AquaSense Model™ 7100
Water Vapor Transmission Rate Analyzer

Coulometric sensor technology ASTM F3299-18 compliant

High sensitivity

Easy to operate

Fully automatic

Wide humidity range

Expandable Satellites

Applications:

**Barrier Film
PET Bottles
Containers
Closures
Bags
Flexible pouches**

Accurate results - High value

Systech Illinois - Instrumental in innovation and cost effective solutions.

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.

What's new:

- 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
- "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.
- Expandable up to 32 cells

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.

bsi. ISO 9001 Quality Management

FM 583777

SYSTECH Illinois
An Industrial Physics Company

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/(m² · d), 0.02 to 1000 g/(m² · 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.

Low operation cost

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

Networking

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

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

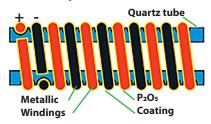The Windows based software offers:
- Easy input and recall of operating parameters and test protocols.

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.

P_2O_5 Sensor
Phosphorous Pentoxide

To achieve an absolute measure, the technology draws upon a fundamental principal of physics.

The phosphorous pentoxide (P_2O_5) moisture sensor consists of a dual platinum winding formed around a quartz tube.

The change in the resistance across the windings creates a change in the measured current. According to Faraday's Law this is directly proportional to the amount of moisture in the gas steam.

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

Tablet computer shown is not included. Systech Illinois can supply the appropriate tablet if requested or the user can provide their own. Contact Systech Illinois for the required specifications of the computer system.

AquaSense Model 7100 Technical Specifications

	g/(m² · day) Unmasked	g/(m² · day) Masked	g/(pkg · day) at 10cc flow
Range	0.002 to 70	0.02 to 1000	0.00001 to 0.05 At 50cc flow up to 0.5

Test Conditions

Test Temperature Range	10ºC to 40ºC (50ºF to 104º F)
Controlled RH Testing Range:	20 to 90% RH
Sample size:	50cm², adapters available for smaller sizes

Our 5 year average Customer Service Rank

★★★★☆

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