



LIB - Temperature & Humidity Test Chamber

TEMPERATURE
-70°C ~ +150°C

HUMIDITY
20%~98%RH



Automobile



Material



Electronics



Aerospac



PV panels



Navigation



Commodity



Paintings



Battery



Pharmaceutical



Military



Cable



Specifications: Temperature & Humidity Test Chamber

Model		TH-100C	TH-225C	TH-500C	TH-800C	TH-1000C
Internal Dimension (mm)		400*500*500	500*600*750	700*800*900	800*1000*1000	1000*1000*1000
Overall Dimension (mm)		860*1050*1620	960*1150*1860	1180*1350*2010	1280*1550*2110	1500*1550*2110
Interior Volume		100L	225L	500L	800L	1000L
Heat Load		1000W				
Parameter	Temperature Range	-70℃ ～ +150℃				
	Temperature Fluctuation	± 0.5℃				
	Temperature Deviation	± 2.0℃				
	Humidity Range	20% ～ 98% RH				
	Humidity Deviation	± 2.5% RH				
	Cooling Rate ting Rate	1℃ / min				
	Heating Rate	3℃ / min				
Structure	Cooling	Cooling system	Mechanical compression refrigeration system			
		Refrigerating unit	French TECUMSEH compressor			
		Refrigerant	R449A/R508B			
	Heating Element	Nichrome heater				
	Controller	Programmable color LCD touch screen controller				
		Ethernet connection, PC Link				
	Humidity	Water supply system	Automatic water supply			
			Water purification system			
		Humidifier	External isolation, stainless steel surface evaporation humidifier			
		Dehumidification	Evaporator			
	Sensor	Temperature Sensor	PTR Platinum Resistance PT100Ω/MV A-class, accuracy 0.001℃			
		Humidity Sensor	Dry and wet bulb sensor			
	Build-in Water Tank(mm)	270*300*400			270*300*450	
	View Window Size(mm)	250*280			300*330	330*370
	Air Circulation	Centrifugal wind fan				
	Safety Device	Humidifier dry-combustion protection; over-temperature protection; over-current protection; Refrigerant high-pressure protection; Water shortage protection; Earth leakage protection				
Material	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				
Power Supply		415V 50Hz				
Maximum Noise		65 dBA				
Environmental Conditional		5℃～+35℃ ≤85% RH				

Structures: Temperature & Humidity Test Chamber

Appearance



1.Workroom

The internal material is 304 stainless steel, mirror surface, rust-proof to high and low temperature and moisture corrosion;
Nice ruggedness and long life.



2.Sample Shelf

SUS304 stainless steel punching sample shelf 2pcs;
Standard load of 50KGS for each layer of sample shelf;
The height of the shelf is adjustable and can be removed directly to facilitate the various sizes of test samples.
Conductive to the air circulation.



3.Cable Hole

A standard test hole, located at the left side of the work room, is provided with a sleeve inside to prevent moisture from entering the insulation layer. Equipped with flange.
The standard inner hole diameter is 50mm.
Soft silicone plug seal; Metal enclosure closed, beautiful designed.



4.Viewing Window

Double layer insulating glass 8cm thick, made of tempered glass.
The conductive film is located on the interior glass to prevent window frosting, built-in LED light for the work room lighting ;can clearly observe samples.
The light control button is located below the controller.



5.Controller

PID programmable color touch screen controller, network connection computer.
Can edit 100 programs 100 segment.
LIB also can preset program into the controller based on user testing requirements.
The set system language is English for standard.



6.Water Re-circulation

Water purifier: mainly purification from water source to water tank.
The filter element is suggested to be replaced once a year.
Water re-circulation system that reduced water use and a series of water pipes.



7.Automatic Water Inlet

Automatic control of the water intake of equipment, the customer can be directly connected to the laboratory faucet, so as to achieve automated testing;
Automatic inlet diameter 1/2 inch (13.5MM);
High and low water level alarm, water shortage lights and sound.
Standard 2 meter drain pipe.



8.Castor

Install 4 castors for ease moving, and with brakes function.
Caster height adjustable.



9.Insulation

10cm thick polyurethane foam and insulation cotton;
Better insulation performance, degradation resistance, environmental protection, noise reduction.



10.External Materials

A3 steel plate with galvanized coating;
Electrostatic treatment; High and low temperature corrosion resistance; High hardness, anti - impact
Very high safety factor;
Color can be customized.