



Application

W533 water vapor permeability analyzer is to test the water vapor transmission rate (WVTR) of films or sheets materials.



Applied to:

- Plastic film, composite film, aluminium foil, aluminized film, etc;
- Sheet, panel, rubber, ceramics, etc;
- Packaging containers, such as: glass, bottle, cans, boxes, etc;
- Expanding application: solar panel, LCD film, medical patch, etc.

Widely used in quality inspection organizations, drug control institutions, research institutes, packaging, thin film, food companies, pharmaceutical enterprises, personal care industry, electronics industry and so on.

Standard

- GB/T 1037-1988
- GB/T 16928-199
- YBB00092003-2015
- ASTM E96/E96M-2016
- ASTM D1653-2013
- ISO 2528-1995
- JIS Z0208-1976
- TAPPI T464

Specifications

Model:	W300
Test precision	0.001 g/m ² ·24h
Weight range	0.1mg~200g
Temperature range	15~55°C
Humidity range	30~90%RH, 100%RH
Humidity accuracy	±1%RH
Test area	86.54 cm ²
Sample size	Φ125 mm
Test Sample Thickness:	≤5mm
Number of test sample	3 pieces
Interface size	Φ4mm polyurethane tube
Air pressure	≥0.2MPa
Dimensions H x W x D:	1680×520×420mm
Weight:	100kg
Power	750W
Power Supply	Ac 220V, 50Hz

Features

Accurate and reliable data

- With The State Certificate for Gradation of the certified Reference Materials and Licence for Manufacturing Measuring Instruments of the state
- Reference Materials (GBW(E)130543/4) of Water Vapor Permeability Analyzer approved and issued by General Administration of Quality Supervision, Inspection and Quarantine of the P.R.C. Adopting state reference materials to calibrate and verify the instruments, ensure the accuracy, universality and authority of the test data.

Simple operation

- Professional software with simple interface, easy to use and convenient to set test process.
- Computer automatically monitors the whole test procedure: auto test, auto judgment, and auto stop.
- Curves display of transmission, water vapor concentration, temperature and humidity in real time. The curves with conceal function, support query function for background data.
- Professional test report; can export file in PDF format.

Advanced technology

- Temperature control: International advanced electromagnetic technology, program controlled, auto heating and cooling; no need of external accessories. Precision: 0.1°C.
- Humidity control: Dual gas flow method (dry gas and humid gas), high precision (1%RH) and stable flow.
- Mainframe configures with color touch screen, can observe temperature, humidity and transmission and can run independently without external computer.
- Introduce multiple foreign advanced technologies, precision is as high as 0.001 g/m²·24h.

High efficiency

- Three chambers work independently with gravimetric method, each chamber has separate report; can run one chamber or two chambers or three chambers respectively.
- High precision sensor, continuous weighing and data acquisition, so test data is reliable.
- By adding adaptive accessory, can test water vapor transmission of various containers such as bag, bottle, can and bowl.
- Can be expanded up to 10 chambers.
- The only water vapor permeability analyzer with cup method that can test aluminum foil, aluminum laminated films and other high barriers materials in the industry.

Calibration & Certification

- The instrument supports two methods of reference materials and standard gas to calibrate and certificate; operation is simple, user only need use certified reference materials for normal testing, and then input the test result into the instrument interface.

Reliable and easy-maintenance instrument

- Adjustment parameters are managed by coded lock. The whole procedure is finished automatically.
- Sensor over-range protection, prevent damaging important sensors.
- Function modularization, easy to maintain.

10 - 11 Colorado Court
Hallam, Victoria 3803 Australia
Ph: +61 3 9708 6885
Fax: +61 3 9708 6770

Email: idm@idminstruments.com.au
Web: www.idminstruments.com.au

Configuration List

A. Spare parts			
NO.	Name	Remark	Quantity
1	Power cable	3*0.75 10A 1.8M	3 PCS
2	Scale plate	--	3 PCS
3	Drying vessel	--	3 PCS
4	Sample cutter	φ123	1 PC
5	Sealing grease	HFV-GS (HFV-GS 70g)	1 PC
6	Standard weight	200g	1 PC
7	4A molecular sieve	3-5MM	1 bag
8	Communication cable	RS232nine-pin data cable	3 PCS
9	Allen wrench	M6 M4	1 Set
10	Mouse	RAPOO M10	1 PC
11	Cross screwdriver	6-10mm	1 PC
12	Rubber pipe	6*4 and 6*2.5 6M for each	2 PCS
13	Gas-pressure meter		3 PCS
14	Speed regulator valve	ESA-6 connect M6	5 PCS
15	Air pipe adaptor	PG6-4	3 PCS
16	Reference material	125µm	1 Set
17	Wooden box	--	1 PC

B. Optional parts				
NO.	Name	Unit	Quantity	Remark
1	Computer			Optional
2	Metrology Certificates			Optional
3	Air compressor			Optional

C. User provide

1	Experiment table requirements:table size length 200cm*width 80cm*height 80cm, the experiment platform can not shake and must be horizontal
2	Laboratory requirements: ordinary laboratory with air conditioner, temperature stale at 23°C±2
3	Power supply: 220V 1 piece of three-hole switch socket with three-position
4	Computer requirements: standard configuration Windows7,with nine-pin serial port)
5	1 piece of drying vessel, 3 pieces of 500-1000ml wide-mouth bottle (all samples must be degassed and dehydrated for 24 hours)
6	Muffle furnace or drying device that temperature can up to 500°C, special desiccant for drying device (can use for several times after drying)
7	Air supply through secondary filtration (separaair compressor water), such as air compressor (2.5HP, 8KG pressure)
8	2 bottles of 40 L bottled nitrogen, purity above 99.999%, 1 bottle is for spare
9	5L first-class distilled water