

# OMD-507 Oxygen Transmitter



- Trace, Percent or Purity Configuration
- Precision Fuel Cell Oxygen Sensor Technology
- Measure Oxygen from 0.1 ppm to 100%
- Large Backlight Display w/ Auto-Range
- Intuitive User Friendly Interface
- Compact In-Line Design
- Cost Effective and Low Maintenance
- Span and Zero Calibration Performed Digitally

## Optional Electronic Configurations:

- 2-wire loop powered 4 - 20mA Transmitter
- 6-wire Transmitter, 4 - 20mA and 0 - 10VDC Output
- Intrinsically Safe Option with Zener Barrier
- "Smart" 2-wire Transmitter with HART Protocol

## Applications:

- Inert Glove Box Systems & 3D Printers
- N<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub> Inert Gas Generators
- Laboratories & Universities
- Steel & Other Metals Processing
- Reflow Soldering
- And Many Other Industrial Applications



## Specifications:

Accuracy:	< 1% Full Scale Range*
Approval:	CE Marked
Dimensions:	6.3" x 3.5" x 2.5"
Enclosure:	Nylon Top & SS Housing
Temperature:	0 - 50 deg C
Temperature Compensation:	Integral
Flow Housing:	In-Line, Swagelok Fittings
Flow Sensitivity:	0.5 - 5.0 SCFH
Sensor Type:	Micro-Fuel Cell
Warranty:	12 Months Sensor
Warranty:	12 Months Electronics
Weight:	1.7 lbs

\*Accuracy at constant conditions

"Inquiry for Application Expertise"



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## Oxygen Transmitter:

The model OMD-507 oxygen transmitter combines a rugged in-line design with SSO2's precision oxygen sensors. The result is a highly reliable and cost effective compact design with easy-to-use user interface.

The transmitter comes in 4 different packages for maximum installation considerations. These include 2-wire, 6-wire, HART Protocol and an intrinsically safe option with Zener Barriers.

The transmitter can be configured for 3 ranges, trace (parts-per-million), percent, and purity.

The display of the transmitter with its large font is set to auto-range, this allows the user to read O2 throughout all ranges. The output can be range selected through the onboard menu allowing easy interface with a PLC,DCS or other control system.

Gas connections are made with Swagelok tube fittings.

## Power Requirements:

Input Power: 12 - 24 V DC  
Current Draw: 25 mA

## Oxygen Sensor Technology:

The oxygen sensor used in the OMD-507 is based on the galvanic electrochemical fuel cell principal. All oxygen sensors are manufactured in house by Southland Sensing Ltd. under a strict quality program.

The standard cells are unaffected by other background gases such as H2, He or Hydrocarbons. The acidic cells work well when acid gases such as CO2 or Natural Gas are present.

The sensors are self-contained and minimal maintenance is required - no need to clean electrodes or add electrolyte.

The SSO2 precision oxygen sensors offer excellent performance, accuracy and stability while maximizing the expected life.

## Oxygen Sensors:

TO2-1x PPM Oxygen Sensor: Trace Analysis, Standard  
TO2-2x PPM Oxygen Sensor: Trace Analysis, Acidic  
PO2-160 Percent Oxygen Sensor: Percent Analysis, Standard  
PO2-24 Percent Oxygen Sensor: Percent Analysis, Acidic  
PO2-1120 Purity Oxygen Sensor: Purity Analysis

Oxygen sensors should be periodically calibrated. Factory recommendation is every 2 - 3 months or as the application dictates. Sensors offer excellent linearity with an air calibration, or calibrate to a certified span gas to maximize accuracy.

## Order Information:

Record Part Number with selected options in Blank Indicated Area of Form

### Model Number:

OMD-507 Oxygen Transmitter

### Selected Range & Sensor:

- |   |                                      |   |
|---|--------------------------------------|---|
| 1 | Trace Analysis Standard (TO2-1x):    | 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 1%, 0 - 25% |
| 2 | Trace Analysis Acidic (TO2-2x):      | 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 1%, 0 - 25% |
| 5 | Percent Analysis Standard (PO2-160): | 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%          |
| 6 | Percent Analysis Acidic (PO2-24):    | 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%          |
| 8 | Purity Analysis (PO2-1120):          | 0 - 100%  |

### Electronics Package:

- 2 2-Wire Loop Powered 4 to 20mA Transmitter, 12 - 24VDC Input
- 6 6-Wire Transmitter, 12 - 24VDC Input, 4 - 20mA and 0 - 10VDC Output
- H "Smart" 2-Wire Transmitter with HART Protocol
- Z Intrinsically Safe 2-Wire with Zener Barrier [MTL-7706]

### Gas Connections:

- 8 1/8" Swagelok Tube Fittings
- 4 1/4" Swagelok Tube Fittings
- 6 6mm Swagelok Tube Fittings

OMD-507 - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Use This Part Number When Ordering



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