

CONSTANT TEMPERATURE AND HUMIDITY CHAMBER

Scope of Application

The Constant Temperature and Humidity Chamber is suitable for environmental protection, health and epidemic prevention, drug administration, agriculture, animal husbandry, fisheries, and other scientific research institutions, universities, and production departments. It is specialized constant temperature equipment for water analysis and BOD measurement, as well as for the culture and preservation of bacteria, molds, and microorganisms, and for plant cultivation and breeding experiments.

Structural Features

Outer Casing

The casing is made from selected cold-rolled steel plate base material, treated with an electrostatic baking paint process. This forms a dense protective layer on the surface, which is hard, robust, and offers excellent rust resistance . A standard 25mm test port is located on the left side. The outer door is equipped with a safety lock. Equipped with a UV sterilization lamp (sterilization time can be set).

Working Chamber

Interior made of high-quality SUS304 stainless steel, mirror-polished. Shelf brackets feature a quick-release design for easy installation, removal, and cleaning of the workspace.

Viewing Glass

Double-door design. The viewing glass is made of tempered glass, allowing the outer door to be opened directly for observing the contents inside the working chamber. The good seal does not affect the internal temperature.

Air Flow

Strong convection ventilation structure forms an effective air circulation system, improving temperature response speed, enhancing temperature uniformity, and reducing temperature fluctuation.

Control Panel

Microcomputer-based intelligent touch screen display temperature controller, offering high precision, no overshoot, multi-data display on a single screen, temperature calibration function, timer function, and 30-segment program control. Equipped with a USB interface for real-time data storage.

Humidification System

Uses first-tier brand humidity sensors paired with internal humidification technology. Employs a Type 316 humidification tube that generates steam through heating to control humidity. This technology results in low internal humidity fluctuation and good uniformity. Features an external 25L water tank; one filling can last 15–20 days.

Safety System

Includes temperature protection, compressor over-current protection, compressor over-pressure protection, water shortage protection, heater over-temperature protection, audible and visual alarm upon fault detection, auxiliary temperature controller, and leakage protection.

Safety System

Optional remote alarm and remote control functions, needle printer, three-level permission management, and audit trail.

Model	HHP-100L-AC	HHP-180L-AC	HHP-280L-AC	HHP-380L-AC	HHP-580L-AC	HHP-800L-AC	HHP-1080L-AC	HHP-1680L-AC
Door	Single Door					Double Door		
Power Supply	AC 220V, 50HZ							
Temperature Fluctuation	± 0.5℃							
Temperature Uniformity	± 1℃（Tested at 25℃）							
Temperature Resolution	0.1℃							
Temperature Adjustment Range	0 ~ 80℃							
Timer Range	1 ~ 9999min							
Humidity Control Range	30 ~ 95%RH							
Humidity Fluctuation	± 3%RH							
Refrigerant	R134a							
Rated Power	1600W	1800W	2100W	2200W	2400W	4000W	4200W	5500W
Inner Dimension W × D × H (cm)	45x40x56	50x46x78	58x52x94	58x54x122	70x58x125	120x52x129	120x70x130	146x85x136
Overall Dimension W × D × H (cm)	59x67x107	66x77x128	74x81x147	74x85x172	86x91x182	136x93x188	136x101x187	162x116x193
Shelves (Standard/Max)	2/ 8pcs	3/ 10pcs	3/ 11pcs	4/ 12pcs	5/ 10pcs	8/ 10pcs	8/ 12pcs	9/ 13pcs