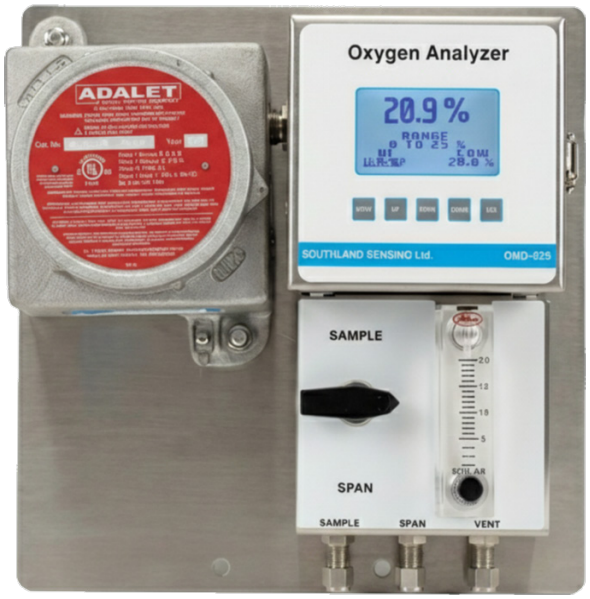
SOUTHLAND SENSING

OMD-625 Oxygen Analyzer

Product Specification Sheet

Hazardous Area Online Process Oxygen Analyzer w/Sample System

ATEX and IECEx Certified for Hazardous Areas



- 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 100%
- Intuitive User Friendly Interface
- Cost Effective and Low Maintenance
- 2 Configurable Alarm Relay Contacts
- Output Sim (4mA, 8mA, 12mA, 16mA and 20mA)

CE 2804

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%
Output:	Isolated 4 - 20mA or 1 - 5 VDC
Power:	12 - 24 VDC 100 - 240 VAC
Area Classification:	Zone 1 IIB + H2
Dimensions:	12" x 12" x 5.25"
Enclosure:	NEMA 4X / IP66
Weight:	21 lbs
Pressure	0.1 - 50 PSIG Inlet
Flow Rate:	0.5 - 5 SCFH
Temperature:	0 to 50° C**
Sensor:	Configurable
Gas Connections:	1/4" Compression Tube
Sensor Warranty:	12 months
Analyzer Warranty:	12 months

* Accuracy at constant conditions

** Consult Factory For Expanded Temp Range

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"

Published: 3/30/2026

Designed, Tested, and Assembled in California, USA

4405 E. Airport Dr. #100 Ontario, CA 91761 USA : 1-949-398-2879 : sales@sso2.com : www.sso2.com

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 - 10000ppm, 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
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-625 Oxygen Analyzer
OMD-625D Oxygen Analyzer (Delete Sample System, 1/8" Compression Tube Gas Inlets)

Selected Range & Sensor:

3	Trace Analysis Standard (TO2-133):	0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25%
4	Trace Analysis Standard (TO2-233):	0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25%
5	Percent Analysis Standard (PO2-160):	0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%
6	Percent Analysis Standard (PO2-24):	0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%
7	Trace Analysis < 500 PPM H2S (TO2-238):	0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25%
9	Hybrid Analysis Standard (TO2-19):	0 - 1000 ppm, 0 - 10000 ppm, 0 - 25%

Electronics Package:

4	12 - 24V DC 4-wire Power
4M	12 - 24V DC Power w/ Bi-Directional MODBUS RS485 RTU
7	100 - 240V AC Power
7M	100 - 240V AC Power w/ Bi-Directional MODBUS RS485 RTU

Gas Connections:

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

OMD-625 - _____ - _____ - _____ Use This Part Number When Ordering

** For assistance when ordering, contact our inside sales specialist **

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ATEX:

Southland Sensing Ltd.
4405 E. Airport Dr. #100 Ontario, CA 91761 USA
OMD-625 Series Oxygen Analyzer

ExVeritas 23ATEX1653X
Ⓔx II 2 G
Ex db ib IIB+H2 T4 Gb
Tamb -20°C to +50°C

CE 2804

IECEx:

Southland Sensing Ltd.
4405 E. Airport Dr. #100 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

CE 2804

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