



OXY4400 PRECISION OXYGEN ANALYZER

Product Code 11810

KEY FEATURES

- Small Optical Sensor, no membrane or consumable chemicals
- Excellent long term stability
- Not affected by H₂S or other sulfur species
- No H₂S scrubber
- Fast and continuous
- No moving parts, simple operation
- Not affected by electrical interferences and magnetic fields
- NEMA 4 system
- Hazardous Area Certified Class 1 Div II

SpectraSensors OXY4400 Oxygen Analyzer is a compact stand-alone one-channel meter with LCD display and data logger. The electronics are certified for hazardous area use. The sensor probe is inserted into the process stream and is connected to the controller by an optical fiber.

Full sample conditioning systems are available with the OXY4400 as well as software for PC interface.

LOW MAINTENANCE The analyzer uses an optical method that detects oxygen using a probe that is inserted into the gas stream. The probe can be easily cleaned and has a lifetime measured in years.

Calibration of the analyzer is a simple procedure that can be performed in minutes using a binary standard with oxygen in nitrogen.



ACCURATE AND RELIABLE

The OXY4400 technology is ideally suited for measuring in Natural Gas.

The sensor is not affected by even high levels of H₂S or other sulfur species. There is no cross sensitivity to contaminants or other gases in natural gas.

The accuracy and reliability of the measurements are superior to electrochemical analyzers because the measurement does not drift.

OXY4400 Oxygen Analyzer

SPECIFICATIONS



Application Data

Target Components	O ₂
Typical Measurement Ranges	0-100 ppmv default, 0-10 to 0-1,000 ppmv user settable
Lower Limit of Detection	0.5 ppmv
Accuracy at 20°C	±5% of Reading (10±0.5 ppmv, 100±5 ppmv)
Measurement Response Time	Programmable Sampling Rate (Default 3 Second)
Principle of Measurement	Fluorescent Quenching
Environmental Temperature Range	0 to 50°C (32 to 122°F)
Sample Inlet Pressure	140-350 kPaG (20-50 PSIG) to sample panel regulator
Sample Probe Temperature Range	Up to 50°C
Maximum Probe Pressure	200 psig
Sample Flow Rate	1.5 slpm (0.05 scfm)
Recommended Calibration	Conventional two-point calibration in oxygen-free environment (nitrogen) and a second point 100 ppm (300 ppm Maximum)

Electrical & Communications

Input Power	100-240VAC 50/60 Hz and 9-24 VDC max 0.83 Amps at 24 VDC
Controller to Probe Cable Length	0.7m standard (2.5m optional)
Communication	Analog: Qty 2 4-20 mA and Qty 2 0-10V, Independent, Isolated Serial: RS232C Interface, Isolated, 19200 Baud, 8 data-bits
Serial	RS232C Interface, Isolated, 19200 Baud, 8 data-bits
LCD Display	Concentration, Temperature, Sample Rate, & Amplitude

Physical

Enclosure Type	NEMA Type 4
Analyzer Dimensions	203 X 254 X 203mm (8 X 10 X 8 inches)
Weight	2.2 kg (4.9 lb)
Sample Probe Construction	316 Stainless Steel
Number of Measurement Channels	1

Area Classification

Certification	 Class I, Division II, Groups A, B, C, and D ID 3035281 & 3035281C (CSA C22.2 No. 142 & 213)
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* Consult factory for alternative or extended ranges.