



**Programmable Temperature and Humidity Test Chamber Vertical Type**

Programmable Temperature and Humidity Test Chamber simulates a full range of temperature and humidity conditions to test reliability, durability, climatic, freezing resistance, quality assurance, thermal endurance etc.

**Features:**

- Chamber exterior material is stainless steel with environmentally baking paint resists corrosion & provides impact resistance. Interior material is SUS304# stainless steel with excellent heat resistance and easy to clean.
- MRC HL-1000 touch screen controller is designed to save chamber programming and setup time with temperature limit and alarm to protect your product.
- Safety relay connection is provided to protect your device under test by removing power to it when the chamber is not running.
- RS-232 communications is for computer connection, programming can be set on computer by software, monitor testing process and automatically execute power on/off functions.
- Fog-free viewing window and interior light makes viewing workspace freely and observe the test under best conditions.
- Adjustable product shelf slides out for easier product access. Shelf design is non-tipping and supports large product loads.
- Left side of chamber with diameter 50mm cable port for power-on test.
- Optional electronic humidity sensor is used on all test chambers for accuracy and minimal maintenance.

**Application:**

- Electronics, electrical appliances, sensors
- Semiconductor, PCB, LCD & LED
- Medicals tests
- Mechanical, Military, aerospace products
- Vehicles, Transport, automobile supply industries
- Chemicals, Petrochemical industries
- Building materials, Plastics, Textile industries
- Testing metal related industries like plating etc.
- Instrumentation.

**Optional Accessories:**

**Cable Port:** Size of cable port is available for Ø100mm

**Water purifier RO 80:** Continuously provide purified water for humidifying heater and wet-bulb

**Dehumidifier:** The rotation regenerating dehumidifier M-120 ensures precise control of low humidity (10C, 15%RH) for electrostatic reliability tests.

**Defrosting Device:** The chamber automatically detects and melts the frost on the evaporator when operating below 0°C in order to allow continuous operation

**Electronic humidity sensor:** Precision Humidity Sensor with stainless steel protection tube.

**Conform standards:**

- IEC68-2-1 (GB-2423.1-2008) Testing A: Low temperature testing method
- IEC68-2-2 (GB-2423.2-2008) Testing B: High temperature testing method
- MIL-STD-202F (GJB360.8-87) High temperature life testing
- MIL-STD-810D (GBJ150.3) High temperature method
- MIL-STD810D (GBJ150.4) Low temperature method
- IEC68-2-3 (GB2423.3-93) Testing Ca: Constant moist heat testing method.
- IEC68-2-30 (GB2423.4-93) Testing Db: Alternate moist heat testing method.
- MIL-STD-810D (GJB150.9-93) Moist heat testing method.

Model	Temp./Humid. Ranges	Internal Dimension (W x H x D) mm	Outer Dimension (W x H x D) mm
HP-40V	0°C ~ +150°C 20% ~ 98%RH	500x500x400	700x1640x1067
HP-50V		500x600x500	750x1650x1400
HP-55V		500x750x600	750x1730x1490
HP-60V		700x850x700	950x1860x1550
HP-80V		1000x1000x800	1200x1600x1350
HP-100V		1000x1000x1000	1400x1950x2250
FP-40V	-20°C ~ +150°C 20% ~ 98%RH	500x500x400	700x1640x1067
FP-50V		500x600x500	750x1650x1400
FP-55V		500x750x600	750x1730x1490
FP-60V		700x850x700	950x1860x1550
FP-80V		1000x1000x800	1200x1600x1350
FP-100V		1000x1000x1000	1400x1950x2250
LP-40V	-40°C ~ +150°C 20% ~ 98%RH	500x500x400	700x1640x1067
LP-50V		500x600x500	750x1650x1400
LP-55V		500x750x600	750x1730x1490
LP-60V		700x850x700	950x1860x1550
LP-80V		1000x1000x800	1200x1600x1350
LP-100V		1000x1000x1000	1400x1950x2250
TP-40V	-70°C ~ +150°C 20% ~ 98%RH	500x500x400	700x1640x1067
TP-50V		500x600x500	750x1650x1400
TP-55V		500x750x600	750x1730x1490
TP-60V		700x850x700	950x1860x1550
TP-80V		1000x1000x800	1200x1600x1350
TP-100V		1000x1000x1000	1400x1950x2250

**\*For temperature only add suffix-T to model number**

20%~98%RH is standard range, optional customized 10%~98%RH or 5%~98%RH. Dimensions are also available for customized.

<b>Control Mode</b>	Balanced Temperature and Humidity Control System
<b>Operating Temp. &amp; Humid. Range</b>	+5°C ~ +35°C; <85%RH
<b>Temp. range</b>	HP=0°C, FP=-20°C, LP=-40°C, TP=-70°C ~ +100°C (150°C)
<b>Humid. range</b>	20% ~ 98%RH (Optional: 5% ~ 98%RH)
<b>Temp. &amp; Humid. fluctuation</b>	±0.5°C; ±2.5%RH
<b>Temp. &amp; Humid. uniformity</b>	≤2.0°C; ≤3%RH
<b>Temp. &amp; Humid. Deviation</b>	≤1.0°C; ≤2%RH
<b>Temp. Heating Time</b>	0°C ~ +100°C within 30min; -20°C ~ +150°C within 45min
<b>Temp. Cooling Time</b>	20°C ~ -40°C within 60min; 20°C ~ -70°C within 85min
<b>Power Supply</b>	AC380V, 50/60HZ, Three-phase (Specified by User)
<b>Exterior Material</b>	stainless steel with baking paint
<b>Interior material</b>	SUS304# Stainless steel
<b>Insulation material</b>	Rigid Polyurethane foam
<b>Refrigeration system</b>	Mechanical cascade refrigeration system; Fin type radiator
<b>Circulation system</b>	Mechanical convection system
<b>Humidification Water Supply</b>	Automatic water regulating, recoverable supply system, water shortage alarm system
<b>Water quality</b>	Distilled water only, 20L Water tank capacity
<b>Controller</b>	Touch Screen Controller
<b>Safety devices</b>	Overheat protector Switch, Compressor overload protector Switch water shortage protector Switch, Humidifier protector Switch Fault alarm system
<b>Accessories</b>	Viewing window, Chamber Illumination, Cable port Ø50mm, Product shelf slides 2 pieces, universal casters HL-1000 touch screen controller

**Note:**

- The performance values are no specimen inside the test area.
- At 20°C ambient temperature, relative humidity 65%rh, rated voltage
- According to IEC60068-3-5:2001 and IEC60068-3-6:2001
- The above specifications are for reference only.