×310 / 7.7×12.2  | ILP-02       |
| AAA24502 | 11          | 305×299 / 12×11.8   | ILP-12       |
| AAA24511 | 5           | 247×247 / 9.7×9.7   | IM-10        |

### Stacking Kits

Stackable up to 2 units using exclusive stacking kits for space saving. (for IB-G and IB-E Models only)

| Cat. No. | Description                          | Suitable for |
|----------|--------------------------------------|--------------|
| AAA21521 | Stacking kits for stackable chambers | IB-05G       |
| AAA21522 | Stacking kits for stackable chambers | IB-15G       |
| AAA21523 | Stacking kits for stackable chambers | IB-25G       |
| AAA26501 | Stacking kits for stackable chambers | IB-01E       |
| AAA26502 | Stacking kits for stackable chambers | IB-11E       |
| AAA26503 | Stacking kits for stackable chambers | IB-21E       |

# Incubators

## Accessories & Options

### for Incubated Shakers



Flask Clamps



Plastic Clamps (Plastic)



Funnel Clamps

### ► Universal Platforms, Flask Clamps, and 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<br>ISF-7200/R | ISS-3075/R  | ISS-4075/R  |
|------------------------|----------|------------------------|------------------------------|-------------|--------------------------|-------------|-------------|
| Universal platform     | Cat.No.  |                        | AAA23501-V1                  | AAA23502-V1 | AAA23505                 | AAA31501-V1 | AAA31502-V1 |
| Flask clamps           |          | Erlenmeyer flask size  | Max. mountable flask clamps  |             |                          |             |             |
|                        | AAA23550 | for 50 mL              | 28                           | 45          | 88                       | 36          | 55          |
|                        | AAA23551 | for 100 mL             | 24                           | 36          | 54                       | 28          | 44          |
|                        | AAA23552 | for 250 mL             | 13                           | 18          | 35                       | 13          | 24          |
|                        | AAA23556 | for 300 mL             | 13                           | 18          | 35                       | 13          | 24          |
|                        | AAA23553 | for 500 mL             | 9                            | 13          | 24                       | 10          | 16          |
|                        | AAA23554 | for 1L                 | 4                            | 7           | 15                       | 5           | 8           |
|                        | AAA23555 | for 2L                 | 2                            | 5           | 11                       | 4           | 5           |
|                        | AAA23557 | for 2.8L               | 1                            | 2           | 6                        | 2           | 4           |
|                        | AAA23558 | for 4L                 | -                            | -           | 6                        | -           | 2           |
|                        | AAA23559 | for 6L                 | -                            | -           | 5                        | -           | 2           |
| Flask clamps (Plastic) |          | Erlenmeyer flask size  | Max. mountable flask clamps  |             |                          |             |             |
|                        | AAA30570 | for 50 mL              | 22                           | 30          | 72                       | 28          | 39          |
|                        | AAA30571 | for 100 ~ 125 mL       | 16                           | 25          | 54                       | 16          | 29          |
|                        | AAA30572 | for 200 mL             | 12                           | 17          | 30                       | 13          | 25          |
|                        | AAA30573 | for 250 mL             | 9                            | 17          | 30                       | 12          | 20          |
|                        | AAA30574 | for 300 mL             | 9                            | 17          | 30                       | 12          | 16          |
|                        | AAA30575 | for 500 mL             | 8                            | 9           | 24                       | 9           | 12          |
|                        | AAA30576 | for 1L                 | 4                            | 8           | 12                       | 5           | 9           |
|                        | AAA30577 | for 2L                 | 2                            | 4           | 6                        | 4           | 5           |
| Funnel clamps          |          | Seperating funnel size | Max. mountable funnel clamps |             |                          |             |             |
|                        | AAA23562 | for 250 mL             | 4                            | 6           | 18                       | 4           | 6           |
|                        | AAA23563 | for 500 mL             | 2                            | 3           | 11                       | 2           | 3           |
|                        | AAA23564 | for 1L                 | -                            | 2           | 9                        | -           | 2           |
|                        | AAA23565 | for 2L                 | -                            | -           | 7                        | -           | -           |

