

Made to Order

# Peltier-Type Thermoelectric Bath

Accurately controls the temperature of liquid in the bath.

Square type is newly added to the product lineup.

Temperature stability

$\pm 0.02^{\circ}\text{C}$  to  $\pm 0.03^{\circ}\text{C}$

Compact  
Lightweight

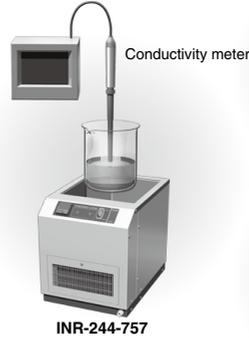
22 kg (INR-244-757)

Current consumption 3.5 A to 6 A

Power supply voltage 100 VAC to 240 VAC  
(Except for some models)



## Application Examples



Temperature control of sample and reagent



Temperature control of source gas for MO-CVD or diffusion furnace



## Related Products

○ Fluoropolymer piping equipment  
Refer to the Best Pneumatics No. 9 for details.

○ Process gas equipment

Fittings *LQ1/LQ3 Series*



Bore through connector *LQHB Series*



Tubing *TL/TLM Series*



Regulator **P.666**



Diaphragm valve **P.758**



## Variations

| Model | Usable constant temperature liquid                                      | Cooling method | Cooling capacity | Tank capacity | Temperature range | Temperature stability      |
|-------|---|----------------|------------------|---------------|-------------------|----------------------------|
|       | Water   | Water-cooled   | 140 W            | Approx. 10 L  | 0 to 60°C         | $\pm 0.03^{\circ}\text{C}$ |
|       |   |                | 320 W            |               |                   |                            |
|       | Ethylene glycol aqueous solution  | Water-cooled   | 320 W            | Approx. 23 L  | 0 to 60°C         | $\pm 0.03^{\circ}\text{C}$ |
|       |   |                |                  | Approx. 39 L  |                   |                            |
|       | Fluorinated fluid (Square type can be used only at normal temperature.) | Air-cooled     | 220 W            | Approx. 17 L  | 0 to 60°C         | $\pm 0.03^{\circ}\text{C}$ |
|       |   |                |                  |               |                   |                            |
|       |   | Water-cooled   | 140 W            | Approx. 3 L   | -15 to 60°C       | $\pm 0.02^{\circ}\text{C}$ |
|       |   |                |                  | 280 W         |                   |                            |
|       |   |                |                  |               |                   |                            |
|       |   |                |                  |               |                   |                            |

HR8

HR8

090

HR8

100/150

HRSH

090

HRSH

HRSE

HRSE

HRZ

HRZ

HRZD

HRW

HRW

HECR

HECR

HEC

HEC

HEB

HEB

HEB

HEB

HEB

HEB

HEA

HEA

IDH

IDH

## Peltier-Type Thermoelectric Bath Lineup

| Specifications             | Square type, water-cooled            |             |                                   |             |
|----------------------------|--------------------------------------|-------------|-----------------------------------|-------------|
|                            | INR-244-745                          | INR-244-743 | INR-244-747                       | INR-244-736 |
| Model                      |                                      |             |                                   |             |
| Cooling method             | Peltier, Water-cooled                |             | Peltier, Water-cooled             |             |
| Cooling capacity*          | 140 W (at 20°C Water)                |             | 320 W (at 20°C Water)             |             |
| Dimensions (W x D x H)     | 266 x 376 x 400 mm                   |             | 266 x 376 x 400 mm                |             |
| Tank capacity (W x D x H)  | 216 x 216 x 250 mm (Approx. 10 L)    |             | 216 x 216 x 250 mm (Approx. 10 L) |             |
| Weight                     | Approx. 15.5 kg                      |             | Approx. 16.5 kg                   |             |
| Power supply voltage range | 100 VAC to 240 VAC                   |             | 100 VAC to 240 VAC                |             |
| Rated current (at 100 VAC) | 3.5 A                                |             | 5.5 A                             |             |
| Liquid temperature range   | 0 to 60°C                            |             | 0 to 60°C                         |             |
| Temperature stability      | ±0.03°C                              |             | ±0.03°C                           |             |
| Communications             | RS-232C                              | RS-485      | RS-232C                           | RS-485      |
| Safety standards           | CE marking, UL (NRTL) standard, RoHS |             |                                   |             |



