# **EMD-482 Oxygen Transmitter**

**Product Specification Sheet** 

### Configurable OEM Oxygen Transmitter, 2-wire loop





H3 Flow Throw Sensor Housing



H1 KF-40 Sensor Housing



### Oxygen Sensor

### **Applications:**

- · Inert Glove Box Systems
- Nitrogen and O2 PSA Generators
- Laboratories & Universities
- 3D Metal Printing Systems
- Air Separation Plants & Many Others

"Inquiry for Application Expertise"

2-Wire Loop Powered Configuration
Well Suited for OEM Installations
Precision Fuel Cell Oxygen Sensor Technology
Trace or Percent Configuration
Measure Oxygen from 0.01ppm to 100%
Updated Microprocessor Based Design
Cost Effective, Compact and Low Maintenance
Integrates seamlessly with PLC and DCS Systems

### **Configurations:**

User Selectable Ranges (Pre-Configured):
0 - 10ppm/100/1000ppm/1%/5%/10%/25%/100%
Digital Push Buttons to Perform Local Span Cal
Sensor Housings: H1 KF-40 or H3 Flow Through
Optional Display without Backlight
Many additional customized options available

#### **Specifications:**

Accuracy:	< 1% Full Scale Range*
Calibration:	2 - 3 months or as needed
Classification:	General Purpose
Dimensions (PCB):	3.25 x 2.00 inch
Display:	Optional
Temperature:	0 - 50 deg C
Temperature Compensation:	Integral
Output:	4 - 20mA
Sensor Housing:	Optional, H1 or H3
Flow Sensitivity:	0 - 5.0 SCFH
Sensor Type:	Precision Fuel Cell
Warranty:	12 Months Sensor
Warranty:	12 Months Electronics

\*Accuracy at constant conditions

## EMD-482 Oxygen Transmitter

## **Product Specifications**

### Oxygen Transmitter:

The model EMD-482 oxygen transmitter combines a rugged electronic design with SSO2's precision oxygen sensors. The result is a highly reliable and cost effective compact design with easy-to-use user interface.

The transmitter comes with a variety of options, which makes it configurable for a large array of applications. These options include custom ranges from 0 - 10ppm through 0 - 100%, a local display, sensor housings for flow through applications and ambient monitoring, as well as a variety of oxygen sensors. See the below ordering guide for complete options.

This unit is configured as a 2-wire loop powered device and is idea for integration with a PLC or DCS system. Output is non-isolated.

### Oxygen Sensor Technology:

The oxygen sensor used in the EMD-482 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 **Model Number:** EMD-482 Oxygen Transmitter Optional Display: Local Display with Backlight No Display, Blind Area of Analyzers Trace Analysis Percent Analysis **Optional Sensor:** 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 - 100ppm, 0 - 1%, 0 - 25% Percent Analysis Standard (PO2-160): 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100% Percent Analysis Acidic (PO2-24): 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100% **Optional Sensor Housing:** H3 Flow Through with 1/8" Compression Tube Fittings H3 Flow Through with 1/4" Compression Tube Fittings H3 Flow Through with 6mm Compression Tube Fittings H1 KF-40 Sensor Housing (ideal for Ambient Monitoring or Glove Box Applications) **Optional Factory Pre-Set 2nd Range:** If you want the factory to pre-set a 2nd range, please list the value here: (i.e. 0 - 10ppm, 0 - 100ppm, 0 - 10%, etc.) Use This Part Number When Ordering \*\* For assistance when ordering, contact our inside sales specialist \*\* FMD-482 -