



Thermal Control Product Brochure

Digital Dry Bath

The microprocessor controlled Digital Dry Baths offer control over both temperature and time, eliminating the need for an external thermometer or timer.

Used to thaw, boil, incubate and warm samples for different applications in molecular biology, assay preparation, tissue/cell culture, biochemistry, genetics, histology, clinical, environmental and industrial laboratories.

Dry Bath & Thermo mix

Dry bath provides precise temperature for various experiments. Thermo mix also has mixing function, and widely used in various fields such as molecular biology and cell biology, including gene synthesis, gene purification, gene cloning, gene expression, protein expression analysis, enzyme reaction, bacterial growth and so on.

List of models:

Model	Image	Function	Temp. Setting Range	Mixing speed	Blocks	Page
HB60-S		Heating	25°C, 30°C, 37°C, 45°C, 60°C	-	5mL×30+10mL×8	P1
HB120-S/SC		Heating	25°C-120°C	-	0.2mL×54 0.5mL×40 1.5/2mL×40 5/15mL×28 5mL blood collection tube×45 50mL×8 (0.2mL+0.5mL+1.5/2mL) ×18 0.2mL×96 PCR Microplate ELISA Microplate Bead/Water bath	P1
HB105-S1/ S2		Heating	25°C-105°C	-	0.2mL×30 0.5mL×20 1.5mL×20 2mL×20 5mL×12 15mL×12 50mL×4 Bead/Water bath	P1
HB150-S1/ S2		Heating	25°C-150°C	-		P1
HB100-pro		Circular heating	Room temperature -100 °C	-	18X5mL 96X0.2mL 24X0.5mL+30x1.5mL 59X0.5mL 39X1.5mL 39X2mL	P3

List of models:

Model	Image	Function	Temp. Setting Range	Mixing speed	Blocks	Page
H100-Pro		Heating	25°C-100°C	-	0.5mL×24 1.5mL×24 2mL×24 5mL×8(Round/Cone Bottom) 15mL×8 50mL×4 0.2mL×96 PCR Microplate ELISA Microplate	P4
HC110-Pro		Heating&Cooling	-5°C-110°C	-		P8
HCM100-Pro		Heating&Cooling&Mixing	0°C-100°C	200-1500rpm		P8
HM100-Pro		Heating&mixing	15°C-100°C	200-1500rpm		P8
CT4-Pro		Cooling	4°C	-		P9
Mini H100		Heating	25°C-100°C	-	0.2mL×40 0.5mL×24 1.5mL×15 2mL×15 5mL×6 15mL×4 50mL×2	P6
Mini HC100		Heating&Cooling	0°C-100°C	-		P6
Mini HCL100		Heating&Cooling (with hot lid)	0°C-100°C	-		P6

Dry Bath Series

HB105-S1/S2/HB150-S1/S2/HB120-S/SC/HB60-S/H100-Pro

Small footprint. Rapid & accurate temperature control. Overheating protection.
Accommodates various types of tube holders to meet every lab need.



HB105-S1



HB105-S2



HB150-S1



HB150-S2



HB120-S/SC



HB60-S



MiniHCL100



H100-Pro

Features

- Accurate and uniform temperature control
- Digital control and display of time and temperature
- Wide range of temperature control for different applications
- Monitor temperature in real-time, and set timer
- Wide range of heating blocks compatible with most popular lab tubes
- Overheating protection ensures sample and user safety
- Equipped with a lid for heat preservation, and preventing pollution
- User-friendly setting knob for easy and simple operation



HB105-S1 HB105-S2 HB150-S1 HB150-S2

Durable, reliable safe and convenient to use

Features

- Single and double heat block modules available
- Highest temperature up to 150°C
- Buzzer alert when the time is up
- External temperature sensor PT1000



HB120-S/SC/HB60-S

Easy to use, safe and durable

Features

- Low profile - space saving design
- The max heating temperature is 120°C (HB120-S/HB120-SC), and the timer function support available
- Discrete heating temperature levels: 25°C , 30°C, 37°C, 45°C, 60°C (HB60-S)
- 5mL×30+10mL×8 dual purpose heating block
- Temperature calibration function inbuilt for users (HB120-SC)

