

OMD-507 Oxygen Analyzer

Product Specification Sheet

Online PPM or Percent Oxygen Analyzer Fully Configurable



Inline Flow Through Configuration



KF-40 (NW40F) Direct Fit Configuration

Trace, Percent or Purity Configuration

Precision Fuel Cell Oxygen Sensor Technology

Measure Oxygen from 0.1ppm to 100%

Intuitive User Friendly Interface

Cost Effective and Low Maintenance

Optional Electronic Configurations:

2-wire loop powered 4 - 20mA Transmitter

3-wire loop powered, isolated 4-20mA Transmitter

6-wire Transmitter, 4 - 20mA and 0 - 10VDC Output

Intrinsically Safe Option for Class 1, Div 2 Areas

"Smart" xmitter with Bi-Directional RS485 MODBUS

Applications:

- Inert Glove Box Systems & 3D Printers
- N₂, O₂, H₂ Inert Gas Generators
- Laboratories & Universities
- Steel & Other Metals Processing
- Reflow Soldering
- And Many Other Industrial Applications



Specifications:

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

"Inquiry for Application Expertise"

*Accuracy at constant conditions

Oxygen Analyzer:

The model OMD-507 oxygen analyzer 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 analyzer comes in 4 different packages for maximum installation considerations. These include 2-wire, 3-wire with an isolated 4-20 mA output, 6-wire, 6-wire with RS485 Bi-Directional Modbus AS- CII, and an intrinsically safe option without requiring a Zener barrier. The analyzer can be configured for 3 ranges, trace (parts-per-million), percent, and purity. The display of the analyzer 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 on board menu allowing easy interface with a PLC, DCS or other control system. Gas connections are made with compression tube fittings or a direct fit KF-40 Housing.

Power Requirements:

Input Power: Current Draw:

12 - 24 V DC
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 TO2-19 Hybrid Oxygen Sensor: Percent or Trace 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 Analyzer

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% |
| 9 Hybrid Analysis (TO2-19): | 0 - 1000 ppm, 0 - 10000 ppm, 0 - 25% |

Electronics Package:

- | | |
|----|--|
| 2 | 2-Wire Loop Powered 4 to 20mA Transmitter, 12 - 24VDC Input |
| 3 | 3-Wire Loop Powered, Isolated 4-20 mA Transmitter, 12-24VDC Input |
| 6 | 6-Wire Analyzer, 12 - 24VDC Input, 4 - 20mA and 0 - 10VDC Output |
| M | 6-Wire Analyzer, 12 - 24VDC Input, 4 - 20mA and 0 - 10VDC Output, MODBUS RS485 ASCII |
| IS | Intrinsically Safe, 12 - 24VDC Input, Isolated 4 - 20 mA and 0 - 10 VDC Outputs |

Gas Connections:

- | | |
|----|--------------------------------|
| 8 | 1/8" Compression Tube Fittings |
| 4 | 1/4" Compression Tube Fittings |
| 6 | 6mm Compression Tube Fittings |
| KF | (NW40F) Fitting |

OMD-507 - _____ - _____ - _____ Use This Part Number When Ordering