



AQUATRAN[®] 3/40

WATER VAPOR PERMEATION ANALYZER

Accurate and reliable water vapor permeation testing for finished packages.



All-in-One Whole Package Permeation Analyzer

The AQUATRAN 3/40 Water Vapor Permeation Analyzer from AMETEK MOCON is the first permeation instrument custom-designed to test whole packages. The AQUATRAN 3/40 integrates a large environmental chamber with Water Vapor Transmission Rate (WVTR) testing into one instrument to ensure precise test gas conditions and accommodations for a wide variety of packages and containers. Using unique and innovative MOCON® test cartridges, the AQUATRAN 3/40 is a complete, all-in-one package WVTR testing system.

Whole Package Testing — Made Easy

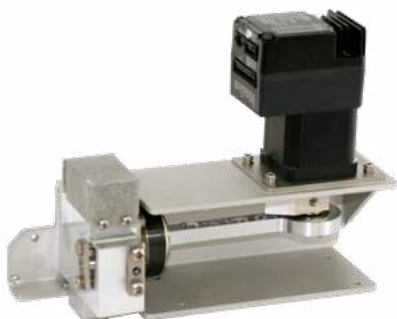
The precisely controlled environmental chamber eliminates the need for cumbersome setup of independent test gas environments and ensures accurate test results for real-world conditions. The controlled chamber instrument has four independent test cells allowing multiple analyses to be run at the same time, while the easy-to-use package test cartridges make mounting and testing of packages simple and repeatable.

Simplified Test Setup and Monitoring

The simple user interface with automated controls makes testing easy with little training. In certain applications, starting a new test may be as simple as a single press of a button. Your operators can now pre-program a variety of tests at different conditions and run them sequentially without operator intervention, resulting in less instrument idle time.

Modulated Infrared Sensor Technology

The MOCON patented modulated infrared sensor provides precise WVTR measurement. An industry-trusted system, it is the only modulated sensor system on the market that meets ASTM F1249.



Improve your bottom line and get peace of mind.

The AQUATRAN 3/40 was designed to help maintain the integrity of your package by giving you the capability to test it in real-world conditions.

This arms you with precise data to select the most appropriate packaging for your product — no over or under packaging, saving costs and reducing package waste.



Application Solutions

The AQUATRAN 3/40 is capable of testing a wide range of package types through the use of our innovative test cartridges. A variety of package test cartridges are available to easily and accurately test:

- Trays
- Bottles
- Flexible containers or pouches
- Cups, packs or pods
- Caps or corks
- Films
- Complete packages or tubing via Package Adapter Cartridge

Package test cartridges use pneumatic clamp mounting in the chamber for quick and tool-free installation and removal.

Low cost, single-use package test foils eliminate the need to heat and scrape the epoxy from reusable plates. They also provide high-confidence mounting with the integrated TruSeal® design, which flushes gas between two seals to prevent ingress into the test area. This eliminates the need to run absolute zero tests on samples, thus saving time.

Custom test cartridges and fixtures are available for greater improvement of test accuracy and reduce setup time. Contact one of our application experts to ask about your custom package application needs.

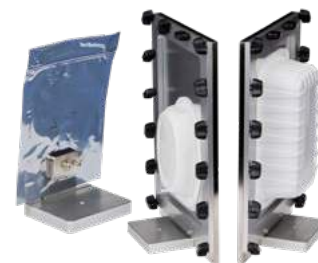
Our Universal Test Cartridge will allow you to test a wide variety of packages, cups, corks, enclosures and more.



No messy sample prep or cleanup! With our disposable foils, just epoxy a sample to the foil, put it on the cartridge, and tighten the four fasteners. When testing is complete just dispose of the foil.



Test just about any pouch, bag, tray or package using one of the many different cartridge styles with simple mounting and repeatable results.



The Package Adapter Cartridge is designed for testing complete containers including closures and seals allowing you to verify that your entire package meets your permeation performance goals.



Our Test Chamber Cartridge allows testing of empty packages with 100% RH without using bags or special configurations



Absolute Precision

- Temperature- and humidity-controlled chamber allows testing in real-world conditions for precise results
- Infrared sensor provides repeatable results without drift or degradation
- Conforms to ASTM Test Standards

Optimized Productivity

- Save on labor hours with easy setup and less in-test monitoring
- Removable test cartridges, prepare additional samples while testing
- Perform simultaneous tests with up to 4 large packages

User Friendly

- Various test cell cartridges available to accommodate a variety of package types and barrier films
- Simplified sample preparation
- Touchscreen interface with accelerated test options

AQUATRAN 3/40 SPECIFICATIONS

PRODUCT BROCHURE

Industry Standards

- ASTM F1249
- ISO 15106-2
- TAPPI 557
- JIS K7129-2

Dimensions & Weight

Interior Dimensions & Volume

Depth: 12" or 30.5 cm

Width: 25.5" or 64.8 cm

Height: 17" or 43.2 cm

Volume: 3 cubic ft or 85 litres

Exterior Dimensions

Depth: 29.75" or 75.6 cm

Width: 33" or 83.8 cm

Height: 35" or 88.9 cm

Weight: 225 lb. or 102 kg

Conformance Standards

- CE, UL, CSA Safety Compliance

Connectivity

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

Test Conditions

Test Temperature Range	10°C to 50°C ± 0.5°C**
Chamber RH Testing Ranges*	30% to 90% ± 5%**

*See RH and Temperature Range at right
**At a single point

Technical Specifications

Models	Test Ranges		Resolution	Repeatability	Min Exam Time
	$\text{g}/(\text{m}^2 \cdot \text{day})$	$\text{g}/(\text{pkg} \cdot \text{day})$	$\text{g}/(\text{pkg} \cdot \text{day})$	$\text{g}/(\text{m}^2 \cdot \text{day})$	Minutes
3/40	0.005 to 100	0.000025 to 0.5	0.000001	0.005 or 2% *	30

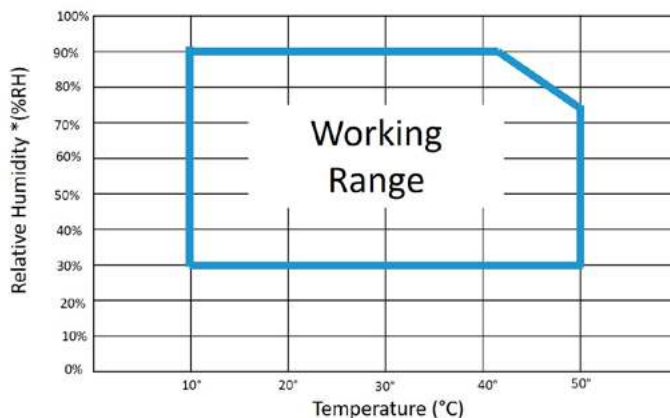
*whichever is greater

Accessories

- Reduced area cartridge
- Edge effect cartridge
- Blister testing cartridge
- Package testing adapter
- Custom-engineered test cartridges
- PermWare® software for data collection and remote monitoring

For more information on accessories, please see our brochure [Permeation Analyzer Accessories: Package Testing Cartridges](#)

RH and Temperature Range



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