

DR-H201 Constant Temperature and Humidity Test Chamber

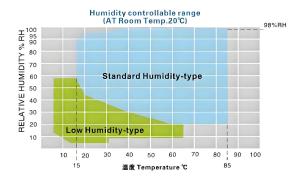


The programmable constant temperature and humidity test chamber is a versatile, essential device. It precisely simulates high/low temperature and alternating humid environments products, materials, and packaging may face during transportation, storage, and use. By exposing them to these conditions, it effectively assesses their resistance to heat, cold, and humid heat, helping manufacturers and researchers spot weaknesses.

It's widely used in aerospace (where components endure extreme in - flight changes), automotive (for reliable performance in different climates), electronics (to ensure stability), and new materials research (to develop adaptable materials). This chamber is crucial for guaranteeing product quality and durability across these fields.

FEATURES

- **♦** Wide-range temperature & humidity control (-70~180°C)
- \bullet High-precision stability ($\pm 0.1^{\circ}\text{C}/\pm 1\%\text{RH}$)
- Multi-level safety protection (overheat, leakage, power failure)
- Energy-efficient and low-noise operation
- Smart data logging & remote monitoring capability



Energy-efficient design

VRF technology, based on PID+PWM, uses cold control PID for low - temp energy - saving. During cooling and low - temp constant - temp, it adjusts refrigeration for "cold balance" (no cooling while heating and vice versa). This design saves over 30% energy vs traditional mode.



Electronic humidity sensing

Electronic humidity sensors offer precise readings with small error via advanced tech. In contrast, wet - and - dry - bulb hygrometers' accuracy is affected by factors like thermometer, airflow, and wick cleanliness, thus less reliable.





DR-H201 Constant Temperature and Humidity Test Chamber

SPECIFICATIONS

Model		DR-H201-100	DR-H201-150	DR-H201-225	DR-H201-408
Internal Dimension		500*500*400	500*600*500	600*750*500	600*850*800
(W*H*D)mm					
External Dimension (W*H*D)mm		750*1536*1310	750*1636*1410	850*1786*1410	850*1896*1710
Total Power (kw)		4.5/4.5/6.5	5/5/6.5	9.5/9.5/11.6	9.5/9.5/11.6
Maximum Current (A)		25/25/32	32/32/40	25/32/40	25/32/40
Voltage (v)		Sigle Phase 220	Sigle Phase 220	Three Phase 380	Three Phase 380
Performance	Temp.& Humi. Adjust Way	Balanced temperature and humidity control (BTHC) PID intelligent adjustment			
	Temperature range	-70°C∼+150°C (Other temperature ranges can be customized)			
	Temperature accuracy	0.01℃			
	Temperature tolerance	$\leq \pm 1.0$ °C or ± 2.0 °C			
	Temperature fluctuations	$\leq \pm 0.5$ °C (without load and temperature stable)			
	Temperature uniformity	$\leq 1.5^{\circ}$ C (without loading)			
	Humidity range	20%~98% (Other humidity ranges can also be customized)			
	Humidity accuracy	0.1%RH			
	Humidity tolerance	1 >75 %RH: $\leq \pm 3$ %RH; 2 < 55 %RH: $\leq \pm 6$ %RH			
	Humidity fluctuations	$\leq \pm 2.5\%$ RH			
	Heating rate	3°C/min in average			
	Cooling rate	1°C/min in average			
	Internal Chamber Material	Stainless Steel 304			
	External Chamber Material	Stainless Steel steel of paint spray			
Regulator	Cooling Method	Single stage compression, two stage compression			
	Refrigerator	Hermertically Sealed France Tecumseh Compressor or Semi-hermetic BOCK Compressor			
	Cooling Method	Air-cooled/Water-cooled			
Controller	Operation Panel	Programmable LCD Touch Screen			
	Running Mode	Fix Running, Pattern Running			
	Program Memory Capacity	120 Group Programmable, Max 100 Section Each			
	Output	Rs-232 (USB,Optional)			
Water	Water Supply	Circulating Water			
	Water Tank Capacity	Chamber Internal Capacity < 800L: 25L X 1pc Chamber Internal Capacity > 800L: 25LX 2pc			

Conventional large capacity: 800 liters / 1000 liters (For more requirements regarding product dimensions and parameters, customization can be made according to specific requests.)