Latest coulometric sensor technology ASTM D3985 compliant

**High sensitivity** 

Widest test range

**Easy to operate** 

**Fully automatic** 

**Expandable Satellites** 

## **Applications:**

Barrier Film
PET Bottles
Containers
Canisters
Bags
Flexible pouches

# OxySense® Model 8101e

**Oxygen Transmission Rate Analyzer** 



### Accurate results - High Value

Systech Illinois - Instrumental in innovation and cost effective solutions.

Setting the new benchmark in oxygen transmission rate measurement instruments, the All-NEW OxySense® Model 8101**e** oxygen transmission rate analyzer incorporates the latest in coulometric sensor technology with high sensitivity and the widest test range. It is simple to operate, reduces testing costs, and increases productivity.

#### What's new:

- Completely new design
- High sensitivity, wide range *e*Metric<sup>™</sup> coulometric sensor
- 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™) feature enabling 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 OxySense 8101*e* is designed to be expandable and lower your testing costs. Systech Illinois is the only major developer of transmission rate test instrumentation to offer satellite expansion. The satellites can be configured to meet your precise testing needs, allowing you to cost effectively add lab capability as needed while continuing to lower your cost per test.





# Choose the right sensor for your OTR application to meet ASTM D3985

The **e**Metric high sensitivity wide rage coulometric sensor offers a range from 0.05 to 432,000 cc/  $(m^2 \cdot d)$ .

#### **Easy operation**

The full size interactive touch screen makes working with instrument easy and intuitive. To start a test just enter conditions and press start.

#### **Networking**

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

#### Anti-Surge™

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

#### Fast wet to dry test conversion

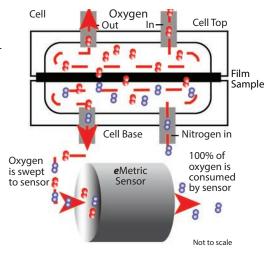
Change from wet to dry test in just minutes.

#### **Accurate validation of the instrument**

Obtained in just a few hours using third party certified gas. NIST tracebable.

#### Remote, Internet based support

Systech Illinois can access your instrument (with your permission) to diagnose and repair system errors without the cost and time involved of onsite visit.



Coulometric sensors perform according to Faraday's Law.

Oxygen enters the test cell (top section) and permeates through the film sample into the lower section where nitrogen sweeps it to the sensor. Systech Illinois' eMetric sensor analyzes 100% of the oxygen resulting in unequivocal conformation to ASTM D3985.

#### **Industry Standards:**

- ASTM D3985
   JIS 7126
- ASTM F1927
   ASTM F1307
- DIN 53380-3 ISO CD 15105-2

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.

### OxySense Model 8101e Technical Specifications

Sensor	cc/(m <sup>2</sup> • day)	cc/(100 in <sup>2</sup> • day)	cc/(pkg • day)	Resolution cc/(m <sup>2</sup> • day)	Repeatability cc/(m <sup>2</sup> • day)
E-Metric Unmasked	0.05 to 432,000	0.003 to 28,000	0.00025 to 2000	0.02	0.02 or 1% whichever is greater

#### **Test Conditions**

Test Temperature Range  $10^{\circ}$ C to  $40^{\circ}$ C  $\pm 0.1^{\circ}$ C

Controlled RH Testing Ranges Films- Carrier and Test gas: 0% to 90% ± 2%

Packages - Ambient or controlled by external environmental chamber

Our 5 year average Customer Service



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