

# OMD-525X Oxygen Analyzer

## Product Specification Sheet

### Online Trace Oxygen Analyzer, IP66 / NEMA 4X Wall Mount Enclosure



Trace, Percent, or Purity 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 Indoor or Outdoor Enclosure

Cost Effective and Low Maintenance

Integral USB Data Logging

#### Specifications:

|                           |                                |
|---------------------------|--------------------------------|
|                           | +/- 1%Full ScaleRange*         |
| Accuracy:                 | LCD with Backlight 9.5 x 6.5 x |
| Display:                  | 3.8 Inches Wall Mount IP66 /   |
| Dimensions:               | NEMA4X General Purpose 0 -     |
| Enclosure:                | 50°C 2 Adjustable w/ delay     |
| Classification:           | mode 100 - 240 VAC or 10 - 28  |
| Temperature:              | VDC Removable USB Stick 4 -    |
| Alarms:                   | 20mA Bi-Directional MODBUS     |
| Power:                    | RS485                          |
| Data Logging:             | ASCII                          |
| Signal Output (analog):   | 1 - 5 VDC (Optional 4 -20mA)   |
| Communication             | Periodically                   |
| Range ID:                 | 0.1 - 50 PSIG                  |
| Calibration:              | Integral                       |
| Pressure:                 | 0.5 - 5 SCFH                   |
| Temperature Compensation: | 12 Months Sensor               |
| Flow Sensitivity:         | 12 Months Electronics          |
| Warranty:                 |                                |

\*Accuracy at constant conditions

#### Applications:

- Nitrogen and O2 PSA Generators
- Laboratories & Universities
- Beverage Grade CO2 Monitoring
- Welding & 3D Printers
- Air Separation Plants
- & Many Others

"Inquiry for Application Expertise"

The OMD-525X offers the unique ability to log data in real time via a removable USB drive. Data is logged in an Excel compatible .csv file by date with an interval between 1 and 120 minutes. Logging at intervals of 1 minute you can store up to ap- proximately 50 years worth of data before filling up an 8GB USB flash drive. The analyzer can be configured for trace (parts-per-mil- lion), percent, or purity applications by the user by select- ing the desired ranges in the built-in menu and using the appropriate sensor.

Oxygen Analyzer:

The model OMD-525X 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 can be configured for either 10-28 VDC or 100-240VAC power to fit a variety of applications. It can also be configured for trace, (parts-per-million) percent, or purity analysis using the on-board menu and correct sensor.

The auto-range feature allows the user to read O2 throughout all relevant ranges on the local display in large font.

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 (1/8", 1/4" or 6mm).

Optional Alarms:

2-non latching fully configurable Form C relay contact alarms.

Oxygen Sensor Technology:

The oxygen sensor used in the OMD-525X 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: Percent Analysis, Standard  
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-525X Oxygen Analyzer

Selected Range & Sensor:

- 1

Trace Analysis Standard (TO2-1x):

0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000ppm, 0 - 25%
- 2

Trace Analysis Acidic (TO2-2x):

0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000ppm, 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

Purity Analysis Standard (PO2-1120):

0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%

Power Option:

- A

100 - 240VAC Analyzer, 4-20 mA Analog Output, Integral Alarms, MODBUS RS485 ASCII
- D

10 - 28 VDC Analyzer, 4-20 mA Analog Output, Integral Alarms, MODBUS RS485 ASCII

Gas Connections:

- 8

1/8" Compression Tube Fittings
- 4

1/4" Compression Tube Fittings
- 6

mm Compression Tube Fittings

OMD-525X -        -        -        Use This Part Number When Ordering