



AQUATRAN® MODEL 3/38 H

WATER VAPOR PERMEATION ANALYZER

High throughput water vapor transmission testing
for barrier films.

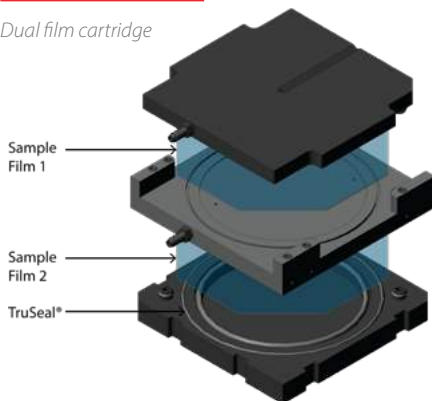


High Throughput Water Vapor Permeation Analyzer

The AQUATRAN 3/38 H Water Vapor Permeation Analyzer is designed for laboratories that routinely perform a high quantity of water vapor transmission rate (WVTR) tests. With its unique four cell capability it can test four barrier samples at the same time, providing twice the throughput of traditional WVTR instruments.

The AQUATRAN 3/38 H includes automated testing features for ease-of-use, including software features to improve laboratory efficiency. Unique test settings like the **QC test mode** and **conditioning test mode** dramatically increase the efficiency and overall testing capacity of your lab, making it the perfect solution for busy QC labs supporting production operations.

Dual film cartridge



Designed for Efficiency

The 3/38 H features an innovative dual film cartridge from AMETEK MOCON, which combines two test cells into a single cartridge. This allows for more than double the testing capacity of legacy and single-cell models, with the exact same compact footprint.

Dual film cartridges use a standard 50 cm² testing area, and incorporate our proprietary TruSeal® in both the upper and lower cells. The TruSeal design uses two seals and flushes gas between them to prevent ingress into the testing area. This reduces background levels, improves repeatability, and reduces the need to run individual zero.

Interchangeable cartridge options such as the dual cell edge effect and reduced area cartridges expand testing capabilities. With the 2-cell remote testing adaptor you can also test films in environmental chambers or packages.

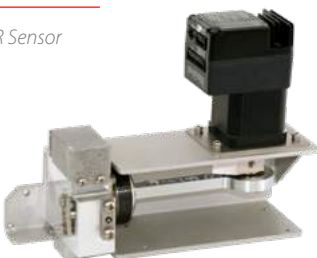
2-cell Remote Testing
Adapter and additional
cartridge options



Precision Measurements With Our Modulated IR Sensor Technology

Using a patented modulated infrared (IR) technology, this sensor provides accurate and repeatable results with the longest life of any WVTR sensor on the market. It's the only modulated sensor system on the market to meet ASTM F1249.

Modulated IR Sensor



High Throughput

- 4 test cells in one analyzer
- Removable horizontal film cartridges
- Short exam times

Low Cost

- Lower maintenance cost per cell
- Long life modulated IR sensor

User-Friendly Auto-Testing

The **QC test mode** provides operators with the real time status of each test by displaying target and failure limits while tests are being run. Test methods for commonly performed tests can be set up and stored by an administrator. With a simple touch of a button, operators can recall and start test methods in seconds. Final test reports clearly display the results of the test as Green (Pass), Yellow (Warning) or Red (Fail), eliminating the need to look up the target values and meaning for each test performed.

The **conditioning mode** option allows phasing of tests by prioritizing the examinations on samples as they approach convergence while other samples are being conditioned. This provides results in less time than normal sampling mode, helping to increase the throughput of the analyzer.

The Industry's Standard in WVTR Testing

The AQUATRAN 3/38 H is designed for quality control laboratories where abbreviated WVTR testing is performed. Due to the simplified operation it is best suited for routine testing at set conditions.

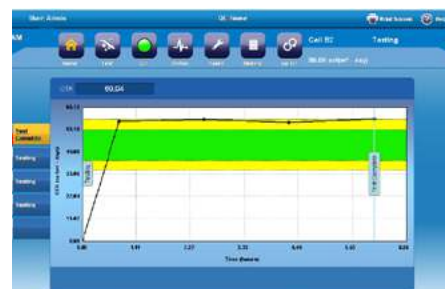
The analyzer provides the ability to perform triplicate testing with or without a reference film in the same test. The option to run a known standard as a control ensures high confidence in the WVTR results. Whether you need to conform to triplicate standards, or just want to make sure you have consistent results, the AQUATRAN 3/38 H will meet your needs.

QC test mode allows upper and lower warning and failure limits to be set for stored test methods

QC test mode graphically displays exam results against the target limits in real time

QC test mode displaying exam results above target limits but within warning limits

Conditioning test mode option for reduced time for convergence data



Easy to Use

- Starts tests with a single button
- Test results give pass, fail or warning
- Touchscreen with easy options
- Stored test method library

Next Generation Features

- Fully automated exams
- Removable test cartridges
- TruSeal gas flushing
- Automatic sensor protection

Warranty

- Full 100% parts and workmanship warranty for 12 months
- Exclusive 4-year warranty on the modulated IR sensor

AQUATRAN® 3/38 H

SPECIFICATIONS

PRODUCT BROCHURE

Industry Standards

- ASTM F1249
- ISO 15106-2
- TAPPI T557
- JIS K-7129 films
- GB/T 26253-2010

Conformance Standards

- CE, UL, CSA safety compliance

Connectivity

- Ethernet port
- 2 USB ports
- PERM-NET™ Lite for remote monitoring

Dimensions & Weight

Depth: 23" or 58.0 cm
Width: 12" or 30.4 cm
Height: 15.5" or 39.4 cm
Weight: 95 lbs. or 43.1 kg

Accessories

- PermWare® software is available to collect and manage test data
- Additional cartridges allow samples to be prepared and staged for a quick change out to increase efficiency
- Interchangeable dual-cell cartridge options expand testing capabilities. Options include:
 - Reduced area cartridge
 - Edge effect cartridge
 - Remote testing adapter

Performance Specifications

Test Temperature Range	20-60°C ± 0.2°C
Controlled RH Testing Ranges	20-40°C: 50-90% ± 3% 20-60°C: 100% ± 3%
Maximum Film Thickness <ul style="list-style-type: none">- Standard cartridge for 50 cm² sample- Optional cartridge for 5.0 cm² sample- Optional cartridge for 10.0 cm² sample	<ul style="list-style-type: none">- Up to 20 mil, 0.5 mm- Up to 120 mil, 3.0 mm- Up to 120 mil, 3.0 mm
Test Gas	Nitrogen (99.7% N ₂ or better)

Technical Specifications

Models		Test Ranges			Resolution	Repeatability
		g/(m² • day)	g/(100 in² • day)	cc/(pkg • day)	g/(m² • day) @ 50cm²	g/(m² • day)
3/38 H	Normal (50 cm²)	0.05 to 100	0.003 to 6.45	0.00025 to 1.0	0.0001	0.05 or 2*%
	Masked (5.0 cm²)	0.5 to 1000	0.03 to 64.5	-	-	-

* whichever is greater



© 2025 AMETEK MOCON. All rights reserved. Subject to modification without notice.
PB-PPS-0119-AQUATRAN 338-0425-2.0

AMETEK MOCON
7500 Mendelssohn Ave. N
Minneapolis, MN 55428 USA
info.mocon@ametek.com
www.ametekmocon.com