

Fabric Moisture Permeability and Water Vapor Transmission Tester

This device tests moisture permeability for breathable waterproof materials, crucial for sportswear like skiing and climbing apparel. It evaluates water resistance, moisture permeability, and air permeability using controlled temperature and humidity.



Product Overview

Precision Moisture Permeability Testing

This environmental testing machine is designed to evaluate the moisture permeability, air permeability, and water resistance of breathable waterproof materials, making it an essential tool for sportswear and high-performance garment manufacturing. By simulating real-world conditions, it accurately determines water vapor transmission rates based on temperature and vapor pressure differentials. The system features a sophisticated rotary sample rack and adjustable airflow, ensuring reliable and consistent performance testing for quality control and research applications.

Standards & Compliance

Standards	JIS L1099, GB/T 12704
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Environmental Control

Temperature range	20 ~ 60 °C
Humidity range	40 ~ 95% (no load)
Temperature accuracy	± 0.5 °C (no load)
Humidity accuracy	± 3% (no load)
Freezer	air-cooled closed compression
Cooler	Flap cooler
Humidifier	pot-type humidifier (with an air burner to prevent)
Heater	Wing radiator (with high temperature to prevent device)
Blower	fan (up and down each one)
Wind speed adjustment range	0.5 ~ 1.5m / sec
Rotating frame	upper and lower two sections (270mmφ)
Indoor specifications	about W400 × D360 × H500mm
Power supply	AC 220V 50Hz
Overall size	about W1100 × D550 × H1470mm

Technical overview of the environmental control system, including temperature, humidity, and airflow specifications.

Temperature Range

20 °C Min Temperature	60 °C Max Temperature
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Control Accuracy (No Load)

Parameter	Accuracy
Temperature	±0.5°C
Humidity	±3%

Humidity Range	95 %
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Technical Specifications

Wind Speed Adjustment	1.5 m/s
Power Supply	AC 220V 50Hz
Internal Chamber Dimensions	W400 x D360 x H500 mm
Overall Dimensions	W1100 x D550 x H1470 mm

Design Features

System Components

- Air-cooled closed compression freezer
- Flap cooler
- Pot-type humidifier with air burner
- Wing radiator with high-temperature protection
- Variable speed blower fans (upper and lower)

Sample Rack Configuration	Rotary type with upper and lower stages (270mm diameter)
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