

# OMD-150 Oxygen Analyzer

## Product Specification Sheet

### Configurable Online Wall Mount IP66 / NEMA4X Oxygen Analyzer



Trace or Percent Configuration

Precision Fuel Cell Oxygen Sensor Technology

Measure Oxygen from 0.01 ppm to 100%

Large Easy-to-Read Display

Intuitive User Friendly Menu Interface

Compact Flow Through Design

Cost Effective and Low Maintenance

#### Optional Electronic Configurations:

2-wire loop transmitter / non backlit display

3-wire loop powered with Isolated 4-20mA Output

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

Intrinsically Safe for Class 1, Div. 2 Groups B, C, D

"Smart" xmitter with Bi-Directional RS485 MODBUS

#### Applications:

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



#### Specifications:

|                               |            |                        |
|-------------------------------|------------|------------------------|
| Accuracy:                     | Approval:  | < 1% Full Scale Range* |
| Dimensions:                   | Enclosure: | CE Certified           |
| Temperature                   | Rating:    | 9.5" x 6.5" x 3.8"     |
| Temperature Compensation:     |            | NEMA 4X / IP66         |
| Gas Connections:              | Flow       | -10 to 50 deg C        |
| Sensitivity: Pressure: Sensor |            | Integral               |
| Type: Warranty: Warranty:     |            | Configurable           |
|                               |            | 0.5 - 5.0 SCFH         |
|                               |            | 0.1 - 50 PSIG          |
|                               |            | Precision Fuel Cell    |
|                               |            | 12 Months Sensor       |
|                               |            | 12 Months Electronics  |

"Inquiry for Application Expertise"

## Oxygen Analyzer:

The model OMD-150 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 an easy-to-use user interface.

The analyzer comes in a variety of different packages for maximum installation considerations. These include 2-wire, 3-wire with isolated 4-20 mA output, 6-wire, and an intrinsically safe option.

The analyzer can be configured for trace (parts-per-million) or percent analysis.

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 onboard menu allowing easy interface with a PLC, DCS or other control system.

Gas connections are made with compression tube fittings (1/8", 1/4" or 6mm).

## Oxygen Sensor Technology:

The oxygen sensor used in the OMD-150 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 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-150 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%          |
| 7 | Hybrid Analysis Standard (TO2-19):   | 0 - 1000 ppm, 0 - 10000 ppm, 0 - 25%                |

### Electronics Package:

- |    |                                                                                     |
|----|-------------------------------------------------------------------------------------|
| 2  | 2-Wire Loop Powered 4 to 20mA Transmitter, 12 - 24VDC Input (Non-Backlit)           |
| 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 Outputs.                  |
| M  | 6-Wire Analyzer, 12 - 24VDC, 4 - 20mA, 0 - 10VDC + Bidirectional MODBUS RS485 ASCII |
| IS | 12 - 24 VDC Analyzer, 4 - 20mA Analog Output, Class 1, Division 2 Groups B, C, D    |

### Gas Connections:

- |   |                                |
|---|--------------------------------|
| 8 | 1/8" Compression Tube Fittings |
| 4 | 1/4" Compression Tube Fittings |
| 6 | mm Compression Tube Fittings   |

OMD-150 -

Use This Part Number When Ordering