dry block heater with blue transparent cover and 4 modules

Dry block heater, also known as dry thermostat, is a kind of laboratory temperature control equipment using metal module as the heat conduction medium, completely abandoning the traditional water bath or oil bath method to realize the constant temperature incubation of samples.

Dry Block Heater

Main Features

1. Intuitive operation: High-definition LCD displays temperature settings, actual temperature, timing status, and more for easy, interactive control.
2. Protective structure: Blue transparent cover prevents accidental spills and reduces heat loss, improving temperature efficiency.
3. Multi-zone independent control: Four heating zones (A, B, C, D) each with individual timers—supporting parallel experiments.
4. Flexible module adaptation: Standard modules for 0.2mL PCR tubes, 1.5mL/2.0mL centrifuge tubes, 96-well plates, etc.; custom modules available for diverse needs.

5. Automation: Automatic preheating, power failure memory/recovery, and auto-run on boot for streamlined, uninterrupted batch processes.
6. Temperature calibration: Built-in deviation correction ensures data reliability via calibration with external thermometers.
7. Intelligent safety: Dual (software/hardware) over-temperature protection prevents equipment/sample damage or denaturation.

Core Advantages

1. High-precision temperature control: Range from room temp +5 °C to 120 °C; accuracy ±0.3 °C, highly stable.
2. Maintenance-free: No liquid required—cleaner, safer than water/oil baths, with no cleaning or fluid replacement.
3. Efficient: Modular, multi-area design allows simultaneous sample processing, boosting lab productivity.
4. Strong compatibility: Easily swap modules for different containers; suitable for R&D and clinical testing.
5. User-friendly & durable: Compact, corrosion-resistant, easy to clean, long service life, low maintenance.

Working Principle

1. High-purity aluminum modules conduct heat from internal electric heater for fast, uniform temperature distribution.
2. Real-time sensor feedback to a microprocessor PID controller precisely regulates heating power for stable temperature.

Application Fields

1. Molecular biology: DNA/RNA extraction, PCR pre-denaturation, enzymatic digestion, inactivation, thermal repair.
2. Clinical & medical research: Serum incubation, coagulation, blood sample temperature control, reagent preservation.
3. Environmental & food testing: Sample pretreatment, lysis, incubation, thermal stability analysis.
4. Pharmaceutical R&D: Drug component stability testing, thermo-responsive material performance evaluation.
5. Education & research: Teaching experiments, small volume sample heating, constant temperature control.

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Model	**DB30**
Temperature range	ambient+5°C to 110°C
Temperature resolution	0.1°C
Temperature accuracy	≤0.3°C, at 37°C
Temperature uniformity	≤±0.2°C, at 37°C
Temperature rise time	≤15 minutes, 25°C to 100°C
Timer	1 minute to 99 hours 59 minutes or continuous
Power supply	220Vac, 50-60Hz or 110Vac, 50-60Hz
Power	500W
External dimensions	370x255x180mm
Weight	8kg

Optional accessories

Order code	Hole diameter	Number of holes	Descriptions
mk01	6mm	48	hole depth 47mm
mk02	7mm	48	hole depth 47mm
mk03	10mm	24	hole depth 47mm
mk04	12mm	24	hole depth 47mm
mk05	13mm	24	hole depth 47mm
mk06	15mm	16	hole depth 47mm
mk07	16mm	16	hole depth 47mm
mk08	19mm	12	hole depth 47mm
mk09	20mm	12	hole depth 47mm
mk10	26mm	8	hole depth 47mm
mk11	28mm	4	hole depth 47mm

Optional accessories

Order code	Hole diameter	Number of holes	Descriptions
mk12	40mm	3	hole depth 47mm
mk13	0.2ml centrifuge tube	48	standard centrifuge tubes
mk14	0.5ml centrifuge tube	48	standard centrifuge tubes
mk15	1.5ml centrifuge tube	24	standard centrifuge tubes
mk16	2.0ml centrifuge tube	24	standard centrifuge tubes
mk17	0.2ml PCR tube	96	Cannot be used for DB20-1 model
mk18	0.2ml zymography plate	96	Cannot be used for DB20-1 model
Note	modules mk17 and mk18 are twice as large as other standard modules		