Con igurable OEM Oxygen Transmitter, 6-wire, MODBUS RS485 ASCII

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
RS485 MODBUS ASCII
Updated Microprocessor Based Design
Cost Effective, Compact and Low Maintenance

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
Graphical Display with Backlight
Many additional customized options available
Integral Span Pot to Adjust 4mA Offset

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, H1 or H3
Flow Sensitivity: 0.5 - 5.0 SCFH
Sensor Type: Precision Fuel Cell
Warranty: 12 Months Sensor
Warranty: 12 Months Electronics

*Accuracy at constant conditions

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

“Inquiry for Application Expertise”
EMD-485M Oxygen Transmitter

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 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.

RS485 Modbus ASCII comes standard on this transmitter which allows for easy digital communication.

Oxygen Sensor Technology:

The oxygen sensor used in the EMD-485M 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.

Power Requirements:

<table>
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<tr>
<th>Input Power:</th>
<th>12 - 24 V DC</th>
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<tr>
<td>Current Draw:</td>
<td>40 mA (max)</td>
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Order Information:

Record Part Number with selected options in Blank Indicated Area of Form

Model Number:
EMD-485M Oxygen Transmitter

Optional Display:
- D Local Display with Backlight
- X No Display, Blind

Area of Analyzers
- T Trace Analysis
- P Percent Analysis

Optional Sensor:
1. Trace Analysis Standard (TO2-1x): 0 - 10 ppm, 0 - 100 ppm, 0 - 1000 ppm, 0 - 1%, 0 - 25%
2. Trace Analysis Acidic (TO2-2x): 0 - 10 ppm, 0 - 100 ppm, 0 - 1000 ppm, 0 - 1%, 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%

Optional Sensor Housing:
- 8 H3 Flow Through with 1/8" Compression Tube Fittings
- 4 H3 Flow Through with 1/4" Compression Tube Fittings
- 6 H3 Flow Through with 6mm Compression Tube Fittings
- K 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 - 10 ppm, 0 - 100 ppm, 0 - 10%, etc.)

Use This Part Number When Ordering
** For assistance when ordering, contact our inside sales specialist **