

# OpTech®-O<sub>2</sub> Model P

## VERSATILE AND INNOVATIVE



### Benefits

- Instant result
- Shelf life testing - continuous O<sub>2</sub> monitoring over time
- Perfect for testing packages with limited headspace
- Non-invasive measurement

### Features

- Lightweight
- Non-invasive and optical measurement
- Invasive testing with needle
- No gas extraction
- Fast reading of O<sub>2</sub>
- Conforms to ASTM F2714-08
- Conforms to ASTM F3136-15

## Multi-purpose optical oxygen measurement

The OpTech®-O<sub>2</sub> Model P is a simple yet effective tool to measure oxygen inside a closed package or container. The OpTech gives the user the ability to measure the oxygen in a non-invasive manner through a transparent foil – making it perfect for shelf life determination of oxygen sensitive products.

The OpTech-O<sub>2</sub> Model P needle and the ImPULSE® sensor accessories enable measurements of the OpTech to measure oxygen in applications with limited headspace, and also to measure oxygen through opaque packaging material.

The OpTech-O<sub>2</sub> Model P uses optical fluorescence, which does not extract any gas from the sample and is thus ideal for long-term testing of the same package over time.

# HOW DOES IT WORK?

The OpTech-O<sub>2</sub> Model P sensor can be deployed in three ways:

- 1:** The platinum sensor comes ready to use in reusable sticker sensors for headspace applications in clear packaging. These sensors are placed inside the package using the convenient vacuum pen. The package is sealed and oxygen is measured non-destructively through the packaging material. This sensor type is ideal for package shelf life studies and distribution studies.
- 2:** ImPULSE platinum sensor measures oxygen inside opaque and retort packages. These sensors can be used for long-term shelf life and respiration studies.
- 3:** An invasive needle incorporating the platinum sensor for destructive headspace measurement in applications with limited headspace (e.g. coffee pods and blister packs).

OpTech shown with the optional needle (p/n 320191) and ImPULSE sensors (p/n 320193).



Dash-gastec-OpTech-O<sub>2</sub> Model P-EN-5

## Technical Specifications

Detector and base	
Warm-up time	20 minutes
Detector dimensions	4.83 x 3.30 x 22.86 cm with needle (HxWxD) 4.83 x 3.30 x 15.24 cm without needle (HxWxD)
Measurement method	Fluorescent decay
Power	Standard power USB port (2.5 watt)
Operating temperature	10-35°C
Compliances	CE/CSA/UL
Pressure compensation needle sensors	
Repeatability (0 to 150 mmHg)	± 0.100% (1000 ppm) O <sub>2</sub> or 5% of reading, whichever is greater
(150 to 1000 mmHg)	± 0.015% (150 ppm) O <sub>2</sub> or 2% of reading, whichever is greater
Range	0.050% (500 ppm) to 25%
Operating temperature	5-40°C
Sensors:	
Adhesive and ImPULSE	
Repeatability (certified)	± 0.015% (150 ppm) O <sub>2</sub> or 3% of reading, whichever is greater
Range of Adhesive sensor	0.001% (10 ppm) to 25% O <sub>2</sub> Permeation Mode 0.015% (150 ppm) 25% Headspace Mode
Operating temperature	5-40°C
Standards	ASTM F2714-08, ASTM F3136-15

Specifications subject to change without notice.