



Rapid temperature and humidity test chamber (5K/min)

-70~+180°C • (10~98%rh)



Test Standards

Low Temperature test

IEC 60068-2-1, Test A; ISO 16750-4, LOW TEMPERATURE; ETSI EN 300019-2-4; Test Ab/Ad, MIL-STD-810 G; Meth. 502.5; JESD22-A119

High Temperature Test

IEC 60068-2-2, Test B; ISO 16750-4, HIGH TEMPERATURE TEST; ETSI EN 300019-2-4, Test Bb/Bd; MIL-STD-202 G, Meth. 108A; MIL-STD-810 G, Meth. 501.5; MIL-STD-883 J, Meth. 1008.2; JESD22-A103D

Alternating Temperature Test

IEC 60068-2-14, Test Nb; ISO 16750-4, Temp. Steps; ISO 16750-4, Temp. Cycling; ETSI EN 300019-2-4, Test Nb; MIL-STD-331 C, Test C6; JESD22-A105C

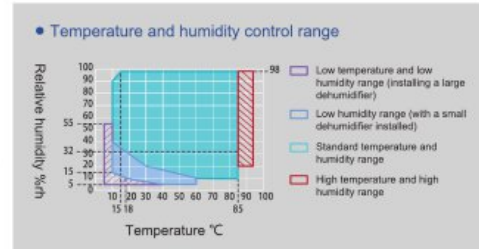
Temperature & Humidity Test

IEC 60068-2-67; IEC 60068-2-78; ISO 16750-4, Damp heat steady; ETSI EN 300019-2-4, Test Cab; MIL-STD-202 G, Meth. 103B; JESD22-A101C; IEC 60068-2-30, Test Db, Var. 1; IEC 60068-2-30, Test Db, Var. 2; IEC 60068-2-38; ISO 16750-4, Damp heat cyclic; ISO 16750-4, Temp/Humid, cyclic; ETSI EN 300019-2-4, Test Db; VG 95210, Blatt 7, Meth. 106C; MIL-STD-202 G, Meth. 106D; MIL-STD-331 C, Test C1; MIL-STD-750-1, Change 3; MIL-STD-810 G, Meth. 507.5; MIL-STD-883 J, Meth. 1004.7; JESD22-A100D

Model	SR/180/70/5(H)	SR/340/70/5(H)	SR/600/70/5(H)	SR/1000/70/5(H)	
System	Balance Temperature & Humidity Control (BTHC) System				
Temperature range	-70 ~ +180°C				
Temperature fluctuation	±0.3K				
Temperature uniformity	1.5°C				
Space temperature change	-70 to +150°C: 1.5K, +150.1 to +180°C: 2.0K				
Temperature performance	Temperature change rate	5K/min (nonlinear)			
	Heating rate	5K/min (nonlinear)			
	Cooling rate	5K/min (nonlinear)			
	Extreme temperature reach time	+20°C to +180°C 40 min. +20°C to -70°C 40 min.			
Humidity performance	Allowable heat load	4000W	4000W	5000W	
	Temperature & Humidity Range	+10 to 95°C / 10 to 98%rh			
	Humidity Fluctuation	±2.5%/rh			
	Allowable heat load	Test area conditions : +85°C / 85%rh 500W			
Structure	Appearance material	Using 1.5mm thick FC advanced electrolytic plate + spray anti-corrosion			
	Test area material	1.2mm thick SUS304 stainless steel			
	Heater	Finned Nichrome Explosion-Proof Heater			
	Humidifier	Stainless Steel Sheathed Humidifier (Steam Humidification)			
	Condenser	Water cooled condenser			
	Air circulator	Centrifugal fan			
	Water supply	Automatic replenishment	10 L	10 L	10 L
		Manual refill	12 L	15 L	20 L
	Refrigeration unit	System	Mechanical cascade refrigeration		
		Compressor	Scroll compressor		
Refrigerant		R404A&R23 R449A&R508B			
Power		4.5 Kw	6 Kw	8 Kw	
Capacity	Extension mechanism	Electronic expansion valve, capillary			
	Capacity	180L	340L	600L	
	Test area load-bearing capacity	30KG	50KG	100KG	
	Internal dimensions W×H×Dmm	580*750*450	750*750*600	800*950*800	1000*1000*1000
Dimensions W×H×Dmm	Dimensions	780*1800*1570	950*1800*1720	1000*2000*1930	1200*2050*2050
	Weight	600kg	720kg	780kg	850kg
Use environment requirements	Environmental conditions	0 ~ +40°C/ Max75%rh			
	Power supply	1φ220V AC&50/60Hz	60A	-	-
	Power supply	3φ380V AC&50/60Hz	28A	32A	40A
Noise level	70dB	70dB	70dB	70dB	

Temp & Humi
Temp
5K/min
10K/min
15K/min
20K/min
25K/min

*1 Performance values based on IEC60068-3-5:2001 and IEC60068-3-6:2001;
Performance data is given at +23°C ambient temperature, 65±20%rh relative humidity, rated voltage and no samples in the test area.
*2 Minimum temperature attainable at ambient temperature +5 to +30°C.
*3 When the temperature inside the box is +20°C.



* Ambient temperature without sample is +23°C.
* Continuous humidity operation at +40°C or lower is limited due to cooler frost.