

NEW

Dry Thermo Unit DTU-R/Cool Thermo Unit CTU-R

The aluminum block Bath that heats and cools Microtubes, Centrifuge tubes, etc. Fast temp. transition with thin block. Cooled-type CTU with CFC-free.

• "Guide to custom-made aluminum block" --> P.119



Features

- Simple operation for easy and safe use by everyone
- For 2 pcs "Half block" and 1 pc "Full block"
- Possible for Temp. control from 0°C [CTU-R]

Applications

- DNA Ligation at low temp. [CTU-R]
- Enzyme reactions
- Heat denaturation of DNA and RNA

Simple operation

There are no complicated operations such as program functions or timers, so anyone can easily set and operate the system.

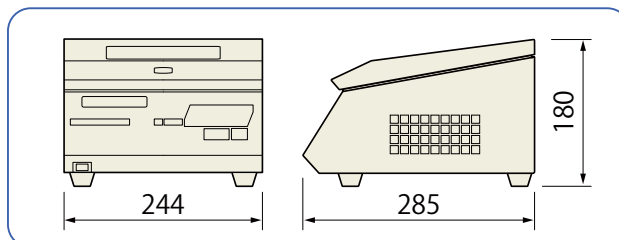
Electronic cooling with Peltier element [CTU-R only]

CTU-R uses electronic cooling with Peltier elements, eliminating the need to inspect for refrigerant gas leaks.

Memory functions

A memory function allows you to quickly recall frequently used temperatures.

Dimensions



Please prepare an electrical adapter compatible with your country for use.

| Model | DTU-R | CTU-R |
|---------------------------|--|--------------------|
| Ambient temperature | + 5°C to + 30°C (*1) | |
| Temperature range | + 5°C above Room temperature to + 105°C (*2) | 0°C to +105°C (*3) |
| Temp. control accuracy | ±0.1°C to ±0.2°C (*4) | |
| Capacity | Half block x 2 pcs or Full block x 1 pc | |
| Temp. Display | Digital | |
| Heating/Cooling method | Heater, Heat dissipation by fan | Peltier element |
| Safe devices | Fuse, Overvoltage/Overcurrent/Overheat protection | |
| Safe protections | Non-volatile memory error, Sensor error Sample protection (High temp.), Sample protection (Low temp.: CTU-R only) | |
| Dimensions (WxDxH)/Weight | 244 x 285 x 180 mm, Approx. 6 kg (DTU-R), Approx. 5.5 kg (CTU-R) | |
| Power supply | AC 100 to 240 V | |
| Standard accessories | Power cord, Hook handle, Fuse (built-in fuse holder) | |

(*1) The specifications may not be met when the hood is open, ambient above 30°C, or in low-temperature environment. (*2) The maximum operating temperature is 80°C above Room temperature. (*3) The lowest operating temperature is 30°C below Room temperature when cooling and the maximum is 80°C above Room temperature. (*4) Values are for an operating temperature around +25°C.

Optional parts: Half block for Microtubes

| Model | Capacity | Hole depth | Dimensions/Remarks |
|----------|------------------------------------|----------------|--|
| OB-0648 | 0.1/0.2 mL x 48 pcs (8-Tube Strip) | 15 mm | 67.5 x 93 x 35H mm (50H mm) Some tubes may not be closely contacted to the holes depending on those sizes. Self-stand tubes cannot be used. |
| OB-0835 | 0.5 mL x 35 pcs | 24.5 mm | |
| OB-1120A | 1.5 mL x 20 pcs | 34 mm | |
| OB-1120B | 2.0 mL x 20 pcs | 34 mm | |
| OB-1515 | 5.0 mL x 6 pcs + 1.5 mL x 8 pcs | 48 mm 34 mm | |

Optional parts: Half block for Micro Vials

| Model | Capacity | Hole depth | Dimensions |
|---------|---------------------|------------|--------------------|
| OB-1220 | 1.5/2.0 mL x 20 pcs | 25 mm | 67.5 x 93 x 35H mm |

