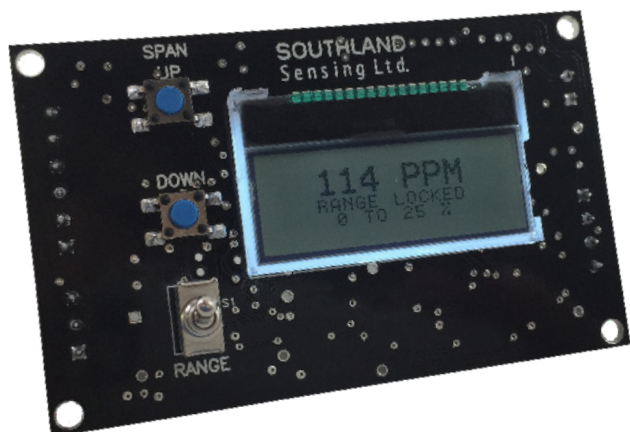


Configurable OEM Oxygen Transmitter, 6-wire



Oxygen Sensor



H3 Flow Through
Sensor Housing



H6 KF-40
Sensor Housing



H6 Long KF-40
Sensor Housing

Applications:

- Inert Glove Box Systems
- Nitrogen and O2 PSA Generators
- Laboratories & Universities
- & Many Other Unique Applications

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

Optional Bi-Directional Digital Communication

Cost Effective, Compact & Low Maintenance

Configurations:

User Selectable Range (Pre-Configured):

0 - 10ppm/100/1000ppm/10000ppm

1%/5%/10%/25%/100%

Digital Push Buttons to Perform Local Span Cal

Sensor Housing: KF-40 (NW40F) or H3 Flow Through

Optional Display with Backlight

Optional Modbus

Specifications:

Accuracy:	< 1% Full Scale Range*
Calibration:	2 - 3 months or as needed
Output:	4 - 20mA, 0 - 1VDC, 0 - 10VDC
Cable Length:	72 inch
Classification:	General Purpose
Display:	Optional
Dimensions (PCB):	3.25 x 2.00 inch
Pressure:	0.1 - 50 PSIG
Flow Sensitivity:	0.5 - 5.0 SCFH
Temperature:	0 to 50° C
Temperature Compensation:	Integral
Sensor Housing:	Configurable
Sensor Warranty:	12 Months
Electronics Warranty:	12 Months

*Accuracy at constant conditions

"Inquiry for Application Expertise"

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.

Gas connections are made with compression tube fittings or a direct fit KF-40 Housing. Sensor housings come standard with a 72 inch Cable.

Power Requirements:

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

Bi-Directional Communication:

As an optional configuration, the unit can come with a bi-directional communication protocol. If digital communication is needed, MODBUS RS 485 ASCII allows for easy digital integration.

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
PO2-1120 Purity Oxygen Sensor: Purity Analysis
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:

EMD-485 Oxygen Transmitter

Optional Display:

D Local Display with Backlight
DM Local Display with MODBUS RS485 ASCII Bi-Directional Communication

Optional 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%
8 Purity Analysis (PO2-1120): 0 - 100%
9 Hybrid Analysis Standard (TO2-19): 0 - 1000 ppm, 0 - 10000 ppm, 0 - 25%

Optional Sensor Housing:

4 1/4" Compression Tube Fittings
6 6mm Compression Tube Fittings
8 1/8" Compression Tube Fittings
KF (NW40F) Fitting
KFL "Long" KF-40 Sensor Housing

Factory Pre-Set 2nd Range:

If you want the factory to pre-set a specific 2nd range, please list the value here:
(i.e. 0 - 10ppm, 0 - 100ppm, 0 - 10%, etc.)

Pre-Set to 0 - 1000ppm when no option is selected (ppm)

Pre-set to 0 - 25% when no option is selected (percent)

EMD-485 - _____ - _____ - _____ - _____ Use This Part Number When Ordering

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

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