

WiseTherm®

Dry Bath



- High Performance Dry Bath - Heating
- High Performance Dry Bath - Heating & Cooling

- Designed for Multi-functional Dry Bath.
- Ideal for Enzyme Reactions, Inactivation of Sera, Incubation, and Other Laboratory Procedures.
- Precise Temperature Control : $\pm 0,2$ °C Accuracy.

► Dry Bath - Heating & Cooling



HB-48-Set



**HB-96D-Set
-Dual type**



**HB-96-Set
-Double Size**



HB-R48-Set

► Dry Bath - Heating

“witeg” **WiseTherm® HB** High-performance Dry Bath-Heating

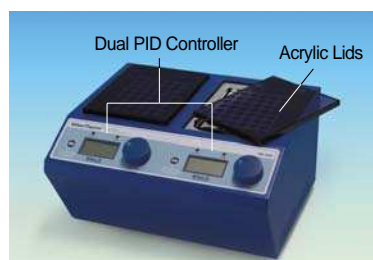
Precise Temperature Control, Modular Blocks, Digital Timer & PID-Control System, Acrylic Lid, up to 150 °C, ±0,2 °C



High Performance Dry Bath-Heating
HB-48-Set (with BLC548 Block)

Patented Control System (No. 10-0554098)

1 or 2 Mode Buttons + Jog Shuttle Switch
Realize “Easy to Use”



Dry Bath-Heating Dual Control
HB-96D-Set (with 2 ea of BLC548 Blocks)



Dry Bath-Heating Package
HB-96-Set (with 2 ea of BLC548 Blocks)

- Designed for Multi-functional Dry Bath
- **Patented Jog-Shuttle Control System** and Digital LCD Display with Back-Light Function
- CE Certified

Application & Features

- * Designed for Multi-functional Dry Bath.
- * Modular Block.
- * Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures.
- * Precise Temperature Control : Ambient +5 °C ~ 150 °C with ± 0,2 °C Accuracy.
- * User's Self-Compensation Function for Temperature. (± 10,0 °C)
- * Over Temperature & Over Current Protection and Sensor Error Detection.
- * Digital Timer Included : up to 99 hr 59 min. (Operation Time + Delay Time)
- * Storage function for the Set Values of Temperature and Timer.
- * Alarm Function : Error Status and Timer-end.
- * Various kind of Blocks are offered. (Optional)
- * Locking Mode Supported for Experimental Safety. (Input to Jog-Shuttle can be Disabled)
- * The Block Extraction Tongs Included for Easy Handling.
- * **Patented Jog-Shuttle Control System** and Digital LCD Display with Back-Light Function.
- * CE Certified.

Specification

Model		HB-48-Set	HB-96-Set	HB-96D-Set
Dimension (w × d × h)	Block (mm)	90 × 120 × 60	(90 × 120 × 60) × 2 ea	(90 × 120 × 60) × 2 ea
	External (mm)	180 × 220 × 155	240 × 255 × 155	285 × 250 × 155
Capacity (1.5ml Tube)		48 ea	96 ea	
Heater		150 W × 2 (Cartridge Heater)	150 W × 4 (Cartridge Heater)	
Temp.	Range	Ambient + 5 °C to 150 °C		
	Accuracy	± 0,1 °C at 37 °C, ± 0,2 °C at 90 °C, ± 0,4 °C at 135 °C		
Heat-Up Speed		Approx. 5 °C/min		
Controller		Single Digital PID Controller	Dual Digital PID Controller	
Display		Digital LCD with Back-Light Function		
Sensor		PT100		
Material	Internal	Stainless Steel (# 304)		
	External	Powder Coated Steel		
	Block	Anodized Aluminum		
Safety Device		Over Temp. and Over Current Protector, Sensor Error Detector		
Timer		99hr 59min (Delay & Continuous Function Included)		
Others		CE Certified Storage Function (Temp., Timer), Locking Mode User Self-compensation Function Alarm (Error Status and Timer-end)		
Packing Dimension (w × d × h) (mm)		400 × 270 × 200		
Gross Weight		4 kg	6 kg	
Power Consumption		300 W	600 W	
Power plug type		Hybrid E+F		
Power Supply*		AC 230 V, 50 / 60 Hz		

* Other Specifications are available upon Customer's Request.

