

## Low-high Temperature Circulating Bath

**B**GD series low-high Temperature Circulating Bathes are all in one that heat and cool, it offer an economical solution for putting sample to bathes for constant temperature testing and widely be used for controlling temperature to sample, testing for material, quality controlling and analysis.

- ◆ Water-proof operation panel, high-lighted four digitals LED, 0.1°C showing precision. The equipment can show all kinds of working status, such as heating, cooling, circulating, controlling for external temperature.

- ◆ The whole bath body is made of stainless steel, and use insulation cotton to insulate and keep temperature; water bath and cooling tubes are also made of corrosion-resistance SUS 304 stainless steel, don't produce verdigris and rusting even long use.

- ◆ Can control heating-cooling or circulation function separately or simultaneously,

- ◆ Three methods for setting temperature: 1- Press button to increase or decrease at 0.1°C step; 2- press button for longer time to increase or decrease temperature quickly; 3- Move cursor quickly , change setting values directly.

- ◆ High efficiency compressor combines PID control technology, more energy-efficient, temperature is stabler ( $\pm 0.05^\circ\text{C}$ )

- ◆ With single point calibration function, the user can calibrate the temperature of some point

- ◆ Immersion pressure & suction pump, pressure part pumps out liquid, suction part pump in liquid, achieve a multi-purpouse

- ◆ Small open size is convenient for using external circulating application

- 1) Closed external circulating function: the equipment is equipped a special pump for external circulation and can be used for keep constant temperature for a closed external circulation, such as reaction still, condenser pipes.

- 2) Open external circulating function: With controller for liquid level, the equipment can achieve a constant temperature circulation to those containers which has a big opening size and test more samples.

**Note:** Standard M16x1 connection nets, can use different joints for different pipe diameters of external containers.



BGD 845 Vertical Type



BGD 846 Horizontal Type

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◆ Three operation modes for option under this situation: the power is off accidentally while the equipment is working, when the power is on again: Mode I --The equipment won't work and the setting value can be changed; Mode II -- The equipment will work automatically and the setting values can be changed; Mode III--The equipment would run automatically and the setting values can't be changed.

◆ Use environment friendly, natural cooled methods, conforms to safety grade III and DIN 12876

◆ Double safety protection: The first one is liquid level, when the liquid level is low, the equipment will remind the user to add liquid and it will stop working if no adding liquid; The second one is setting the limiting values of high temperature and low temperature, the equipment would alarm and stop working when working temperature exceeds the setting values ( use only non-combustible liquid ) . The user can find problems directly by the shown alarming codes. The voice of alarm buzzer can be set on or off

◆ Small size, and with handles in the back and forth, user can move the equipment more convenient. The equipment can be put on desk, in fume hoods or on the ground directly.

◆ The optional extended functions as below:

1-Middle-grade PID control technology, 5 figures LED, 0.1℃ display accuracy, higher control precision—reach to  $\pm 0.03$  ℃

2-RS 485 or RS 232 interface to accomplish: 1) Get telecommunication by digital signals, 0-10V、4-20mA analog signals and switching signals, control turning on or off the equipment; 2) Monitor the working status of equipment; 3) Working with host computer on-line

3-3KW heater to rise temperature more quickly

4-Control external temperature, with moveable external temperature sensor PT 100, the user can control external temperature precisely.

5-Monitor software for external temperature--Lab Temp. Show temperature curve in PC , record and export data.

6-Moveable vehicle, place and move the equipment more convenient.

### Main Technical Parameters:

Technical Items → Ordering Information ↓	Temp. Range, ( ℃ )	Temp. Fluctuation ( ℃ )	Temp. Resolution ( ℃ )	Capacity ( L )	Open Size ( L×W, mm )	Overall Size ( L×W×D, mm )	Pump Flux ( L/min )
BGD 845/1008	-10 ~ 100	± 0.05	0.1	8	166 × 140	230 × 400 × 615	12
BGD 845/1020	-10 ~ 100	± 0.05	0.1	20	295 × 297	350 × 570 × 778	22
BGD 845/0520	-5 ~ 100	± 0.05	0.1	20	295 × 297	350 × 570 × 778	22
BGD 845/2005	-20 ~ 100	± 0.05	0.1	5	166 × 38	230 × 400 × 615	12
BGD 845/2020	-20 ~ 100	± 0.05	0.1	20	295 × 297	350 × 570 × 778	22
BGD 845/3005	-30 ~ 100	± 0.05	0.1	5	166 × 38	350 × 450 × 720	22
BGD 846/1008	-10 ~ 100	± 0.05	0.1	8	175 × 145	415 × 410 × 426	12
BGD 846/2008	-20 ~ 100	± 0.05	0.1	8	175 × 145	415 × 410 × 426	12

**Note:** Biuged also accepts any special customized bath, including different temperature range ( low or high ) or different capacity.