



# Water Vapor Permeability Tester DMPC-E96

*Not just products... Solutions*

# APPLICATIONS

The instrument has the ability to measure water vapor permeability of a wide variety of samples based on ASTM Designations ASTM E96 and ASTM D1653.

# PRINCIPLE

The sample is used to seal the mouth of a cup containing water. The cup is kept in the test chamber which is maintained at the desired temperature and humidity. The water maintains one hundred percent humidity in the cup below the sample and a lower humidity is maintained outside the cup above the sample. Hence water vapor migrates through the sample and water is lost by the cup. Weight loss of the cup yields water vapor permeability.

# INSTRUMENT

The layout of the instrument is shown in Figure 1. Pressurized air passes through a pressure regulator. The outlet of the regulator is divided into two streams, which pass through flow controllers. The gas from one of the flow controllers goes through bubblers and then combines with the other air stream. The humidity of the air stream is controlled simply by controlling the ratio of gas flow rates through the flow controllers. The air with desired humidity is released to the test chamber which is maintained at the desired temperature. The flow velocity of gas above the cup is maintained at the desired value which is normally less than 3 m/s. The flow rate is measured.

# FEATURES

- Fabric and textile tester
- Water vapour permeability testing machine
- Fully automatic
- Windows-based software handles all control, measurement, data collection, and report generation; complete manual control also possible
- Comes with a PC computer equipped with real-time graphical LCD test display that depicts testing status and results throughout operation
- Non-destructive testing
- Minimal maintenance required

## SPECIFICATION

- Temperature Range: ambient 10°C to 45°C (can be upgraded up to 70°C)
- WVTR Measuring Range: 0.1 g/m<sup>2</sup> .day - 10,000 g/m<sup>2</sup> .day
- Humidity Range: 5% RH to 90% RH
- Conforms to ASTM Standard E-96
- Calibration: Using test standard films

## SALES & SERVICE

Our sales team is dedicated to helping our customers find which machine is right for their situation. We also offer custom machines for customers with unique needs. To find out what we can do for you, contact us. We are committed to customer support including specific service products, short response times & customer specific solutions. To quickly & flexibly meet our customer's requirement, we offer a comprehensive range of services.

*Customize your machine today!*



The most advanced, accurate, easy to use and reproducible porometers in the world.



20 Dutch Mill Rd, Ithaca, NY 14850, USA  
Toll Free (US & Canada): 1-800-TALK-PMI (1-800-825-5764)  
Phone: 607-257-5544 Fax: 607-257-5639

Email: [info@pmiapp.com](mailto:info@pmiapp.com)

[www.pmiapp.com](http://www.pmiapp.com)

