OMD-507 Oxygen Analyzer

Product Specification Sheet

Online PPM or Percent Oxygen Analyzer Fully Configurable

Trace, Percent or Purity Configuration
Precision Fuel Cell Oxygen Sensor Technology
Measure Oxygen from 0.1 ppm to 100%
Intuitive User Friendly Interface
Cost Effective and Low Maintenance

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:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>&lt; 1% Full Scale Range*</td>
</tr>
<tr>
<td>Approval</td>
<td>CE Marked</td>
</tr>
<tr>
<td>Dimensions</td>
<td>6.3&quot; x 3.5&quot; x 2.5&quot;</td>
</tr>
<tr>
<td>Enclosure</td>
<td>Aluminum Top &amp; SS Housing</td>
</tr>
<tr>
<td>Temperature</td>
<td>0 - 50 deg C</td>
</tr>
<tr>
<td>Temperature Compensation</td>
<td>Integral</td>
</tr>
<tr>
<td>Flow Housing</td>
<td>In-Line, Swagelok Fittings</td>
</tr>
<tr>
<td>Flow Sensitivity</td>
<td>0.5 - 5.0 SCFH</td>
</tr>
<tr>
<td>Sensor Type</td>
<td>Precision Fuel Cell</td>
</tr>
<tr>
<td>Warranty</td>
<td>12 Months Sensor</td>
</tr>
<tr>
<td>Warranty</td>
<td>12 Months Electronics</td>
</tr>
<tr>
<td>Weight</td>
<td>1.7 lbs</td>
</tr>
</tbody>
</table>

*Accuracy at constant conditions

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

“Inquiry for Application Expertise”
**OMD-507 Oxygen Analyzer**

**Product Specifications**

**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, 6-wire, 6-wire with RS485 Bi-Directional Modbus ASCII and an intrinsically safe option with Zener Barriers.

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:**

- **Model Number:** OMD-507 Oxygen Analyzer
- **Input Power:** 12 - 24 V DC
- **Current Draw:** 25 mA

**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%

**Electronics Package:**

- **2-Wire Loop Powered 4 to 20mA Transmitter, 12 - 24VDC Input**
- **6-Wire Analyzer, 12 - 24VDC Input, 4 - 20mA and 0 - 10VDC Output**
- **6-Wire Analyzer, 12 - 24VDC Input, 4 - 20mA and 0 - 10VDC Output, MODBUS RS485 ASCII**
- **Intrinsically Safe 2-Wire with Zener Barrier [MTL-7706]**

**Gas Connections:**

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

Use This Part Number When Ordering

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**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.