# **EMD-485 Oxygen Transmitter**

**Product Specification Sheet** 

### Configurable OEM Oxygen Transmitter, 6-wire



Well Suited for OEM Installations

Precision Fuel Cell Oxygen Sensor Technology

**Trace or Percent Configuration** 

Measure Oxygen from 0.1ppm to 100%

4 - 20mA, 0 - 1V DC, 0 - 10V DC Outputs

**Updated Microprocessor Based Design** 

Cost Effective, Compact & Low Maintenance





H3 Flow Through Sensor Housing

### **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: H6 KF-40 or H3 Flow Through
Graphical Display with Backlight
Many additional customized options available
Integral Span Pot to Adjust 4mA Offset





Oxygen Sensor

# Applications:

- Inert Glove Box Systems
- Nitrogen and O2 PSA Generators
- · Laboratories & Universities
- Beverage Grade CO2 Monitoring
- Air Separation Plants& Many Others

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### **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, 0 - 1VDC, 0 - 10VDC
Sensor Housing:	Optional, H6 or H3
Flow Sensitivity:	0.5 - 5.0 SCFH
Sensor Type:	Precision Fuel Cell
Warranty:	12 Months Sensor
Warranty:	12 Months Electronics

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

"Inquiry for Application Expertise"

### EMD-485 Oxygen Transmitter

## **Product Specifications**

#### Oxygen Transmitter:

The model EMD-485 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 an 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.

### **Power Requirements:**

Input Power: 12 - 24 V DC Current Draw: 40 mA (max)

#### Oxygen Sensor Technology:

The oxygen sensor used in the EMD-485 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-485 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 H6 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-485 -