

Constant Temperature & Humidity Chamber

This product series is widely used in the temperature variation tests, cold resistance tests and storage in the of aerospace, aviation, electronics, instrument, electric products, materials, parts and components and equipment to analyze and evaluate the property and performance of the samples under the simulated conditions

- Inner chamber material: stainless steel plate Shelve
- External: Stainless steel with texture treatment or high-quality cold rolled steel plate with static injection
- Thermal-insulating material: high-density isocyanurate foam + glass fiber
- Cable hole: inside diameter of $\Phi 50$, $\Phi 80$, $\Phi 100$...
- Heater: Nichrome electric heater
- Humidifier: stainless steel electric vapor generation type UL-type humidifier
- Mixing blower: centrifugal blower
- Motor: condenser type
- Castor: 4 active castors with braking
- Observation window: built-in toughened glass with heating
- Refrigerating system: Refrigerant: environment-friendly R404, R23 refrigerant closed-type and low-noise rotor compressor
- Refrigeration mode: air-cooled condenser
- Control system: Touch-type temperature and humidity programmable controller
- Operating interface: LCD display Temperature and humidity controller: touch-type LCD controller
- Setting mode: touch type
- Running mode: setting-up running and programmed running
- Program: 100 groups in 1000 sections
- Resolution: temperature: $\pm 0.1^{\circ}\text{C}$; humidity: $\pm 1\%\text{RH}$
- Input: platinum thermal resistance
- Control mode: PID control Communication function:LAN network interface
- Additional function: alarm and display function, power-off protection function, upper limit temperature alarm function, timing function (auto startup and auto stop), self-diagnosis function, curve record and display function, paperless record, USB data export, tele-monitoring and so on.
- It can execute 100 STEP X 10 PATTEM mode. Each section can be grouped and executed in crossing way.
- The execution time for each section can be set up between 0-999H plus 59min. For setting up for each group, it can circulate within 1-999 in part or entirely for option. In execution, it can select group circle picture or section execution picture and can know the remaining time for execution.
- It has power-off function. After power recovery, it can complete the remaining test.
- It can select single-section control or multi-section programmable control.
- The screen has backlight time control function and it can adjust the backlight brightness.
- For executing single-section control, it can change the execution value at will. The memory-type multi-function control has automatic control output functions, such as heating heater and humidifying heater for electromechanical solenoid valve for different groups of refrigerating compressors and so on.
- Water supply mode: water circulation by pump, Water supply port: convenient front water supply.
- Water storage tank: built-in stainless steel fixed-type water storage tank (with a volume about 15L)
- Safety device: Humidifier dry-combustion protection, independent over-temperature protection, water shortage protection, over-current protection, refrigerant high-pressure protection switch, over-current circuit breaker, earth leakage protection and so on.
- Operation ambient temperature: $+5^{\circ}\text{C} \sim +30^{\circ}\text{C}$
- Power supply : AC220 $\pm 10\%$ V 50 ± 0.5 Hz single-phase double-wire + protective grounding wire/ AC380 $\pm 10\%$ V 50 ± 0.5 Hz three-phase four-wire+ protective grounding wire
- Accessory 1 cable hole ($\Phi 50$, $\Phi 80$, $\Phi 100$) cover, 2 sets of shelf, 2 protector tubes, 1 overflow water tube, 1 copy of operating specification
- Optional accessory: Recorder, tele-monitoring software



Specification of Constant Temperature & Humidity Chamber

Model	ST-CTH-100	ST-CTH-225	ST-CTH-500	ST-CTH-800	ST-CTH-1000
Chamber dimension (cm)	45 x 45 x 50	50 x 60 x 75	80 x 70 x 90	80 x 100 x 100	100 x 100 x 100
Exterior dimension (cm)	105 x 97 x 176.5	105 x 102 x 200	132 x 132 x 217	147 x 152 x 231.5	167 x 152 x 231.5
Temperature range	0 $^{\circ}\text{C}$ ~ +150 $^{\circ}\text{C}$				
Humidity range	20% ~ 98% RH				
Temperature fluctuations	$\pm 0.5^{\circ}\text{C}$				
Temperature deviation	$\pm 2.0^{\circ}\text{C}$				