Optional parts: Half block for Disposable centrifuge tubes

| Model | Capacity | Hole depth | Dimensions |
|---------------|---------------------|------------|--------------------|
| OB-1612L (*1) | 15 mL x 12 pcs (*2) | 48 mm | 67.5 x 93 x 50H mm |

Optional parts: Half block for Test tubes

| Model | Capacity | Hole depth | Dimensions |
|---------------|-------------------|------------|--------------------|
| OB-1712L (*1) | φ16.5 mm x 12 pcs | 48 mm | 67.5 x 93 x 50H mm |

(*1) The lid cannot be closed while in operation, and the specifications of the temperature range and temperature control accuracy may not be met. (*2) Eppendorf 5 mL tube (0030 119) can also be used.

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TAITEC [General Catalog]

Optional parts: Full block for Microtubes

| Model | Capacity | Hole depth | Dimensions |
|---------|-----------------|------------|---------------------|
| OB-1140 | 1.5 mL x 40 pcs | 34 mm | 135.5 x 93 x 35H mm |

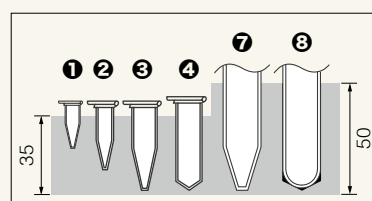
Optional parts: Full block for Microtubes/PCR plate

| Model | Capacity | Hole depth | Dimensions |
|--------------|--|------------|-----------------------|
| OB-0696 (*1) | 0.1/0.2 mL x 96 pcs or PCR plate x 1 pc | 14 mm | 135.5 x 93 x 35.5H mm |

(*1) Some PCR plates cannot be used. Thus, check if it can be used in advance.

Hole shape and fit condition of each vessel

The fit of ⑩ is similar to ③, and ① is almost the same as ① (slightly shallower). Note that ⑨ on the right page cannot be used with DTU/CTU-R.



Dry Thermo Unit DTU-Mini/Cool Thermo Unit CTU-Mini

The compact-sized aluminum block bath that heats and cools Microtubes and Centrifuge tubes. Fast temp. transition with thin block. Cooled-type CTU with CFC-free.

•"Guide to custom-made aluminum block" --> P.119

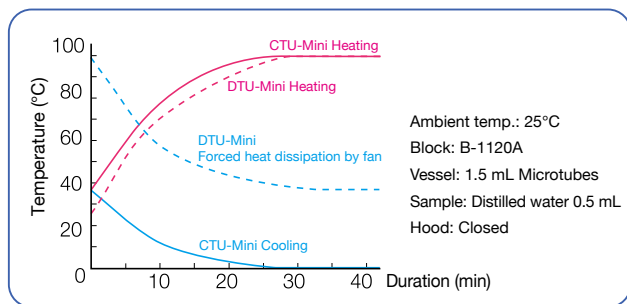
Features

- For 1 pc "Half block". Changeable block (Optional)
- Easy to use, Frequently used temp. can saved in the memory
- Possible for Temp. control from 0°C [CTU-Mini]

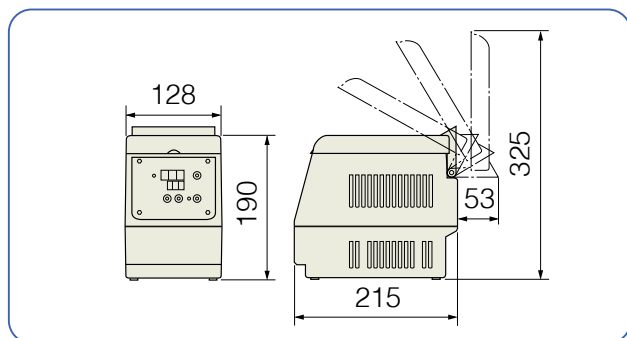
Applications

- Enzyme reactions and Heat denaturation of DNA and RNA
- DNA Ligation at low temp. [CTU-Mini]
- Incubation, etc. in ELISA

