



Thermal Control




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.

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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 DLAB 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+15mL × 8	p.32
HB120-S		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 Microplate Bead/water bath	p.32
HB105-S1/ S2		Heating	25°C-105°C	-	0.2mL × 30 0.5mL × 20 1.5mL × 20 2mL × 20 15mL × 12 50mL × 4 Bead/water bath	p.32
HB150-S1/ S2		Heating	25°C-150°C	-		p.32
H100-Pro		Heating	25°C-100°C	-	0.5mL × 24 1.5mL × 24 2mL × 24 5mL × 5 15mL × 8 50mL × 4 0.2mL × 96 Microplate	p.33
HC110-Pro		Heating&Cooling	-5°C-110°C	-		p.37
HCM100-Pro		Heating& Cooling&Mixing	0°C-100°C	200-1500rpm		p.36
HM100-Pro		Heating&mixing	15°C-100°C	200-1500rpm		p.36
Mini H100		Heating	25°C-100°C	-	0.2mL × 40 0.5mL × 24 1.5mL × 15 2mL × 15 5mL × 6 15mL × 4 50mL × 2	p.35
Mini HC100		Heating&Cooling	0°C-100°C	-		p.35
Mini HCL100		Heating&Cooling	0°C-100°C	-		p.35
DWB20-S		Heating	25°C-80°C	-	20L	p.39

DLAB Dry Bath Series

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 / HB60-S / H100-Pro /



HB105-S1



HB105-S2



HB150-S1



HB150-S2



HB120-S



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 function allows accurately monitor the heating time
- External temperature sensor PT1000,
- Historical data tracing via USB interface



HB120-S / HB60-S

Easy to use, safe and durable

Features

- Low profile - space saving design
- Timer function support available
- Discrete heating temperature levels: 25 °C, 30 °C, 37 °C, 45 °C, 60 °C (HB60-S)
- 5/10mL × 38 dual purpose heating block (HB60-S)



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	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 range [°C]	15-100	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 90-105: ±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	160	160
Time setting range	0min~99h30min	0min~99h59min	0min~99h59min	0min~99h30min	0min~99h30min
External sensor	-	Yes	Yes	-	-
Display	TFT	LED	LED	LED	LED
Power supply	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

Mini HCL100 / Mini HC100 / Mini H100

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
No of programs	9(2steps for each)	9(2steps for each)	9(2steps for each)
Temperature self-calibration	Support	Support	Support
USB interface	Support	Support	Support
Error code reminder	Support	Support	Support
External dimension[WxDxH]	110x162x140mm	110x162x140mm	110x162x140mm
Overall weight [kg]	≤1	≤1	≤1
Power supply	DC12V,100-240V, 50/60Hz	DC12V,100-240V, 50/60Hz	DC12V,100-240V, 50/60Hz
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

DLAB HCM100-Pro-Heating/Cooling/Mixing

DLAB 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 110°C for all major lab applications
- Interchangeable sample blocks available Applications
- Most common application if for Reagent warming/cooling, DNA extractions, enzymatic reactions and reactions that need to processed at or near room temperature.

As low as -5°C

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

Specifications	HCM100-Pro	HM100-Pro	HC110-Pro
Functions	Heating,cooling&mixing	Heating&mixing	Heating&cooling
Temperature range [$^{\circ}\text{C}$]	Below room temp 15– 100	Room temp–100	Below room temp 25– 110
Temperature Setting range [$^{\circ}\text{C}$]	0.1–100	15–100	-5 –110
Temperature control accuracy@20–45 [$^{\circ}\text{C}$]	± 0.5	± 0.5	± 0.5
Temperature uniformity@20–45 [$^{\circ}\text{C}$]	± 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 $^{\circ}\text{C}/\text{min}$	5.5 $^{\circ}\text{C}/\text{min}$	5.5 $^{\circ}\text{C}/\text{min}$
Max Cooling speed	5 $^{\circ}\text{C}/\text{min}$ (100 $^{\circ}\text{C}$ –room temp) 0.5 $^{\circ}\text{C}/\text{min}$ (below room temp)	–	2.5 $^{\circ}\text{C}/\text{min}$ (100 $^{\circ}\text{C}$ –room temp) 0.5 $^{\circ}\text{C}/\text{min}$ (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 [$^{\circ}\text{C}$]	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 [$^{\circ}\text{C}$]	10–40	10–40	10–40
Operating humidity [% RH]	< 80	< 80	< 80

Blocks

H100-Pro

Cat.No	18900401	18900402	18900403	18900404	18900405	18900406	18900407	18900420	18900423
Block types									
Capacity	0.5mL × 24	1.5mL × 24	2mL × 24	5mL × 8 round bottom	5mL × 8 cone bottom	15mL × 8	50mL × 4	96 or 384 well plate	microplate

HB120-S

Cat.No	Standard	18900218	18900219	18900253	18900220	18900221	18900222	18900224	18900223	18900546	—
	Thin	18900274	18900275	18900276	18900277	—	—	18900278	18900279	—	18900504
Block types											
Capacity		0.2mL × 54	0.5mL × 40	1.5mL × 40	2mL × 40	5/15mL × 28	50mL × 8	0.2mL+0.5mL +1.5/2mL 18+18+18	microplate	5mL blood collection tubex45	8PCR strips and 96PCR microplate

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

Capacity	Cat. No. 18900520
Aluminum beads	

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

Cat.No	18900459	18900460	18900461	18900462	18900463	18900464	18900465	18900522	18900523	18900520
Block types										
Capacity	0.2mL × 30	0.5mL × 20	1.5mL × 20	2mL × 20	5mL × 12	15mL × 12	50mL × 4	Two-in-one block,bead bath/water bath Adapt to S1	Two-in-one block,bead bath/water bath Adapt to S2	Aluminum beads

Mini HCL100/Mini HC100/Mini H100

Cat.No	18900414	18900415	18900416	18900428	18900417	18900426	18900427
Block types							
Capacity	0.2mL × 40	0.5mL × 24	1.5mL × 15	2mL × 15	5mL × 6	15mL × 4	50mL × 2
Diameter × depth	6.4 × 20 mm	8.2 × 28.4mm	11.2 × 31mm	11 × 31mm	17 × 31mm	16.4 × 45mm	29 × 45mm