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Ordering Information

- DH.WHB00148 Dry Bath-Heating, **HB-48 Unit Only**
- DH.WHB00149* Dry Bath-Heating Package, **HB-48-Set**
with **BLC548** Block for 1,5 ml Tubes, 48 holes
- DH.WHB00196 Dry Bath-Heating, **HB-96 Unit Only**
- DH.WHB00197* Dry Bath-Heating Package, **HB-96-Set**
with Two **BLC548** Blocks for 1,5 ml Tubes, 96 holes
- DH.WHB00198 Dry Bath-Heating Dual Control, **HB-96D Unit Only**
- DH.WHB00199* Dry Bath-Heating **HB-96D-Set**
with Two **BLC548** Blocks for 1,5 ml tubes, 96 holes

Optional Accessories

- DH.WHB510596* Block, **BLC596**, 0,2 ml PCR Tube, 96 holes
- DH.WHB510570* Block, **BLC570**, 0,5 ml Centrifuge Tube, 63 holes
- DH.WHB511548* , **BLC548**, 1,5 ml , 48 holes
- DH.WHB521248* Block, **BLT248**, for ϕ 12 mm Test Tube, 48 holes
- DH.WHB521335* , **BLT335**, for ϕ 13 mm Test Tube, 30 holes
- DH.WHB521535* , **BLT535**, for ϕ 15 mm Test Tube, 30 holes
- DH.WHB521628* , **BLT628**, for ϕ 16,5 mm Test Tube, 24 holes
- DH.WHB521828* , **BLT828**, for ϕ 18 mm Test Tube, 24 holes
- DH.WHB531515* Block, **BLC515**, 15 ml Conical Tube, 15 holes
- DH.WHB535008* , **BLC008**, 50 ml , 8 holes
- DH.WHB500101 Block Extraction Tongs, **BLE101**
*1 \times Block Extraction Tongs, BLE101 included

※ If you order BLT series Block, please make sure your test tube size is exact same with your order one.

Validation (IQ, OQ & PQ) Service

- DH.WHB30148 Validation Service(IQ, OQ & PQ), **DBV148**, for **HB-48**
- DH.WHB30196 , **DBV196**, for **HB-96**
- DH.WHB30198 , **DBV198**, for **HB-96D**

※ You will find matching tubes in our general catalogue at following pages : 223–225, 263–265, 371, 372.

► *Optional Accessories*



BLE101

“witeg” **Wisetherm® HB-R** High-performance Dry Bath-Heating & Cooling

Precise Temperature Control, Peltier Cooling System, Digital Timer & PID-Control System, Acrylic Lid, $-5\text{ }^{\circ}\text{C} \sim 95\text{ }^{\circ}\text{C}$, $\pm 0,15\text{ }^{\circ}\text{C}$



- Designed for Multi-function Digital Dry Bath-Heating & Cooling
- Patented Jog-Shuttle Control System and Digital LCD Display with Back-Light Function
- CE Certified

Application & Features

- * Designed for Multi-function Digital Dry Bath-Heating & Cooling.
- * Modular Block.
- * Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory procedures.
- * Precise Temperature Control : $-5\text{ }^{\circ}\text{C} \sim 95\text{ }^{\circ}\text{C}$ with $\pm 0,15\text{ }^{\circ}\text{C}$ Accuracy.
- * User's Self-Compensation Function for Temperature.
- * Peltier Cooling System.
- * Digital Timer Included : up to 99 hr 59 min (Operation Time + Delay Time)
- * Storage Function for the Set Values of Temperature and Timer.
- * Over Temperature & Over Current Protection and Sensor Error Detection.
- * Alarm Function : Error Status and Timer-end.
- * Locking Mode Supported for Experimental Safety. (Input to Jog-Shuttle can be Disabled)
- * The Block Extraction Tongs Included for Easy Handling.
- * Various kind of Blocks are Offered. (Optional)
- * Patented Jog-Shuttle Control System and Digital LCD Display with Back-Light Function.
- * CE Certified.