Example of Temperature transition time



Dimensions



DTU-Mini

CTU-Mini

Using with Aluminum blocks (Optional)

| Model | DTU-Mini | CTU-Mini |
|---|---|--|
| Settable temperature range | 0°C to +105°C | |
| Temperature range (*) | + 3°C above Room temperature to + 95°C above Room temperature | + 30°C below Room temperature to + 85°C above Room temperature |
| Temp. control accuracy (*) | ±0.1°C to ±0.2°C (Set per 0.1°C) | |
| Capacity | Half block × 1 pc | |
| Temp. transition time at 25°C (Left figure for details) (*) | 37°C --> 70°C: Approx. 10 min 70°C --> 37°C: Approx. 25 min | 37°C --> 70°C: Approx. 10 min 37°C --> 4°C: Approx. 20 min |
| Temp. Display/Other functions | Digital (Preset/Current value), Temperature Memory × 1 | |
| Heating/Cooling method | Heater, Heat dissipation by fan | Peltier element |
| Safe devices/protections | Sample protection (High/Low temp.), Sensor error, Non-volatile memory error, Automatic tuning error, Alarm setting error, Fuse (inside) | |
| Dimensions (W×D×H)/Weight | 128 × 215 × 190 mm, Approx. 1.6 kg (Block is not included) | |
| Power supply | AC100V-240V/1.5A (universal power supply) | |
| Standard accessories | Block extraction hook handle × 1 pc (Blocks are sold separately) | |

(*)The specifications may not be met when the hood is open and/or ambient 30°C.

Optional parts: Half block for Microtubes

| Model | Capacity | Hole depth | Dimensions/Remarks |
|----------|------------------------------------|----------------|--|
| OB-0648 | 0.1/0.2 mL × 48 pcs (8-Tube Strip) | 15 mm | 67.5 × 93 × 35H mm (50H mm) Some tubes may not be closely contacted to the holes depending on those sizes. Self-stand tubes cannot be used. |
| OB-0835 | 0.5 mL × 35 pcs | 24.5 mm | |
| OB-1120A | 1.5 mL × 20 pcs | 34 mm | |
| OB-1120B | 2.0 mL × 20 pcs | 34 mm | |
| OB-1515 | 5.0 mL × 6 pcs + 1.5 mL × 8 pcs | 48 mm 34 mm | |

Optional parts: Half block for Micro Vials

| Model | Capacity | Hole depth | Dimensions |
|---------|---------------------|------------|--------------------|
| OB-1220 | 1.5/2.0 mL × 20 pcs | 25 mm | 67.5 × 93 × 35H mm |

Optional parts: Half block for Disposable centrifuges

| Model | Capacity | Hole depth | Dimensions |
|--------------|--------------------|------------|--------------------|
| OB-1612L (*) | 15 mL × 12 pcs (*) | 48 mm | 67.5 × 93 × 50H mm |

Optional parts: Half block for Test tubes

| Model | Capacity | Hole depth | Dimensions |
|--------------|-----------------------|------------|--------------------|
| OB-1712L (*) | φ16.5 mm × 12 pcs (*) | 48 mm | 67.5 × 93 × 50H mm |

Optional parts: Half block for Microplate (for Mini)

| Model | Capacity | Hole depth | Dimensions |
|---------|------------------------|------------|-------------------|
| OB-0001 | Flat bottom × 1 pc (*) | - | 77 × 116 × 39H mm |

(*)The hood cannot be closed during use, and the specifications of the temperature range and temperature control accuracy may not be met. (*)Eppendorf Safe-Lock Tubes can be used. (*)The temperature transfer is inferior in Round bottom Microplates.

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[General Catalog] **TATEC**

NEW

Constant-temperature Incubator/shaker OD Monitor

For cell culture related products

Shaker

Mixer Rotator Stirrer

Bead beater Ultrasonic homogenizer

Aluminum block Bath Mini-size Bath

Water bath Shaking Water bath Immersion cooler

Hybridization Incubator Constant temperature Chambers

Centrifugal Concentrators Cold Trap

Freeze dryers

Substrate Electroporosis apparatus Blotting device for hybridization

Constant-temperature water circulating system [Chilled]

Appendix