

Temperature Humidity Test Chamber

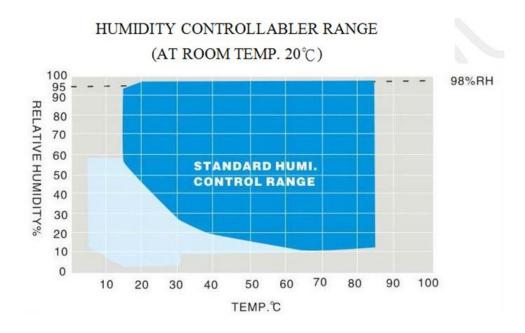
Related Standard: IEC600628 2-1/2/3/30, GB/T2423/5170/10586, JIS C60068, ASTM D4714, CNS3625/12565/12566

Uses:

This equipment can simulate different environment condition. It's appropriate for testing material performance, such as resist heat, resist dry,resist humidity and resist cold. That can define performance of material.

Characteristics:

- 1.Use the high precision microcomputer touch temperature and humidity controller with high stability of platinum resistance to temperature and wind speed in the circulatory system of temperature and humidity test.
- 2. Control temperature humidity well-distributed, precisely and steady.
- 3. Completely independent system separate for testing in high temperature, low temperature and constant temperature&humidity environment.







Specifications:

Model		HY-LY-280	HY-LY- 2150	HY-LY-2225	HY-LY-2408	HY-LY-2800	HY-LY- 21000	
Inner Size W×H×D (cm)		40×50×40	50×60× 50	50×75×60	60×85×80	100×100×80	100×100× 1000	
External Size W×H×D		93×155×	100×148	117×166×	122×176×12	158×186×148	158×195×	
(cm)		95	×106	118	1	136^160^146	168	
Volume (L)		80 L	150L	225L	408L	800L	1000L	
Temp Humi Control Range		Temp. Range: A: -30°C~100°C Humi.range: RH20%-98% B: -40°C~150°C C: -70°C~150°C (Other temperature and humidity range can be customized)						
Temp Humi Fluctuation		±0.5°C; ±2.5%RH						
Temp Hum Departure		±0.5°C-±2°C; ±3%RH (>75%RH); ±5%RH(≤75%RH)						
Controller Resolution		±0.3°C; ±2.5%RH						
Controller Brand		TEMI880/Tato/Youyi						
Material	Inwall	SUS 304# steel plate						
	Housing	SUS 304# steel plate surface fog processed						
	Heat Insulator	resistance to high temperature, high chlorine acid b vinegar foam insulation materials						
Aie Circulation Way		centrifugal fan-broadband type force air circulation						
Refrigeration Way		cascade type multiple refrigeration						
Refrigerater		fully enclosed piston compressor Taikang France						
Refrigerants		R4O4Aor American dupont environmental protection cold media (R23+R404)						
Condensing Way		Air-cooling						
Heater		nickel chrome heating wire heater						
Humidifier		semi-closed steam						
Water Supply Way		automatic cycle water supply						
Standard Accessaries		*50mm test hole on the left						
		*Software CD						
Safety Devices		*Leakage current *Overload *Compressor overload *Over temperature *Ultra-wet/dry *Humidification temperature protection.						
	Power		380V or 220V AC±10% 50/60Hz					





Structure Instruct:

Chamber structure

Metal plate material:

The inner and outside material is SUS mirror surface corrosion resistant plate, inner chamber two sides have sample Rail frame, it has the adjustable hang strip, heat preservation and heat insulation at least 10cm with hardness polyamine foaming.

It has the high quality bakelite and glass fibre doorframe cutting off the heat conduction. Heat-proof quality is quite good, the door airtight seal strip is the two-way wide hig-temperature resistance silicon foaming.

Test space blowing-in circulate

Mature blowing-in system use high temperature resistance multiple-blade wind wheel which is drived by the motor,the upside blade blow the wind in and the downside return the wind. When the temperature is -70-100 $^{\circ}$ C,the error will be less 2 $^{\circ}$ C



Controller system

Use the **TEMI880/Tato/Youyi** controller which is with low energy consumption

(20W), the controll system accuracy is ± 0.3 °C.

High mark screen

5.7 inch LCD color screen with interactive parameter input method, resolution ratio is 800*480.

Big memory capacity

120 groups / 1200 section all repeatedly:maximum is 999 (can repeated unlimited), part repeated: support maximum 99 PC-Link, MODBUS (ASCII, RTU). And has fact curve with temperature and humidity.

Convenient and fast connect the computer

Controller use R232 port,if you monitoring the history curve and need to playback the data,you can use editing operation.

Heating and humidifying system

<u>Heater</u>

Spiral nichrome tubular electric heating element heater, High accuracy temperature fluctuation, and with long lifetime!

Humidifier

Use shallow slot method to humidify. Humidity measurment use wet and dry bulb method.

Secondary protection

Over-temperature protector: (protect the sample and the chamber) Humidifier empty burn preventer (protect the humidifier)

Temp & Humi. Control Range (Specific test requirements customize)

1. Choice of wind circulation way: Forced air supply

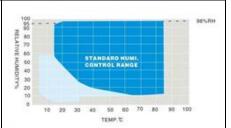
If you have requirements on wind supplying way, this kind of air supply is the best choice.

2. Choice of water supply system: RO (Reverse osmosis)

Our equipment use pure water when doing humidity test, can automatically add water to make test more convenient.











3. Polymer film/wheel dehumidification system

If you need to do low temperature and low humidity test for long time, then honeycomb chemistry dehumidifier system will be your best choice. It can make to

 10° C 10° RH or lower.

4. LN2/LCO2 fast cooling system

We offer all kinds of imported professional LN2/LCO2 solenoid valve and related controlling system to meet your requirements of fast heating and cooling.

5. Equiped with glass door and operation hand hole on the door

If you need to move or open the test sample during testing, to equip a glass door and operation hand hole to avoid effect to test condition when open the chamber door.

6. Recorder to get test data in time

If need to record different points environmental and sample temperature, to equip a temperature recorder is a best choice.