HB100-Pro

Circular heating block

New

Features

- Fast heating: The room temperature rises to 100°C for less than 10 minutes
- Small size: compact internal structure, smaller footprint
- Accurate temperature control: Temperature control accuracy < 1 °C
- Dual display option: set temperature main display, time main display
- Multiple module options: 6 heating modules can be selected, with tightly arranged holes to accommodate more samples
- Compatible containers: 0.2mL, 0.5mL, 1.5mL, 2mL, 5mL



Specifications	HB100-Pro
Temperature display	LED dot matrix screen
Temperature control range [°C]	Room temperature -100 °C
Temperature display error	±0.5 °C
Temperature stability @ 37 °C	±0.3
Timing range	0-99h59min
Allow relative humidity	< 80%
Input power supply	100-120V, 50/60Hz 200-220V, 50/60Hz
Dimensions [length x width x height]	210×180×130mm
Weight [kg]	0.9kg

Cat. No.18901479

Circular heating module
(18X5mL)



Cat. No.18901477

Circular heating module
(59X0.5mL)



Cat. No.18901478

Circular heating module
(96X0.2mL)



Cat. No.18901476

Circular heating module
(39X1.5mL)



Cat. No.18901480

Circular heating module
(24X0.5mL+30x1.5mL)



Cat. No.18901704

Circular heating module
(39X2mL)





H100-Pro

Digitally accurate with exceptional temperature uniformity

Features

- Customizable user setting program with up to 6 sequential steps
- Temperature calibration function inbuilt for users Magnetic heat block mounting eliminating need of any tools
- Interchangeable sample blocks designed to provide versatility, easy cleaning and disinfecting
- Accurate temperature control of each heating block with lid to minimize the heat loss

Applications

Suitable for clinical laboratories, for sample preparation, Enzyme-substrate reactions, biochemistry tests, serum coagulation tests and many other.



Specifications	H100-Pro	HB105-S1 HB105-S2	HB150-S1 HB150-S2	HB120-S/SC	HB60-S
Temperature range[°C]	Room temp+5-100	Room temp+5-105	Room temp+5-150	Room temp+5-120	Room temp+5-60
Temperature Setting Srange[°C]	0-100	25-105	25-150	25-120	5 gears:25, 30, 37,45,60
Temperature control accuracy[°C]	±0.5	25-90:±0.3 90-105:±0.6	25-90:±0.3 90-150:±0.6	±0.5	±0.5
Temperature uniformity@37°C[°C]	±0.5	±0.2	±0.2	±0.5	±0.3
Power [W]	200	HB105-S1:100 HB105-S2:200	HB150-S1:100 HB150-S2:200	170	160
Time setting range	0min-99h59min	0min-99h59min	0min-99h59min	0min-99h59min	0min-99h59min
External sensor	-	Yes	Yes	-	-
Display	TFT	LED	LED	LED	LED
Voltage,Frequency	110/220V,50/60HZ	110/220V,50/60HZ	110/220V,50/60HZ	110/220V,50/60HZ	110/220V,50/60HZ
External Dimension[WxDxH]	200x235x120	290x210x120	290x210x120	175x290x85	175x290x85
Weight(kg)	7.3	3.2	3.2	3	2.5
Operating temperature[°C]	10-40	10-40	10-40	10-40	10-40
Operating humidity[% RH]	<80	<80	<80	<80	<80



Mini Dry Bath

MiniHCL100/MiniHC100/MiniH100

Portable and option to power by automobile power adapter

Features

- Mini, lightweight, safe with LCD display
- Digital control over both temperature and time
- Built-in user recalibration function guarantees long term temperature accuracy
- Overheating protection
- Optional cooling function
- Interchangeable blocks for a wide variety of test tube sizes
- Mini HCL100 with hot lid to prevent water condensing on the tube cap



Applications

Useful for rapid and uniform heating of biological samples in applications like preservation, denaturation of nucleic acids and proteins, and many other applications.