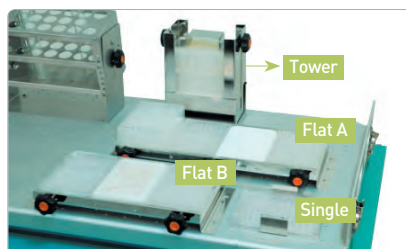
# I Incubators

## Accessories & Options

### for Incubated Shakers



Test Tube Racks



Microplate Holders



Dedicated Platforms

### 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<br>ISF-7200/R | ISS-3075/R  | ISS-4075/R  |
|--------------------|----------|----------------------------------|-----------------------------|-------------|--------------------------|-------------|-------------|
| Universal platform | Cat.No.  |                                  | AAA23501-V1                 | AAA23502-V1 | AAA23505                 | AAA31501-V1 | AAA31502-V1 |
| Test tube racks    |          | Test tube size                   | Mountable capacity of rack* |             |                          |             |             |
|                    | AAA23581 | for 86 test tubes, Ø8mm / Ø0.3"  | 2                           | 4           | 9                        | 2           | 4           |
|                    | AAA23582 | for 86 test tubes, Ø10mm / Ø0.4" |                             |             |                          |             |             |
|                    | AAA23583 | for 58 test tubes, Ø12mm / Ø0.5" |                             |             |                          |             |             |
|                    | AAA23584 | for 58 test tubes, Ø14mm / Ø0.6" |                             |             |                          |             |             |
|                    | AAA23585 | for 32 test tubes, Ø17mm / Ø0.7" |                             |             |                          |             |             |
|                    | AAA23586 | for 19 test tubes, Ø25mm / Ø1.0" |                             |             |                          |             |             |
|                    | AAA23587 | for 10 test tubes, Ø30mm / Ø1.2" |                             |             |                          |             |             |
|                    | AAA23594 | for 10 test tubes, Ø35mm / Ø1.4" |                             |             |                          |             |             |
|                    | AAA23593 | for 4 test tubes, Ø50mm / Ø1.9"  |                             |             |                          |             |             |

\* 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<br>ISF-7200/R | ISS-3075/R  | ISS-4075/R  |
|--------------------|----------|------------------------|-----------------------------------|-------------|--------------------------|-------------|-------------|
| Universal platform | Cat.No.  |                        | AAA23501-V1                       | AAA23502-V1 | AAA23505                 | AAA31501-V1 | AAA31502-V1 |
| Microplate holders |          | Microplate holder type | Max. mountable microplate holders |             |                          |             |             |
|                    | AAA23654 | Single                 | 7                                 | 12          | 25                       | 8           | 15          |
|                    | AAA23651 | Tower                  | 5                                 | 7           | 22                       | 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.

### 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<br>ISF-7200/R | ISS-3075/R | ISS-4075/R |
|---------------------|---------|-----------------------------------------|------------|------------|--------------------------|------------|------------|
| Dedicated platforms | Cat.No. | Universal platform & 250mL flask clamps | AAA23611   | AAA23621   | AAA23634                 | AAA31551   | AAA31561   |
|                     |         | No. of flask clamps                     | 13         | 18         | 35                       | 13         | 24         |
|                     |         | Universal platform & 500mL flask clamps | AAA23612   | AAA23622   | AAA23635                 | AAA31552   | AAA31562   |
|                     |         | No. of flask clamps                     | 9          | 13         | 24                       | 10         | 16         |

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

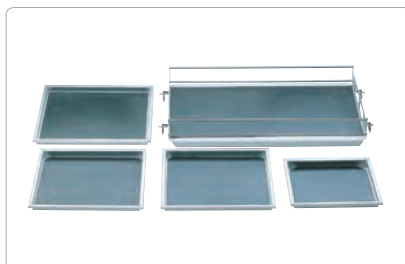
# Incubators

## Accessories & Options

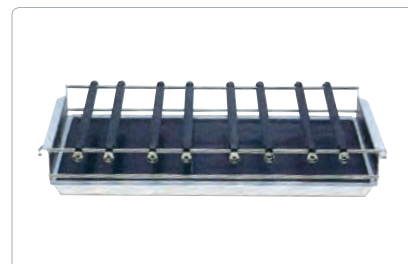
### for Incubated Shakers



Spring Wire Racks



Rubber Mats



Universal Attachments

### 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<br>ISF-7200/R | ISS-3075/R  | ISS-4075/R  |
|-------------------|-----------------------|-----------------------|-------------|--------------------------|-------------|-------------|
| Spring wire racks | Cat.No.               | AAA23521-V1           | AAA23522-V1 | 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           |

### Rubber Mats

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

| Model    | IST-3075/R | IST-4075/R | ISF-7100/R<br>ISF-7200/R | ISS-3075/R | ISS-4075/R |
|----------|------------|------------|--------------------------|------------|------------|
| Cat. No. | AAA23531   | AAA23532   | AAA23534                 | AAA31531   | AAA31532   |

### 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.

| Model    | IST-3075/R | IST-4075/R | ISF-7100/R<br>ISF-7200/R | ISS-3075/R | ISS-4075/R |
|----------|------------|------------|--------------------------|------------|------------|
| Cat. No. | AAA31511   | AAA31512   | AAA23505                 | AAA31511   | AAA31512   |

### Retractable Foot Caster

| Cat. No. | Description (WxDxH) (mm / inch) | Suitable for     |
|----------|---------------------------------|------------------|
| AAA23801 | 700x733x145 / 27.6x28.9x5.7     | ISS-3075 / 3075R |
| AAA23802 | 800x813x225 / 31.5x32x8.9       | ISS-4075 / 4075R |

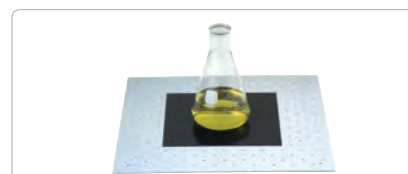


※ Above products design is subject to change.

### 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 | 200x200x5 / 7.9x7.9x0.2         |



\* Lab Sticker need to be mounted on an universal platform which is sold separately.