

ЛАНФОР

ООО "ЛАНФОР РУС"  
195112, г.Санкт-Петербург,  
пр.Малоохтинский, д.68  
Тел/факс: +7 (812) 309-05-12  
+7 (499) 703-20-73  
+7 (343) 236-63-20  
E-mail: zakaz@lanfor.ru  
<http://www.lan-for.ru>

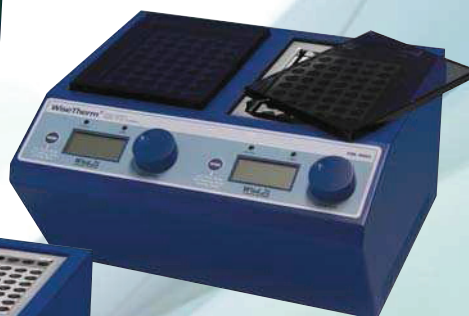
# Dry Bath

- Designed for Multi-functional Dry Block Heater
- User Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature ( $\pm 10.0^{\circ}\text{C}$ )
- Various kind of Blocks are offered (Optional)
- Over Temperature & Over Current Protection and Sensor Error Detection
- Patented Jog-Shuttle Control System and Digital LCD Display with Back-Light Function

## ❖ Dry Bath - Heating



**HB-48-Set**



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



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

## ❖ Dry Bath - Heating & Cooling



**HB-R48-Set**

**“witeg” WiseTherm® HB High-performance Dry Bath, Heating, up to 150°C, ±0,2°C with Digital PID Control, Acrylic Lid, Precise Temperature Control, Modular Blocks, Anodized Aluminum Block**

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

- \* Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures
- \* Precise Temperature Control : ± 0,1°C at 37°C, ± 0,2°C at 90°C, ±0,4°C at 135°C
- \* User Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10,0°C)
- \* Over Temperature & Over Current Protection and Sensor Error Detection
- \* Digital Timer Included : up to 99 hr 59min (Operation Time + Delay Time)
- \* Storage Function of Temperature and Timer setting values
- \* Alarm Function : Error Status and Timer-end
- \* Various kind of Blocks are offered (Optional), \* Modular Block
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
- \* The Block Extraction Tongs and Included for Easy Handling

**Specification**

Models	Single Control System		Dual Control System
	“HB-48-Set”	“HB-96-Set”	“HB-96D-Set”
Controller	Single Digital PID Controller		Dual Digital PID Controller
Capacity (1,5/2ml Tube)	48 Holes × 1,5/2ml Tube	96 Holes × 1,5/2ml Tube	
Heater	150W×2(Cartridge Heater)	150W×4 (Cartridge Heater)	
Dimension	Block (mm)	90 × 120 × h60	(90 × 120 × h60) × 2ea (90 × 120 × h60) × 2ea
	Unit (mm)	180 × 220 × h155	240 × 255 × h155 285 × 250 × h155
Heater	150W×2(Cartridge Heater)	150W×4 (Cartridge Heater)	
Temp. Range, & Accuracy	Ambient +5°C to 150°C, ±0,1°C at 37°C, ±0,2°C at 90°C, ±0,4°C at 135°C		
Heat-Up Speed & Sensor	Approx. 5°C/min, PT100		
Safety Circuit	Over Temp. and Over Current Protector, Sensor Error Detector		
Timer with Alarm	99hr 59min, Alarm (Error Status and Timer - end)		
Display	Digital LCD with Back-Light Function		
Material	Internal & External	Stainless Steel (# 304), and Powder Coated Steel	
	Block	Anodized Aluminum	
Included Standard Acce.	Block “BLC548” for 1,5/2ml Tubes, and Block Tong “BLE101”		
Packing Size	400 × 270 × h200 mm		
Gross Weight	4 kg	6 kg	
Power Consumption	300 W	600 W	
Power plug type	Hybrid E+F		
Power Supply*	AC 230V, 1N~, 50/60Hz		

\* Other Specifications are available upon Customer’s Request.