(INR-244-736)

| Specifications             | Square type, water-cooled            |             |                                   |             |
|----------------------------|--------------------------------------|-------------|-----------------------------------|-------------|
|                            | INR-244-746                          | INR-244-734 | INR-244-749                       | INR-244-748 |
| Model                      |                                      |             |                                   |             |
| Cooling method             | Peltier, Water-cooled                |             | Peltier, Water-cooled             |             |
| Cooling capacity*          | 320 W (at 25°C Water)                |             | 320 W (at 25°C Water)             |             |
| Dimensions (W x D x H)     | 350 x 510 x 400 mm                   |             | 350 x 510 x 550 mm                |             |
| Tank capacity (W x D x H)  | 300 x 350 x 250 mm (Approx. 23 L)    |             | 300 x 350 x 400 mm (Approx. 39 L) |             |
| Weight                     | Approx. 21 kg                        |             | Approx. 25 kg                     |             |
| Power supply voltage range | 100 VAC to 240 VAC                   |             | 100 VAC to 240 VAC                |             |
| Rated current (at 100 VAC) | 5.5 A                                |             | 5.5 A                             |             |
| Liquid temperature range   | 0 to 60°C                            |             | 0 to 60°C                         |             |
| Temperature stability      | ±0.03°C                              |             | ±0.03°C                           |             |
| Communications             | RS-232C                              | RS-485      | RS-232C                           | RS-485      |
| Safety standards           | CE marking, UL (NRTL) standard, RoHS |             |                                   |             |



(INR-244-749)

| Specifications             | Square type, air-cooled                         |
|----------------------------|---|
|                            | INR-244-757                                     |
| Model                      |   |
| Cooling method             | Peltier, Air-cooled                             |
| Cooling capacity           | 220 W (at 25°C Water, Ambient temperature 25°C) |
| Dimensions (W x D x H)     | 350 x 460 x 395 mm                              |
| Tank capacity (W x D x H)  | 300 x 290 x 200 mm (Approx. 17 L)               |
| Weight                     | Approx. 22 kg                                   |
| Power supply voltage range | 100 VAC to 240 VAC                              |
| Rated current (at 100 VAC) | 6 A   |
| Liquid temperature range   | 0 to 60°C                                       |
| Temperature stability      | ±0.03°C   |
| Communications             | RS-232C   |
| Safety standards           | RoHS  |



| Specifications             | Round type, water-cooled/Remote controller |                               |
|----------------------------|--|-------------------------------|
|                            | HEBC002-WA10/HEBC002-WB10                  |                               |
| Model                      |  |                               |
| Cooling method             | Peltier, Water-cooled                      |                               |
| Cooling capacity*          | 140 W (at 25°C Water)                      |                               |
| Dimensions (W x D x H)     | Liquid tank 200 x 207 x 332 mm             | Controller 250 x 300 x 180 mm |
| Tank capacity              | ø130 x 188 mm (Approx. 3 L)                | —                             |
| Weight                     | Approx. 8.5 kg                             | Approx. 6.5 kg                |
| Power supply voltage range | 100 VAC to 240 VAC                         |                               |
| Rated current (at 100 VAC) | 4 A  |                               |
| Liquid temperature range   | -15 to 60°C                                |                               |
| Temperature stability      | ±0.02°C                                    |                               |
| Communications             | RS-485/RS-232C                             |                               |
| Safety standards           | CE marking, UL (NRTL) standard, RoHS       |                               |



| Specifications             | Round type, water-cooled/Remote controller |                               |
|----------------------------|--|-------------------------------|
|                            | INR-244-696A                               |                               |
| Model                      |  |                               |
| Cooling method             | Peltier, Water-cooled                      |                               |
| Cooling capacity*          | 280 W (at 25°C Water)                      |                               |
| Dimensions (W x D x H)     | Liquid tank 240 x 240 x 350 mm             | Controller 220 x 330 x 123 mm |
| Tank capacity              | ø170 x 202 mm (Approx. 5.5 L)              | —                             |
| Weight                     | Approx. 12 kg                              | Approx. 5 kg                  |
| Power supply voltage range | 200 VAC to 220 VAC                         |                               |
| Rated current (at 200 VAC) | 5 A  |                               |
| Liquid temperature range   | -15 to 60°C                                |                               |
| Temperature stability      | ±0.02°C                                    |                               |
| Communications             | RS-485                                     |                               |
| Safety standards           | RoHS                                       |                               |



\* Conditions: Facility water temperature 20°C, flow rate 5 L/min, ambient temperature 25°C