



TEMPERATURE AND HUMIDITY TEST CHAMBER LTHC-C10

Temperature and Humidity Test Chamber LTHC-C10 designed with 700 L internal capacity volume. It offers 20 to 98 % RH humidity Range and temperature ranges from 10°C to 50°C. Designed to simulate constant climatic conditions for testing a wide variety of products for their quality, performance, shelf life and stability. It features conductive film located on the interior glass (of double layer 8 cm thick insulation glass) to prevent window frosting, built-in LED light for the work room lighting to clearly observe samples. A good temperature humidity chamber is essential for evaluating potential success or failure of a product in the field.

Features :

- ❑ Designed with PID controller system to control main unit, temperature system and Display
- ❑ Double layer insulating glass 8 cm thick, made of tempered glass
- ❑ Internal material designed with mirror surface finishing, 304 stainless steel which is rust proof, corrosion resistance
- ❑ Heat load can absorb 1000 W in -20°C
- ❑ Built-in LED light for the working room light which clearly observe samples
- ❑ The filter element is suggested to be replaced once a year
- ❑ Water re-circulation system consisting of water purifier which purifies sourced water to water tank, reduces water use and series of pipes
- ❑ Designed with PT-100 sensor, real time accurate detection and display of temperature
- ❑ Wet gauze and a real-time temperature, converted by temperature difference, show real-time relative humidity
- ❑ LCD display, which can display test conditions
- ❑ Equipped with automatic humidification, which automatically heated by the humidification tank

- ❑ High and low temperature corrosion resistance external material is made up of A3 steel plate with galvanized coating
- ❑ Provides protection against over temperature, water shortage, over current, earth leakage, phase sequence, humidifier dry combustion, and refrigerant high pressure
- ❑ 10 cm thick polyurethane foam and insulation cotton provides better insulation
- ❑ Standard test Cable hole 50 mm inner diameter, located at left side of work room, is provided with sieve inside to prevent moisture from entering the room
- ❑ SUS304 stainless steel shelves, standard configuration 2 pcs (removable, adjustable height), 50 kg sample load of each shelf
- ❑ 4 movable castors for ease moving, and with brakes function

Application :

Test Chamber is used in food industry also basic used in advanced research, pharmaceutical industries, chemical industries, and including testing products relating to aerospace, electronics, automobile and environmental stress screening etc.

Specifications:

Model	LTHC-C10
Interior Volume	700 L
Heat load	1000 W
Temperature Range	10°C to +50 °C
Temperature Deviation in time	± 0.1 to 0.3 °C
Temperature Deviation in space	± 0.5 to 1.0 °C
Humidity Range	20 to 98 % RH
Humidity Deviation in time	± 1% RH
Cooling Rate	1 °C /min
Heating Rate	3 °C / min

Temperature and Humidity Test Chamber LTHC-C10

Cooling system	Mechanical compression refrigeration system
Refrigerating unit	French TECUMSEH compressor
Refrigerant	R404A, R23
Heating Element	Nichrome heater
Controller	Programmable color LCD touch screen controller Ethernet connection, PC Link
Water supply system	Automatic water supply, (water purification system)
Humidifier	External isolation, stainless steel surface evaporation humidifier
Dehumidification	Evaporator
Temperature Sensor	PTR Platinum Resistance PT100Ω/MV A-class, accuracy 0.001°C
Humidity Sensor	Dry and wet bulb sensor
Build-in Water Tank	270 × 300 × 450 mm
View Window Size	330 × 370 mm
Air Circulation	Centrifugal wind fan
Exterior Material	Steel Plate with protective coating
Interior Material	SUS304 stainless steel
Thermal Insulation	Polyurethane foam and insulation cotton
Observation Window	Interior lighting, double-layer thermo stability silicone rubber sealing
Standard Configuration	1 Cable hole (Φ 50,) with plug; 2 shelves
Maximum Noise	65 dBA
Ambient Temperature	5°C to 35 °C
Relative Humidity	≤85% RH
Internal Dimension	700 × 1000 × 1000 mm
External dimension	1180 × 1550 × 2110 mm
Power Supply	220V 50Hz / 380V 50 Hz