

# WATER VAPOR TRANSMISSION RATE ANALYSER MODEL 7100



Coulometric Sensor for WVTR analysis to meet the new ASTM F3299-18 standard for testing barrier films

Meeting the NEW ASTM International F3299-18 standard, the AquaSense Model 7100 water vapor transmission rate analyzer incorporates the most advanced coulometric sensor technology with high sensitivity. It is simple to operate, reduces testing costs and increases productivity. Its wide humidity and sample temperature ranges provide research grade flexibility.

- Completely new design
- High sensitivity, coulometric sensor with no calibration required
- Easy testing, just load the film and press a button to start
- Large touch screen providing easy operation and display of results
- Film loading made simple and effective with the Q-Seal™ gas-free cell closure system
- Automatic relative humidity and temperature control
- Expandable up to 32 cells
- "Test Condition Matrix"(TCM™) enables you, with the touch of a single button, to test a sample at up to ten different conditions of temperature and relative humidity.

The AquaSense 7100 is designed to be expandable and reduce your testing costs. Systech Illinois is the only major developer of transmission rate test instrumentation to offer satellite expansion. Satellite systems can be configured to meet your precise testing needs, allowing you to cost effectively add capability as needed while continuing to reduce your cost per test.

## A wide range sensor for your WVTR application to meet ASTM F3299-18

The high sensitivity wide range coulometric sensor offers a range from 0.002 to 70 g/(m<sup>2</sup> · d), 0.02 to 1000 g/(m<sup>2</sup> · d) when masked.

### Easy operation

Large interactive touch screen makes working with the instrument easy and intuitive. To test, just enter conditions and press start.

### Networking

This system runs on a full Windows® operating system enabling safe, secure operation and network connectivity.

### Low operation cost

The sensor continues Systech Illinois' leadership in providing a longer lasting sensor with a lower replacement cost.

### Anti-Surge™

Prevents sensor damage due to excessive levels of water vapor - extending sensor life.

### Accurate validation

Obtained in just a few hours using third party certified gases. NIST traceable.

### Remote, Internet based support

Systech Illinois can access your instrument (with your permission) to diagnose and repair system errors without the cost and time of an on-site visit.

### Software

The Windows based software offers:

- Easy input and recall of operating parameters and test protocols
- Software Cont:
  - Data tracking, searches, sorts, storage and output capabilities.
  - Graphical representation of measurement data in real time.
  - Auto-stop feature stops test when samples have reached equilibrium or by user entered elapsed time valve.
  - Software available to conform with 21 CFR Part 11.
  - Complete system diagnostics.

### Specifications

- Industry : Packaging
- Gas : Water Vapor
- Application : Permeation
- Measurement range : 0.002 to 70 g/(m<sup>2</sup> · d). 0.02 to 1,000 g/(m<sup>2</sup> · d). when masked.
- Test temperature range : 10 to 40°C (50 to 104°F)
- Test RH range : 20 to 90% RH
- Sample Size : 50cm<sup>2</sup>, adapters available for smaller sizes

### Industry Standards:

- ASTM F3299-18
- ASTM F1249 (modified)
- ISO 151106-3
- DIN 53122-2