**Ordering Information**

**(a) Single Control System, available 1 Block**

DH.WHB00149 Dry Bath, Heating, 230V, “HB-48-Set”, with 1,5 / 2ml Block  
 DH.WHB00148 , “HB-48 Unit”, without Block

**(b) Single Control System, available 2 Blocks**

DH.WHB00197 Dry Bath, Heating, 230V, “HB-96-Set”, with 1,5 / 2ml Block  
 DH.WHB00196 , “HB-96 Unit”, without Block

**(c) Dual Control System, available 2 Blocks**

DH.WHB00199 Dry Bath, Heating, 230V, “HB-96D-Set”, with 1,5 / 2ml Block  
 DH.WHB00198 , “HB-96D Unit”, without Block



**(a) Single Control System, Dry Bath, Heating Package-Set “HB-48-Set” with Block “BLC548” for 1,5/2ml Centrifuge Tube ×48 holes**



**(b) Single Control System, Dry Bath, Heating Package-Set “HB-96-Set” with 2 x Block “BLC548” for 1,5/2ml Centrifuge Tube ×48 holes**



**(c) Dual Control System, Dry Bath, Heating Package-Set “HB-96D-Set” with 2 x Block “BLC548” for 1,5/2ml Centrifuge Tube ×48 holes**

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



(a) Single Control System, Dry Bath, Heating Package-Set  
"HB-48-Set" with Block "BLC548"  
for 1,5/2ml Centrifuge Tube × 48 holes

*Optional Interchangeable Blocks*

- DH.WHB510596\* (1) Block, "BLC596", for 0,2ml PCR Tube, 96 holes
- DH.WHB510570\* (2) Block, "BLC570", for 0,5ml Centrifuge Tube × 63 holes
- DH.WHB511548\* (3) , "BLC548", for 1,5/2ml Centrifuge Tube × 48 holes
- DH.WHB521248\* (4) Block, "BLT248", for  $\phi$  12mm Test Tube, 48 holes
- DH.WHB521335\* (5) , "BLT335", for  $\phi$  13mm Test Tube, 30 holes
- DH.WHB521535\* (6) , "BLT535", for  $\phi$  15mm Test Tube, 30 holes
- DH.WHB521628\* (7) , "BLT628", for  $\phi$  16,5mm Test Tube, 24 holes
- DH.WHB521828\* (8) , "BLT828", for  $\phi$  18mm Test Tube, 24 holes
- DH.WHB531515\* (9) Block, "BLC515", for 15ml Conical Tube, 15 holes
- DH.WHB535008\* (10) , "BLC008", for 50ml Conical Tube, 8 holes

- DH.WHB500101 Spare Block Extraction Tong, "BLE101"  
\* 1 × Block Extraction Tongs, BLE101 included



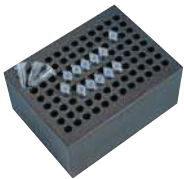
※ If you order BLT series Block, please make sure your test tube size is exact same with your order one.

*Validation (IQ, OQ) Service*

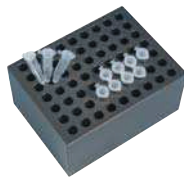
- DH.WHB30148 Validation Service(IQ, OQ), "DBV148", for HB-48
- DH.WHB30196 , "DBV196", for HB-96
- DH.WHB30198 , "DBV198", for HB-96D

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

The Details of 10 Optional Blocks



(1) "BLC596"  
0,2ml PCR Tube × 96 holes



(2) "BLC570"  
0,5ml Centrifuge Tube × 63 holes



(3) "BLC548"  
1,5 / 2ml Centrifuge Tube × 48 holes  
Included in the Package-Set



(4) "BLT248"  
 $\phi$  12mm Tube × 48 holes



(5) "BLT335"  
 $\phi$  13mm Tube × 30 holes



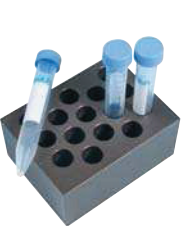
(6) "BLT535"  
 $\phi$  15mm Tube × 30 holes



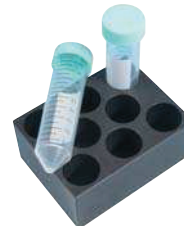
(7) "BLT628"  
 $\phi$  16,5mm Tube × 24 holes



(8) "BLT828"  
 $\phi$  18mm Tube × 24 holes



(9) "BLC515"  
15ml Conical Tube × 15 holes



(10) "BLC008"  
50ml Conical Tube × 8 holes



# “witeg” *WiseTherm*<sup>®</sup> *HB-R* High-performance Dry Bath-Heating & Cooling with Precise Temperature Control, Modular Blocks, Acrylic Lid, Anodized Aluminum Block, -5°C~95°C, ±0,15°C

- Designed for Multi-Function : Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures.
- **Patented Jog-Shuttle Control System** and Digital LCD Display with Back-Light Function
- CE Certified

- \* User Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature
- \* Storage Function of Temperature and Timer setting values
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

