

# OMD-507 Oxygen Transmitter



- Trace, Percent or Purity Configuration
- Precision Fuel Cell Oxygen Sensor Technology
- Measure Oxygen from 0.1ppm 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" xmitter with Bi-Directional RS485 MODBUS

## 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:	Precision 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 with RS485 Bi-Directional Modbus 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 H<sub>2</sub>, He or Hydrocarbons. The acidic cells work well when acid gases such as CO<sub>2</sub> 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 (MODBUS Pending)
- 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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