

Gravimetric Method Water Vapor Permeability Analyzer W303 2.0



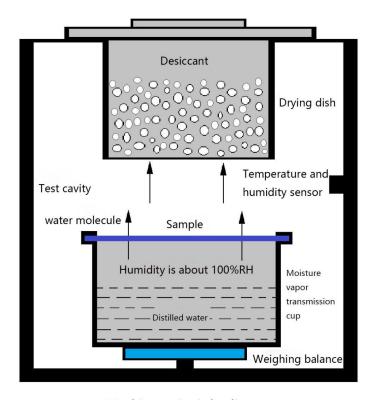


Product introduction

The W303 WVTR tester is designed and produced based on the test principle of weight method (weight reduction) and as per the standards of ASTM E96 and GB/T 1037, etc. It is suitable to measure the water permeability performance of film, sheets, papers, packagings and other related materials in the industries of food, pharmaceutical, medical equipment, daily chemicals, Photovoltaic electronics, etc, providing wide range and high efficiency water vapor transmittance detection for high, medium and low water vapor barrier materials.

Test principal

Adding distilled water to a dry, clean test dish, put the test dish sealed by pr-processed sample into the test chamber, by controlling temperature and humidity, make the distilled water in the test dish evaporate, the evaporated water vapor is absorbed by the drying device through the film, by measuring decreasing weight change of distilled water in the test dish over time, obtain the parameters of water vapor permeability of the sample, etc.



Working principle diagram





Standards

ASTM E96/E96M, ASTM D1653, ISO 2528, DIN 53122-1, JIS Z0208, YBB 00092003, GB/T 1037, GB/T 16928

Technical Parameters

Item	Technical parameters
Test range	0.1~10000 g/(m2·24h)
Test precision	0.0001 g/(m2·24h)
Temperature range	15~55°C
Temperature accuracy	±0.1°C
Humidity range	≤10%RH, Drying method
Humidity accuracy	±2%RH
Test area	50.24 cm2
Sample size	Ф90 mm
Sample thickness	≤3mm
Number of test sample	3 pieces
Dimension	1150*545*315mm
Weight	66 kg
Power	1300 W
Power supply	AC 220 V, 50 Hz

Product Features

◆ High precision load cell

The instrument is equipped with high-precision weighing sensor, which is with high weighing efficiency, stable performance, resolution up to $0.0001 \text{ g/(m2} \cdot 24\text{h})$.

Temperature control : The semiconductor stabilizer automatically controls the temperature, and the temperature control accuracy is 0.1 $\,^{\circ}\text{C}$.







◆ Meeting the test requirements of high throughput, wide range and high applicability

The instrument is equipped with 3 chambers with independent data, which can meet the requirements of high throughput testing and testing efficiency is high.

Wide measuring range $0.1\sim10000$ g/(m2 \cdot 24h) meets the testing demand of high, medium and low barrier materials. By using customized fixtures also can measure the water vapor transmission of bottles, bags, bowls and other packaging parts.

• Outstanding shape, easy operation, real time visual curve

The product is designed from the Angle of ergonomics and technical aesthetics, Exquisite 3D printed shell, smooth lines, beautiful fashion, novel and unique.

Automatic operation, one key test, automatic judgment, automatic shutdown.

Real-time display four groups of curves of transmittance - time, temperature - time, humidity - time, weight - time, curves support preview hiding function.

◆ Intelligent operating system, global certification

We develop intelligent operating system by ourselves, with modular graphics, flexible setting of test process parameters, intuitive and convenient operation.

Designed according to the GMP appendix "Computerized System", it has the function of auditing and tracking, and multi-level permission settings for users can meet the requirements of the pharmaceutical industry for data traceability.

Personalized test report can be set as required, supporting multiple formats of data output. Support electronic signature, online submission of audit report function.

◆ Professional calibration service, data is accurate and reliable

Our company has "National Reference Material Grading Certificate" and "Manufacturing







Measuring Instrument License of the People's Republic of China" for water vapor transmission rate analyzer issued by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, The reference material number is GBW(E)130543 / GBW(E)130544. The instrument is calibrated and verified by national reference materials developed independently to ensure the accuracy, versatility and authority of the test data.

◆ Laboratory intelligent IoT platform

The instrument can be connected to IoT platfor, achieve digital network management.

Remote authorization to log in to the IoT platform can realize these functions such as managing experimental data, remote diagnosis and troubleshooting etc.

Customers can download the required instrument information, documents and operation videos on the platform.

Application

Film	Water vapor permeability tests of membrane materials such as All kinds of plastic film (PP/PET/PE/PVC/BOPP/CPP, etc.), plastic composite film, paper-plastic composite film, metal composite film, co-extrusion film, aluminum plating film, degradable packaging film (PLA/PBAT/PBS, etc.), etc.
Sheet	Water vapor permeability tests of solid pharmaceutical hard sheet (PP/PVC/PTP, etc.), metal composite sheet, rubber sheet and other sheet materials.





Paper, paperboard and composite materials	Water vapor permeability tests of Coated paper, silicone paper, cigarette aluminized paper, paper aluminum-plastic composite sheet, paper board.
Medicinal patches	Water vapor permeability tests of medical plaster for treatment.
Package	Customizable fixtures can be extended to packages such as pharmaceutical polyethylene bottles, sealed bags, pharmaceutical ointment tubes, infusion hoses, plastic trays, etc.

Factory configuration

Standard	Main unit, power cord, moisture permeable cup, sampler, sealing grease,
configuration	standard weight, 4A molecular sieve, serial cable, mouse, 125µm reference
	film
Optional	Computer, calibration certificate

Note: GBPI has always been committed to the innovation and improvement of product performance and function. For this reason, product technical specifications and appearance will also be changed accordingly.

The above situation will not be notified. GBPI reserves the right of modification and final interpretation.









Service Commitment

- Free packaging inspection technical support.
- One-year warranty for instrument, free software upgrade service, and lifetime free technical support.
- Free to the factory to train the operation of the instrument, qualified people issued graduation certificates, free accommodation and food.
- ◆ Instrument "trade-in" policy and provision of backup instruments in case of failure.
- There is a testing center (CNAS L8185) to provide incoming sample testing and sample.
 data comparison services
- Set up a Reference Standards Development
 Center to provide calibration services.

Company Introduction

Guangzhou Biaoji Packaging Equipment Co., Ltd. was established in 2002 and located in Guangzhou Economic Development Zone. It is a company integrating R&D, production and sales of packaging testing instruments, packaging equipment, modified atmosphere preservation equipment and other products, as well as providing third-party testing and reference material proficiency testing. It is committed to providing comprehensive, professional and high-quality products and technical services for packaging, food, medicine, testing and other industries.

Write industry standards with quality, and become the leader and leader in the field of global packaging testing. The 80,000-mile journey is sailing, and GBPI will escort you!







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