Specifications	Mini HCL100	Mini HC100	Mini H100
Display	LCD	LCD	LCD
Temperature setting range[°C]	0-100	0-100	25-100
Temperature range [°C]	Room temperature-23~100	Room temperature-23~100	Room temperature+5~100
Temperature control accuracy[°C]	±0.5	±0.5	±0.5
Temperature display accuracy[°C]	0.1	0.1	0.1
Minimum time taken for heating(25°C+100°C)	≤20min	≤20min	≤20min
Minimum time for cooling(20°C-0°C)	≤25min	≤25min	-
Max. Heating Rate	8°C/min	8°C/min	6.5°C/min
Max. Cooling Rate	3°C/min	3°C/min	-
Time setting range	0-999min/0-999sec	0-999min/0-999sec	0-999min/0-999sec
Program Memory	9(2steps for each)	9(2steps for each)	9(2steps for each)
Temperature self-calibration	Support	Support	Support
Error code display	Support	Support	Support
Dimension[WxDxH]	110x162x140mm	110x162x140mm	110x162x140mm
Total Weight [kg]	≤1	≤1	≤1
Voltage,Frequency	100-240V, 50/60Hz or DC12V	100-240V, 50/60Hz or DC12V	100-240V, 50/60Hz or DC12V
Power [w]	60	60	60
Operating temperature[°C]	+10-40	+10-40	+10-40
Operating humidity [% RH]	≤80	≤80	≤80