High Performance Dry Bath-Heating & Cooling
HB-R48-Set (with BLC548 Block)

Patented Control System
(No. 10-0554098)

1 or 2 Mode Buttons + Jog Shuttle Switch
Realize “Easy to Use”

Specification

Model		HB - R48-Set
Dimension (w × d × h)	Block (mm)	90 × 120 × 60
	External (mm)	185 × 230 × 220
Capacity (1.5ml Tube)		48 ea
Cooling		Two Peltier Modules
Heater		150 W × 2 (Cartridge Heater)
Temp.	Range	$-5\text{ }^{\circ}\text{C}$ to $95\text{ }^{\circ}\text{C}$
	Accuracy	$\pm 0,15\text{ }^{\circ}\text{C}$ at $37\text{ }^{\circ}\text{C}$, $\pm 0,15\text{ }^{\circ}\text{C}$ at $90\text{ }^{\circ}\text{C}$
Heat-Up Speed		Approx. $5\text{ }^{\circ}\text{C} / \text{min}$
Cool-Down Speed		$2,3\text{ }^{\circ}\text{C} / \text{min}$. between $95\text{ }^{\circ}\text{C}$ to $25\text{ }^{\circ}\text{C}$, $0,5\text{ }^{\circ}\text{C} / \text{min}$. between $25\text{ }^{\circ}\text{C}$ to $-5\text{ }^{\circ}\text{C}$
Controller		Digital PID Controller
Display		Digital LCD Display with Back-Light Function
Sensor		PT100
Material	Internal	Stainless Steel (# 304)
	External	Powder Coated Steel
	Block	Anodized Aluminum
Safety Device		Over Temp. and Over Current Protector, Sensor Error Detector
Timer		99 hr 59 min (Delay & Continuous Function Included)
Option		Blocks and Extraction Tong
Others		CE Certified Storage Function (Temp., Timer), Locking Mode User Self-compensation Function Alarm (Error Status and Timer-end)
Packing Dimension (w × d × h) (mm)		350 × 220 × 310
Gross Weight		10 kg
Power Consumption		450 W
Power plug type		Hybrid E+F
Power Supply*		AC 230 V, 50 / 60 Hz

* Other Specifications are available upon Customer's Request.

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<Continued from... "witeg" WiseTherm® HB-R High-performance Dry Bath-Heating & Cooling >

Ordering Information

DH.WHB00248 Dry Bath-Heating & Cooling, **HB-R48 Unit Only**
DH.WHB00249* Dry Bath-Heating & Cooling Package, **HB-R48-Set**
 with **BLC548** Block for 1,5 ml Tubes, 48holes

Optional Accessories

DH.WHB510596* Block, **BLC596**, 0,2 ml PCR Tube, 96 holes
DH.WHB510570* Block, **BLC570**, 0,5 ml Centrifuge Tube × 63 holes
DH.WHB511548* , **BLC548**, 1,5 ml × 48 holes
DH.WHB521248* Block, **BLT248**, for ϕ 12 mm Test Tube, 48 holes
DH.WHB521335* , **BLT335**, for ϕ 13 mm Test Tube, 30 holes
DH.WHB521535* , **BLT535**, for ϕ 15 mm Test Tube, 30 holes
DH.WHB521628* , **BLT628**, for ϕ 16,5 mm Test Tube, 24 holes
DH.WHB521828* , **BLT828**, for ϕ 18 mm Test Tube, 24 holes

DH.WHB531515* Block, **BLC515**, 15 ml Conical Tube, 15 holes
DH.WHB535008* , **BLC008**, 50 ml , 8 holes

DH.WHB500101 Block Extraction Tongs, **BLE101**
 *1 × Block Extraction Tongs, BLE101 included

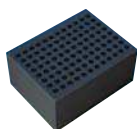
※ If you order BLT series Block, please make sure your test tube size is exact same with your order one.

Validation (IQ, OQ & PQ) Service

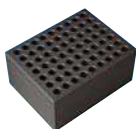
DH.WHB30248 Validation Service(IQ, OQ & PQ), **DBRV248**, for **HB-R48**

※ You will find matching tubes in our general catalogue at following pages : 223–225, 263–265, 371, 372.

► Optional Accessories



BLC596



BLC570



BLC548



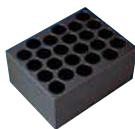
BLT248



BLT335



BLT535



BLT628



BLT828



BLC515



BLC008



BLE101