

W201 Water Vapor Transmission Rate Tester

W201 Water Vapor Transmission Rate Tester is manufactured based on the infrared sensor method and is applicable to test the water vapor transmission rate of high barrier materials.

Features

- The touch interface is more convenient to operate.
- High precise infrared moisture sensor.
- One sample for each test.
- The stability of the temperature and humidity is to ensure the consistency of test conditions of chambers.
- High-precise and automatic control system of temperature can be used under different conditions.
- The data can be stored and outputted in multi-format (including reports in excel and cloud sharing).
- GMP management of the user's three-level authority complies with international standards.
- The instrument processes a statistical analysis of single and group data.
- Equipped with ISP control online and upgrade function.
- Specialized communicating software can display in real-time, analyze and store data.



Principle

The test specimen is mounted in the diffusion cell, which is subsequently divided into a dry chamber and a controlled-humidity chamber. The dry side of the specimen is swept by a flow of dry nitrogen, and the water vapor permeating through the specimen from the controlled-humidity chamber is carried by dry nitrogen to the infra-red sensor where proportion electrical signals will be generated. The water vapor transmission rate is obtained by analyzing and calculating the electrical signals. For package samples, dry nitrogen flows inside the package, and moisturized nitrogen flows outside.

Standards

ISO 15106-2, ASTM F1249, TAPPI T557, JIS K7129, GB/T 26253-2010, YBB 00092003-2015

Applications

Films

Including plastic films, plastic composite films, paper-plastic composite films, geomembranes, coextruded films, aluminized films, aluminum foils, aluminum foil composite films,

	breathable water-proof films and many other film materials.
Sheeting	Including engineering plastics, rubber, waterproof building materials and thermal insulation materials, e.g, PP, PVC, PVDC and nylon.
Paper, Paperboard	Including paper and paper board.

Technical Specifications

Test Range	0.01 ~ 50 g/m ² •24h (Standard)
Number of Specimen	1 PC
Accuracy	0.01 g/m ² •24h
Resolution	0.0001 g/m ² •24h
Range of Temperature	10°C ~ 60°C (Standard)
Accuracy of Temperature	±0.1°C
Range of Humidity	0%, 35%RH ~ 90%RH, 100%
Accuracy of Humidity	±1%RH
Test Area	50 cm ²
Sample Thickness	≤ 3 mm (Customization is available)
Test Pressure	≥0.20MPa
Port Size	1/8 inch Metal Tube
Dimension	400 mm (L) × 600 mm (W) × 350 mm (H)

Configurations

Standard: Instrument, Sample Cutter, Gloves.

Optional: Reference film, Professional Software, Communication Cable

Note: 1. The air connection of the instrument is 1/8 inch Metal Tube.

2. Customers need to prepare for air source and distilled water.

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