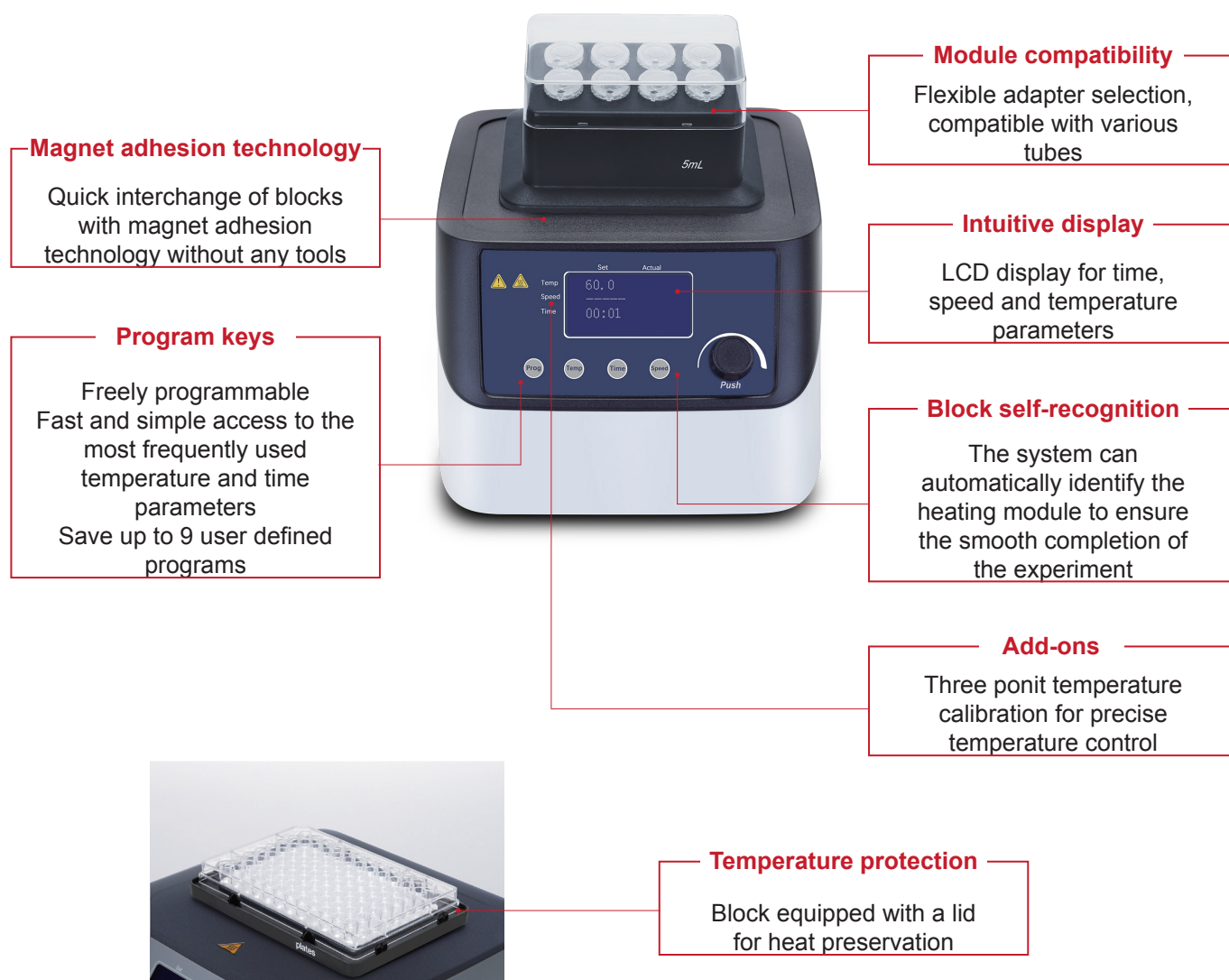
Thermo Mix

HCM100-Pro/HM100-Pro

Thermo Mix series integrates precise and efficient heating & cooling and mixing function

HCM100-Pro-Heating/Cooling/Mixing

HCM100-Pro combines the excellent mixing and accurate temperature control, to make your work efficiently and productively



Features

- Fully programmable
- Precise temperature control for heating and cooling
- Real-time display of speed, temperature and time
- Excellent mixing (200-1500rpm)
- Quick interchange of blocks without tools and automatic block recognition
- Compatible with most popular tubes
- Block equipped with a lid for heat preservation
- Temperature self-calibration

Applications

Precise and efficient heating/cooling and mixing is applicable for many applications such as Gene synthesis, gene purification, gene and protein denaturation, enzymatic reaction, bacterial growth, and others.

Thermo Control

HC110-Pro

heating and cooling with digital display



Features

- Compact, programmable and overheating protection for safe sample handling
- Precise temperature control for heating and cooling -5°C to 100°C for all major lab applications
- Interchangeable sample blocks available
- Most common application includes reagent warming/cooling, DNA extractions, enzymatic reactions and reactions that need to be processed at or near room temperature.

As low as -5°C

Precise temperature control for heating and cooling between -5°C - 110°C.

Specifications	HCM100-Pro	HM100-Pro	HC100-Pro
Functions	Heating,cooling&mixing	Heating&mixing	Heating&cooling
Temperature range [°C]	Below room temp 15- 100	Room temp-100	Below room temp 25- 110
Temperature Setting range [°C]	0-100	0-100	-5-110
Temperature control accuracy@20-45 [°C]	±0.5	±0.5	±0.5
Temperature uniformity@20-45 [°C]	±0.5	±0.5	±0.5
Power [W]	200	200	200
Time setting range	0min~99h30min	0min~99h30min	0min~99h30min
Max Heating speed	5.5°C/min	5.5°C/min	5.5°C/min
Max Cooling speed	5.5°C/min(100°C-room temp) 0.5°C/min(below room temp)	-	2.5°C/min(100°C-room temp) 0.5°C/min(below room temp)
Mixing speed [rpm]	200-1500	200-1500	-
Mixing orbit [mm]	3	3	-
Display	TFT	TFT	TFT
Program	9	9	9
Overheating protection [°C]	150	150	150
Voltage,Frequency	110/220V, 50/60HZ	110/220V, 50/60HZ	110/220V, 50/60HZ
Dimension [mm]	200x235X120	200x235X120	200x235X120
Weight [kg]	7.3	7.3	7.3
Operating temperature [°C]	10-40	10-40	10-40
Operating humidity [% RH]	<80	<80	<80

CT4-Pro

4°C Thermostatic Ice Box

New



Features

- Fast cooling rate and high stability;
- High-efficiency Peltier precision temperature control with good homogeneity;
- Multi-colour LEDs to indicate different operating status;
- Built-in temperature deviation calibration function, module alert function;
- Compact product design, small footprint;
- Multiple module choices, easy replacement of magnetic adsorption, suitable for a wide range of test tubes, and support for continuous operation;
- It takes only about 10 minutes to reduce the temperature from room temperature to 4°C;



Applications

4°C Thermostatic Ice Box is a microcomputer-controlled thermostat with high temperature control accuracy and good homogeneity, widely used for sample preservation, pre-denaturation of DNA amplification products and electrophoresis, serum coagulation, etc. The industry covers pharmaceutical, chemical, food safety and environmental testing.

