## MEASURE, ANALYZE, CONTROL.

# Hazardous Area Online Process Oxygen Analyzer w/Sample System



Designed for the Natural Gas Industry Class 1, Div 2 Groups B,C,D Full Scale Range as low as 0 - 10 ppm Precision Fuel Cell Oxygen Sensor Technology Large Backlight Display w/ Auto-Range Measure Oxygen from 0.01ppm to 25% Intuitive User Friendly Interface Cost Effective and Low Maintenance MODBUS RS485 ASCII (Optional) 2 - Wire Loop Configuration (Optional)

### Specifications:

specifications.	
Accuracy:	< +/-1% Full Scale Range*
Analyzer Range:	0 - 10/100/1000ppm/1%/25%
Optional Range:	0 - 1%,/5%/10%/25%/100%
Area Classification:	Class 1, Div 2, Groups B,C,D
Dimensions:	11.25″ x 12.0″ x 5.50″
Flow:	0.5 - 5.0 SCFH
Gas Connections:	1/4" Compression Tube
Output:	Isolated 4 - 20mA or 1 - 5 VDC
Power:	12 - 24 VDC
Pressure	0.1 - 50 PSIG Inlet, vent to atm
Response Time:	T90 in 10 Seconds
Sample System:	Optional
Sensor:	Precision Fuel Cell
Temperature:	0 to 50 deg C
Warranty Sensor:	12 Months
Warranty Electronics:	12 Months
Weight:	12.5 lbs
	*Accuracy at constant conditions

Accuracy at constant conditions

## **Optional Configurations:**

- Customizeable Measurement Ranges
- Sample Conditioning Systems
- Bi-Directional RS485 Modbus ASCII
- Extreme Weather Packaging

## **Applications:**

- Natural Gas Extraction & Pipelines
- Natural Gas Processing
- Acid (CO2) Gas Streams
- Inert, Hydrocarbon, Hydrogen Processing
- And Many Other Industrial Applications

"Inquiry for Application Expertise"

Rev 1.02 May 2nd, 2019\_BB

# OMD-150-NG Oxygen Analyzer

# **Product Specifications**

#### Oxygen Analyzer:

The model OMD-150-NG oxygen analyzer combines a rugged design with SSO2's precision oxygen sensors. The result is a highly reliable and cost effective compact design with easy-to-use user interface designed specifically for the Natural Gas Industry.

The oxygen analyzer is designed to meet standards for Class 1, Div 2, Groups B,C,D installation.

The oxygen analyzer is isolated both on the power input and analog output. This eliminates most electronic gremlins seen with existing competitive equipment in the field.

Standard ranges include 0 - 10ppm, 0 - 100ppm, 0 - 100ppm, 0 - 1%, 0 - 25%.

Optional Percent Analysis Ranges: 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%

Gas connections are made with 1/4'' Compression tube fittings. (1/8'' Compression Tube fittings for sample system delete).

#### **Power Requirements:**

Input Power: Current Draw: 12 - 24 V DC 50 mA

### Oxygen Sensor Technology:

The oxygen sensor used in the OMD-150-NG 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

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		
<b>Model Number:</b> OMD-150-NG Oxygen Analyzer (Includes Analyzer, Sample / Span Valve, Flow Meter with Valve) OMD-150-NG-D Oxygen Analyzer (Delete Sample System, 1/8" Compression Tube Gas Fittings)		
<b>S</b> 1 2 3 4	elected Range & Sensor:       0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 1%, 0 - 25%         Trace Analysis Standard (TO2-1x):       0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 1%, 0 - 25%         Trace Analysis Acidic (TO2-2x):       0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 1%, 0 - 25%         Percent Analysis Standard (PO2-160):       0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%         Percent Analysis Standard (PO2-24):       0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%	
<ul> <li>Electronics Package:</li> <li>12 - 12V DC Input Power w/ Isolated Analog Outputs</li> <li>2 - Wire Loop Configuration</li> <li>M 12 - 24V DC Input Power w/ Isolated Analog Outputs + MODBUS RS485 ASCII</li> </ul>		
	Gas Connections: 4 1/4" Compression Tube Fittings with Sample / Span Valve & Flowmeter 8 Delete Sample / Span Valve & Flow Meter, 1/8"Compression Tube Fittings	
OMD-150-NG Use This Part Number When Ordering		

Rev 1.02 June 6th, 2019\_BB