



VOC Emission Test Chamber

Emission of VOC (volatile organic compounds), formaldehyde and other harmful substances from raw material such as wood products, furniture, floor, carpet, shoes, plastic runway, building decoration materials, automobile interior materials can be harmful to human health when they are prolonged exposed to these chemicals.

The Emission Test Chamber can provide one or more clean enclosed test spaces, precisely controlling the temperature, humidity, air flow, air pressure and air changes within the chamber. The Emission Test Chamber simulates the process of harmful chemicals released in a model room, and specifies the emission rate of volatile organic compounds (VOC) from sample under pre-defined climate conditions.

- Determine the effects of environmental variables on emission rate and release characteristics of VOC.
- The grades of materials are determined according to the VOC emission characteristics of the sample materials.
- R & D of sample materials and verification of indoor air pollution characteristics from VOC emission.
- Emission rate of VOC in sample experiences time decay in natural environment.
- Assessment of indoor air quality is predicted based on test data analysis.

Technical Specification / Ordering Info

Name & Model	XD-006/6VOC-AH3
Volume of operating chamber	Interior Dimension $0.6 \pm 0.02 \text{ m}^3$; W385mm \times H315mm \times D500mm
Overall Dimension	W2060mm \times H1930mm \times D1080mm (约)
Temperature/Humidity	Temperature Range: $+15^{\circ}\text{C} \sim +60^{\circ}\text{C}$
	Humidity Range: 5% \sim 80% RH
Instrument resolution	Temperature: 0.1°C
	Humidity: 0.1%RH
Temperature fluctuations	$\pm 1^{\circ}\text{C}$
Temperature uniformity	$\leq 2^{\circ}\text{C}$
Humidity fluctuations	-2%RH, + 3%RH
Air change rate	0.5 \sim 3 Time/hour (adjustable)
Flowmeter accuracy	Digital flow meter ,tolerance 0.5 grade; 0 \sim 5L/min
Air Flow Display	Micro air mass floweter,online flow display on touch screen (adjustable)
Airtightness	When the overpressure is 1000pa , the leakage is less than $10^{-3} \times 1\text{m}^3/\text{min}$; Import an export gas gas flow difference is less than 1% Air pressure monitoring in the chamber , micro pressure sensor of analog quantity , pressure display on the touch screen.
Condition period	Temperature stabilization time is less than 40min; Humidity stabilization time is less than 70min; The equipment can be operated continuously for not less than 30 days;
VOC concentration in air from emptychamber	Single VOC $\leq 0.005 \text{ mg/m}^3$, TVOC $\leq 0.05 \text{ mg/m}^3$
Noise	$\leq 55\text{db}$ (Class A),There is no resonance sound between the door and the equipment door.