Specifications	CT4-Pro
Functions	Cooling
Temperature Control Setting	4°C
Temperature Control Accuracy	±0.5°C
Temperature Uniformity	±0.5°C
Status Indicator	LED Dual Colour (Red&Green)
Cooling Speed	≤10min (depending on the module)
Running State	Continuous
Noise Level	≤55dB
Protection Class	IP20
Voltage	110V/220V
Frequency	50/60HZ
Power	80W
Dimensions [L×W×H]	240×195×135
Weight	3.3kg
Permissible Ambient Temperature and Humidity	5-40°C, 80%RH

Blocks

H100-Pro/HC110-Pro/HCM100-Pro/HM100-Pro/CT4-Pro

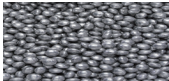
Cat.No	Magnetic	18900401	18900402	18900403	18900404	18900405
	Mechanical fixation	18900344	18900343	18900345	18900637	18900638
Block types						
Capacity		0.5mL×24	1.5mL×24	2mL×24	5mL×8 round bottom	5mL×8 cone bottom
Speed		1500rpm	1500rpm	1500rpm	1500rpm	1400rpm
Diameter×depth		8.1×26mm	10.9×30.8mm	10.9×30.8mm	13.6×42mm	17×51.5mm

Cat.No	Magnetic	18900874	18900406	18900407	18900420	18900423	18900746
	Mechanical fixation	-	18900241	18900242	18900349	18900350	-
Block types							
Capacity		1.5mL×24 Chromatography Vial	15mL×8	50mL×4	0.2mL×8 PCR strips or 0.2mL×96 PCR microplate	ELISA microplate	Deep well Plate
Speed		1500rpm	800rpm	600rpm	1500rpm	1500rpm	-
Diameter×depth		12×20.5mm	16.9×80mm	29.6×80mm	5.7×13.2mm	127×85mm	127×85×42mm

HB120-S/HB120-SC(Standard:151×95×50mm, Thin:151×95×36.5mm)

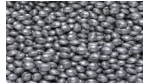
Cat.No	Standard	18900218	18900219	18900253	18900220	18900818	18900221
	Thin	18900274	18900275	18900276	18900277	18900877	-
Block types							
Capacity		0.2mL×54	0.5mL×40	1.5mL×40	2mL×40	2mL×60 Ampoules tubes	5/15mL×28
Diameter×depth		6.4×15mm	8.2×26.4mm	11×34.7mm	11×34.7mm	12×37mm	17×48mm

Cat.No	Standard	18900222	18900224	18900223	18900546	-
	Thin	-	18900278	18900279	-	18900504
Block types						
Capacity		50mL×8	0.2mL+0.5mL +1.5/2mL 18+18+18	microplate	5mL blood collection tubex45	0.2mL×8 PCR strips or 0.2mL×96 PCR microplate
Diameter×depth		29.8×48mm	Each capacity	127×85mm	13.5×48mm	5.7×13.2mm

Capacity	Cat. No.18900523	Capacity	Cat. No.18900520
Two-in-one block, bead bath/water bath Adapt to S2		Aluminum beads	

HB105-S1 /HB105-S2 /HB150-S1 /HB150-S2

Cat.No	18900459	18900460	18900461	18900462	18900463
Block types					
Capacity	0.2mL×30	0.5mL×20	1.5mL×20	2mL×20	5mL×12
Diameter×depth	6.4×15mm	7.85×28.4mm	11×34.7mm	11×34.7mm	16.6×46mm

Cat.No	18900464	18900465	18900522	18900523	18900520
Block types					
Capacity	15mL×12	50mL×4	Dual purpose block, bead bath/water bath Adapt to S1	Dual purpose block, bead bath/water bath Adapt to S2	Aluminum beads
Diameter×depth	16.6×73mm	29.2×73.5mm	95×76×56mm	151×95×62mm	-

Mini HCL100/Mini HC100/Mini H100

Cat.No	18900414	18900415	18900416	18900428
Block types				
Capacity	0.2mL×40	0.5mL×24	1.5mL×15	2mL×15
Diameter×depth	6.4×20mm	8.2×28.4mm	11.2×31mm	11×31mm

Cat.No	18900417	18900426	18900427
Block types			
Capacity	5mL×6	15mL×4	50mL×2
Diameter×depth	17×31mm	16.4×45mm	29×45mm

LifeReal explores the reality of the life.



Website



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