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.

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.

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.

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