

## Heating & Cooling Block

Rapid cooling and heating in centrifuge tubes, sample vials, micro tubes within the broad temperature range of 4 to 95°C . Outstanding temperature compensation function guarantees precise temperature control.

### Features

- > Precision accuracy of  $\pm 0.1^{\circ}\text{C}$  is ensured by its PID controller.
- > Wide temperature control range from 4 to 95°C with rapid cool down and heat-up times.
- > Maximum 9 temperature range-specific calibration.
- > Memory function of programmed protocols allowing relevant parameters of each protocol step to be stored.
  - Up to 10 protocols allowed for memory storage.
  - Up to 10 steps allowed for each protocol.
- > Two types of timer modes:
  - Timer 1 starts only after reaching the set temp.
  - Timer 2 starts right after the timer setting.

### Convenience

- > Cooling is controlled by Peltier elements for an energy efficient compact design.
- > Bright VFD display with responsive touch buttons.
- > Its polypropylene main body is highly chemical-resistant and easy-to-clean.
- > Optimal heat transfer is achieved by the tight coupling design of the main body and the corrosion-resistant anodized aluminum blocks.
- > Transparent lid allows easy sample monitoring and even temperature distribution.
- > Blocks can be easily interchanged by the included block lifter.



### Specifications

Model	<b>WB-350</b>	
Order No.	W3033350	
Control system	Feedback control PID	
Display	VFD(0.1°C resolution)	
Temperature	Range (°C )	4 to 95
	Fluctuation at 37°C ( $\pm^{\circ}\text{C}$ )	0.1
	Variation at 37°C ( $\pm^{\circ}\text{C}$ )	0.5
Safety	Over temp.	Heating plate
	Over current	PCB
		Current limit protection
Dimension (W×D×H)	Interior (mm)	99 x 77.5 x 36
	Exterior (mm)	249×330×168
	Net weight (kg )	5.0
Electrical requirements	230V, 50 / 60Hz/2A	

Permissible environmental conditions: temperature (2-60°C ) and relative humidity (up to 80%)

## Multi-Purpose Heater / Dry Bath

Ideal for simultaneous sample heating of multiple vials or test tubes with uniform and precise temperature control.

### Features

- > Precision accuracy of  $\pm 0.1^{\circ}\text{C}$  is ensured by its PID controller from ambient +  $5^{\circ}\text{C}$  to  $130^{\circ}\text{C}$ .
- > Its built-in temperature limit setting feature (with max.  $0.2^{\circ}\text{C}$  overshooting) allows you to perform highly temperature sensitive reactions such as isothermal amplifications.
- > Automatic power cutoff.
  - If the temperature of the main body exceeds  $150^{\circ}\text{C}$ .
  - If the internal circuit is overheated.
- > Two types of timer modes:
  - Timer 1 starts only after reaching the set temp.
  - Timer 2 starts right after the timer setting.

### Convenience














- > Its polypropylene main body is highly chemical-resistant and easy-to-clean.
- > Optimal heat transfer is achieved by the tight coupling design of the main body and the corrosion-resistant anodized aluminum blocks.
- > Bright VFD display with responsive touch buttons.
- > Transparent lid allows easy sample monitoring and even temperature distribution.
- > Blocks can be easily interchanged by the included block lifter.



### Specifications

Model		WB-350T	WB-350S
Order No.		W3033351	W3033352
Control system		Feedback control PID	Feedback control PID
Display		VFD (0.1°C resolution)	VFD (0.1°C resolution)
Temperature	Range (°C )	Amb. +5 to 130	Amb. +5 to 130
	Fluctuation at 37°C ( $\pm^{\circ}\text{C}$ )	0.1	0.1
	Variation at 37°C ( $\pm^{\circ}\text{C}$ )	0.5	0.5
Safety	Over temp.	Heating plate	Heating plate
		PCB	PCB
	Over current	Current limit protection	Current limit protection
Dimension (W×D×H)	Interior (mm)	154×99×37	154×99×37
	Exterior (mm)	249×330×250	249×330×125
	Net weight (kg )	4.3	3.9
Electrical requirements		230V, 50 / 60Hz/2.8A	230V, 50 / 60Hz/2.8A

Tube Blocks

Block	Order No.	Description	WxDxH (mm)	Mountable Capacity of Blocks		
				WB-350S	WB-350T	WB-350
	W3033001	0.2mL x 96 holes (microtube)	153×98×41	1	1	-
	W3033002	0.5mL x 48 holes (microtube)	98×76.5×41	2	2	1
	W3033003	1.5mL x 48 holes (microtube)	153×98×41	1	1	-
	W3033004	15mL x 15 holes (centrifuge tube)	98×76.5×51	2*	2	1*
	W3033005	50mL x 6 holes (centrifuge tube)	98×76.5×51	2*	2	1*
	W3033006	50mL x 6 holes (centrifuge tube)	98×76.5×87	2	2	1*
	W3033007	Ø10 x 35 holes	98×76.5×51	2*	2	1*
	W3033008	Ø12 x 24 holes	98×76.5×51	2*	2	1*
	W3033009	Ø13 x 24 holes	98×76.5×51	2*	2	1*
	W3033010	Ø15 x 20 holes	98×76.5×51	2*	2	1*
	W3033011	Ø16 x 16 holes	98×76.5×51	2*	2	1*
	W3033012	Ø18 x 12 holes	98×76.5×51	2*	2	1*
	W3033013	Ø20 x 12 holes	98×76.5×51	2*	2	1*

\* Available to use only when the lid is opened.