



# Humidity Detection Method Water Vapour permeability tester W3/130

The humidity detection method water vapour permeability tester is used for water vapour transmission rate tests for plastic film, laminated film and various barrier materials employed by pharmaceutical industry as well as polyester foam, leather, textile and non-woven. Users can control and adjust the technical indexes of packaging materials independently by testing the water vapour transmission rate.

#### Principle

Clamp the sample between dry and humid constanttemperature chambers, the sensor located in the testing chamber detects the humidity change and trace the cost time from the preset upper limit date to the lower limit data. Get the water vapour transmission rate and coefficient by multiple tests and analyse.



Before testing, preset the temperature, humidity and other parameters. Other processes will be done automatically during the testing as well as the final results. According to the actual use requirements, users can preset one or several groups of parameters to test the water vapour transmission rate under different conditions.

Easy to place the samples and maintain the test cups.

Four kinds of materials can be tested at the same time and can be tested in any group according to actual requirements.

With a computer, users can store, review, print and plot results for complete analysis and inspection.



#### **Features**

- Humidity sensor test principle, easy to test.
- Blank test, four independent chambers, group tests.
- Observable characteristics: Four chambers can test independently at the same time, higher efficiency.
- Free from weighting, good in anti-jamming, accurate.
- Computer controls full testing procedure accurately, rapidly and reliable.
- Digital P.I.D. temperature control system accurately, no requirements for ambient conditions.
- Professional software, testing data is shown dynamically.
- Test data is stored openly, good to re-analyse.
- Test point an scope are adjustable, easy to do non-standard tests.

#### Technical specifications

Testing range

 $0.1 \sim 1000 \text{ g/m}^2 24 \text{ h}$ 

Testing temperature

Room temperature ~50°C

Temperature control accuracy

+/- 0,5°C

Quantity of samples

1~4 pieces

Testing area

50,24 cm<sup>2</sup>

Sample size

110 mm x 180 mm (dia. 110 mm)

Sample thickness

≤ 5 mm

Power

AC 220V/50Hz/60Hz

## Physical specifications

Dimensions

786 mm x 385 mm x 540 mm (L x B x H)

Net weight

82 kg

#### Standards

ASTM E398, ISO 15106-1, TAPPI T523, JIS K7129

### Configuration

Mainframe, air, professional software, communication cable, test cups, sample holders

Note: test gas and distilled water should be provided by users themselves

