## **OMD-625 Oxygen Analyzer**

**Product Specification Sheet** 

## Hazardous Area Online Process Oxygen Analyzer w/Sample System ATEX and IECEx Certified for Hazardous Areas





### **Optional Configurations:**

- Sample System Add-On Components
- Bi-Directional RS485 Modbus RTU
- Extreme Weather Packaging
- Extended Temperature Ranges

#### **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"

Precision Fuel Cell Oxygen Sensor Technology

Zone 1 IIB + H2 Applications

Custom Full Scale Range (i.e. 0 - 99.5 ppm)

**Optional MODBUS RS485 RTU** 

Large Backlight Display

Ability to Calibrate Analog Output

Measure Oxygen from 0.01ppm to 25%

Intuitive User Friendly Interface

Cost Effective and Low Maintenance

2 Configurable Alarm Relay Contacts

Output Sim (4mA, 8mA, 12mA, 16mA and 20mA)

#### **Specifications:**

Accuracy:	< +/-1% Full Scale Range*
Alarms:	2 Configurable Relay Contacts
Analyzer Range:	0 - 10/100/1000/10000ppm/25%
Optional Range 1:	0 - 1%,/5%/10%/25%/100%
Area Classification:	Zone 1 IIB + H2
Dimensions:	12" x 12" x 5.25"
Flow:	0.5 - 5.0 SCFH
Gas Connections:	1/4" Compression Tube
Output:	Isolated 4 - 20mA or 1 - 5 VDC
Power:	12 - 24 VDC
	100 - 240 VAC
Pressure	0.1 - 50 PSIG Inlet, vent to atm
Response Time:	T90 in 10 Seconds
Sensor:	Precision Fuel Cell
Temperature:	0 to 50 deg C**
Warranty Sensor:	12 Months
Warranty Electronics:	12 Months
Weight:	21 lbs

<sup>\*</sup> Accuracy at constant conditions

<sup>\*\*</sup> Consult Factory For Expanded Temp Range

## OMD-625 Oxygen Analyzer

## **Product Specifications**

#### Oxygen Analyzer:

The model OMD-625 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 certified for use in Zone 1 IIB + H2 applications.

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 - 1000ppm, 0 - 25%.

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

Custom Range: The unit comes with the ability to customize a 6th range (i.e. 0 - 94.0 ppm).

#### **Standard Power Requirements:**

Input Power: 12 - 24 V DC Current Draw: 50 mA \*\* Optional power input choices available

#### Oxygen Sensor Technology:

The oxygen sensor used in the OMD-625 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. H2S resistant sensors are available for sour gas streams with <500 PPM H2S.

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:

TO2-133 PPM Oxygen Sensor: Trace Analysis, Standard TO2-233 PPM Oxygen Sensor: Trace Analysis, Acidic TO2-238 PPM Oxygen Sensor: Trace Analysis, < 500PPM H2S 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 **Model Number:** OMD-625 Oxygen Analyzer OMD-625D Oxygen Analyzer (Delete Sample System, 1/8" Compression Tube Gas Inlets) Selected Range & Sensor: 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25% Trace Analysis Standard (TO2-133): Trace Analysis Standard (TO2-233): 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25% 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25% Trace Analysis < 500 PPM H2S (TÓ2-238): 5T 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% **Electronics Package:** 12 - 24V DC 4-wire Power 4M 12 - 24V DC Power w/ Bi-Directional MODBUS RS485 RTU 100 - 240V AC Power 7M 100 - 240V AC Power w/ Bi-Directional MODBUS RS485 RTU **Gas Connections:** 1/4" Compression Tube Fittings 6mm Compression Tube Fittings 1/8" Compression Tube Fittings OMD-625 Use This Part Number When Ordering

# OMD-625 Oxygen Analyzer

## **Product Certifications**

#### **ATEX:**

Southland Sensing Ltd. 4045 E. Guasti Rd. Suite 203, Ontario, CA 91761 USA OMD-625 Series Oxygen Analyzer

ExVeritas 23ATEX1653X

**⟨€x**⟩ II 2 G

Ex db ib IIB+H2 T4 Gb

Tamb  $-20^{\circ}$ C to  $+50^{\circ}$ C



#### **IECEx:**

Southland Sensing Ltd. 4045 E. Guasti Rd. Suite 203, Ontario, CA 91761 USA OMD-625 Series Oxygen Analyzer

IECEx EXV 23.0038X

**⟨£x**⟩ II 2 G

Ex db ib IIB+H2 T4 Gb

Tamb -20°C to +50°C

