

8700 & 8701 Oxygen Permeation Analysers



The ultimate solution for fast and reliable oxygen permeation testing of multiple bottles, packages, or films



8700 Applications

Ideal for rapid permeation testing of multiple bottles

- PET bottles
- Coated PET bottles
- Coated bottles for beer and wine
- Soft drinks bottles
- Bottle closures



8701 Applications

Ideal for flexible testing of different packaging types

- Pet food pouches
- Cereal packages
- Pharmaceutical packaging
- Trays
- Complete packaging
- Barrier films
- Fruit juice containers
- PET bottles

Features & Benefits

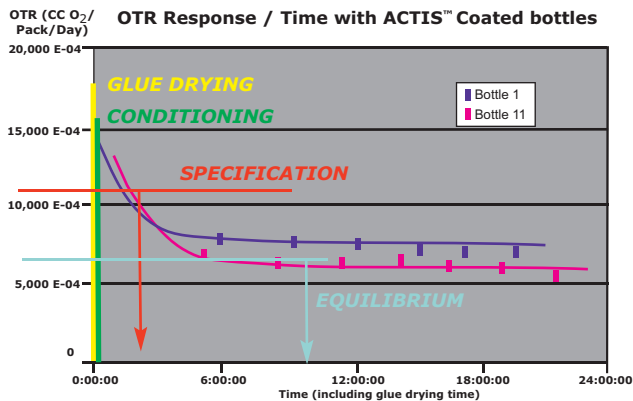
- Measurement of 11 samples simultaneously - individually started, stopped or delayed. Easy sample connection and rapid measurements make the 8700/8701 the most efficient permeation analysers available.
- Ultra fast testing - Systech Illinois' Turbopurge™ technology ensures the fastest possible stabilisation time for the permeation measurement. Saving out-of-specification production time. Testing can be done in as little as 3 hours.
- These analysers are set up to eliminate errors and reduce operator training.
- Confidence in your permeation measurement - the proven coulometric sensor provides you with reliable, repeatable, and accurate measurements, time and time again.
- Simple Windows® based software control - easy to set up with QuickStart stored testing configuration settings and clear concise results presentation.
- Low running costs - no special gases required, industrial grade nitrogen is all you need.

The 8700 and 8701 can be used for all your package testing.

Conforms to: ASTM D-3985 F-1307 F-2622 ISO 15105-2 DIN 53380 JIS K-7126
Electromagnetic Compatibility Directive 89/336/EEC Low Voltage Directive 73/23/EEC

8700 oxygen permeation analyser

The 8700 with fixed platens is used primarily in PET bottle manufacturing, as an invaluable R&D resource for new packaging development to test and validate new packages.



In addition, this analyser can be used for Quality Control, to confirm the performance and standard of the packaging. Testing can be done in as little as 3 hours.

8701 oxygen permeation analyser

Built to be versatile

The 8701 offers a range of optional adaptors to provide versatile package testing. Adaptors are available for analysing films, containers, canisters, pouches, bags, closures and more. Adaptors can also be specially designed for your application.



A choice of adaptors to be used with the 8701 for a variety of package testing requirements.

Delay Repeat Test Adaptor

Test any package that will take days to equilibrate. Connect and start test. Withdraw to shelf and reconnect later to verify equilibrium.



Film Test Adaptor

Test any film sample. May also be used to check the calibration of the instrument

Complete Package Adaptor

Glue to complete package for easy and quick testing.



Bottle Adaptor

No need to glue bottle to adaptor anymore. Just screw in for fast testing.



8000 range of Oxygen Permeation Analysers

Systech Illinois' range meets the requirement for the testing of any application.



8001

533 x 533 x 305 (mm) 28.1kg
2 stations for films or packages,
precise humidity control, can switch
between wet or dry samples within
minutes.



8001L

533 x 533 x 305 (mm) 28.1kg
As 8001, with new coulometric oxygen
sensor.



8002

533 x 533 x 305 (mm) 28.1kg
As 8001, but tests only dry or wet
(assumed 100% RH).



8003

533 x 533 x 305 (mm) 28.1kg
As 8001, but tests dry only.



8200

533 x 533 x 305 (mm) 25.4kg
2 station for films or packages.



8501

356 x 356 x 279 (mm) 18.2kg
Reduced specification single station
for film or package, dry test only.



8700

760 x 590 x 350 (mm) 65kg
11 stations for testing bottles.



8701

760 x 590 x 350 (mm) 65kg
11 stations for films or packages.

Technical Specifications

8001 8001L 8002 8003 8200 8501 8700 8701

OTR Test Range

Films

0.005 - 432,000 cc/m²/day
(0.0003 - 28,000 cc/100in²/day) No masking required

0.008 - 432,000 cc/m²/day
(0.0005 - 28,000 cc/100in²/day) No masking required

0.04 - 100,000 cc/m²/day
(0.0001 - 5,000 cc/100in²/day) No masking required

1 - 99,999 cc/m²/day
(0.07 - 6,800 cc/100in²/day) No masking required

Package

0.000025 - 2,000 cc/pack/day
0.00004 - 2,000 cc/pack/day

Test Temperature Range

5°C to 50°C (41°F to 122°F)
15°C to 40°C (59°F to 104°F)

Controlled RH Testing

Dry (0% RH) or generated RH (20% to 90%)
Dry and Unknown Wet RH (Assumed saturated or 100% RH)
Dry only

Expansion

Expandable up to 5 Modules (Total 12 test cells)
Expandable up to 5 Modules (Total 66 test cells)

Test Sample Size

Films 50cm²
Films 100cm²
Packages

Calibration

Films or NIST gas

Automatic Temperature Control

Power rating

100-240 VAC, 50/60 Hz, 840 VA (max)
100-240 VAC, 50/60 Hz, 150 VA (max)

	8001	8001L	8002	8003	8200	8501	8700	8701
0.005 - 432,000 cc/m ² /day (0.0003 - 28,000 cc/100in ² /day) No masking required		✓						
0.008 - 432,000 cc/m ² /day (0.0005 - 28,000 cc/100in ² /day) No masking required	✓		✓	✓				
0.04 - 100,000 cc/m ² /day (0.0001 - 5,000 cc/100in ² /day) No masking required					✓		✓	✓
1 - 99,999 cc/m ² /day (0.07 - 6,800 cc/100in ² /day) No masking required						✓		
0.000025 - 2,000 cc/pack/day 0.00004 - 2,000 cc/pack/day	✓	✓	✓	✓	✓		✓	✓
5°C to 50°C (41°F to 122°F) 15°C to 40°C (59°F to 104°F)	✓	✓	✓	✓	ambient	✓	ambient	ambient
Dry (0% RH) or generated RH (20% to 90%) Dry and Unknown Wet RH (Assumed saturated or 100% RH) Dry only	✓	✓	✓	✓	✓	✓	✓	✓
Expandable up to 5 Modules (Total 12 test cells) Expandable up to 5 Modules (Total 66 test cells)	✓	✓	✓	✓	✓		✓	✓
Films 50cm ²	✓	✓	✓	✓	✓		✓	✓
Films 100cm ²	✓	✓	✓	✓	✓	✓	✓	✓
Packages	✓	✓	✓	✓	✓		✓	✓
Films or NIST gas	✓	✓	✓	✓	✓	✓	✓	✓
Automatic Temperature Control	✓	✓	✓	✓	ambient	✓	ambient	ambient
100-240 VAC, 50/60 Hz, 840 VA (max) 100-240 VAC, 50/60 Hz, 150 VA (max)	✓	✓	✓	✓	✓	✓	✓	✓

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