## Specification

Model	Heat/Cool Package-Set “HB-R48-Set”	
Capacity (1,5/2ml Tube)	48 holes × 1,5/2ml Centri. Tubes	
Dimension : Unit & Block	185 × 230 × h220mm, and 90 × 120 × h60mm	
Cooling	Two Peltier Modules	
Cool-Down Speed	2,3°C/min. between 95°C to 25°C, 0,5°C/min. between 25°C to -5°C	
Heater and Sensor	150 W × 2 (Cartridge Heater), PT100	
Temp. Range, & Accuracy	-5°C to 95°C, and ±0,1°C at 37°C, ±0,2°C at 90°C	
Heat-Up Speed	Approx. 5°C/min	
Safety Device	Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm	99hr 59min, Alarm (Error Status and Timer - end)	
Display	Digital LCD Display with Back-Light Function	
Controller	Digital PID Controller	
Material	Internal & External	Stainless Steel (#304), and Powder Coated Steel
	Block	Anodized Aluminum
Included Standard Acce.	Block “BLC548” for 1,5/2ml Tubes, and Block Tong “BLE101”	
Packing Size, Gross Weight	350 × 220 × h310mm, 9 kg	
Power Consumption	450 W	
Power plug type	Hybrid E+F	
Power Supply*	AC 230V, 1N~, 50/60Hz	

\* Other Specifications are available upon Customer's Request.

## Ordering Information

### Dry Bath-Heating & Cooling Package-Set, with 1,5/2ml Block

DH.WHB00249 Dry Bath, Heat/ Cool, “HB-R48-Set”, 230V, with 1,5/2ml Block

### Dry Bath-Heating & Cooling Unit Only, without Block

DH.WHB00248 Dry Bath, Heat/ Cool, “HB-R48-Unit”, 230V, without Block

### Optional Interchangeable Blocks

- DH.WHB510596\* (1) Block, “BLC596”, for 0,2ml PCR Tube, 96 holes
- DH.WHB510570\* (2) Block, “BLC570”, for 0,5ml Centrifuge Tube × 63 holes
- DH.WHB511548\* (3) , “BLC548”, for 1,5/2ml Centrifuge Tube × 48 holes
- DH.WHB521248\* (4) Block, “BLT248”, for φ 12mm Test Tube, 48 holes
- DH.WHB521335\* (5) , “BLT335”, for φ 13mm Test Tube, 30 holes
- DH.WHB521535\* (6) , “BLT535”, for φ 15mm Test Tube, 30 holes
- DH.WHB521628\* (7) , “BLT628”, for φ 16,5mm Test Tube, 24 holes
- DH.WHB521828\* (8) , “BLT828”, for φ 18mm Test Tube, 24 holes
- DH.WHB531515\* (9) Block, “BLC515”, for 15ml Conical Tube, 15 holes
- DH.WHB535008\* (10) , “BLC008”, for 50ml Conical Tube, 8 holes

DH.WHB500101 Spare Block Extraction Tong, “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) Service

DH.WHB30248 Validation Service(IQ, OQ), “DBRV248”, for HB-R48



Heat/Cool Package-Set “HB-R48-Set” with Block “BLC548” for 1,5/2ml Centrifuge Tube × 48 holes

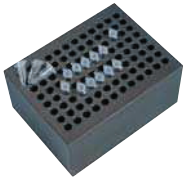
## Included Block in the Package-Set



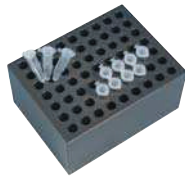
(3) “BLC548”  
1,5/2ml Centrifuge Tube × 48 holes

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

### The Details of 10 Optional Blocks



(1) "BLC596"  
0,2ml PCR Tube × 96 holes



(2) "BLC570"  
0,5ml Centrifuge Tube × 63 holes



(3) "BLC548"  
1,5 / 2ml Centrifuge Tube × 48 holes  
Included in the Package-Set



(4) "BLT248"  
φ 12mm Tube × 48 holes



(5) "BLT335"  
φ 13mm Tube × 30 holes



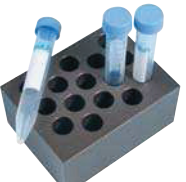
(6) "BLT535"  
φ 15mm Tube × 30 holes



(7) "BLT628"  
φ 16,5mm Tube × 24 holes



(8) "BLT828"  
φ 18mm Tube × 24 holes



(9) "BLC515"  
15ml Conical Tube × 15 holes



(10) "BLC008"  
50ml Conical Tube × 8 holes