

# 6501X O<sub>2</sub> Oxygen Analyzer

Product Specification Sheet

## Online Oxygen Analyzer, 1/4 DIN Package, Remote Sensor Housing



- Precision Electrochemical Sensor Technology
- Intuitive User-Friendly Interface
- Trace, Percent, or Purity Analysis Ranges
- Auto-Ranging or Manual Range Mode
- Two Adjustable Alarm Contacts w/ delay mode
- 1/4 DIN Panel Mount Compact Design
- Measure Oxygen from 0.01ppm to 100%

### Specifications:

Accuracy:	+/- 1% Full Scale Range*
Display:	LCD with Backlight
Dimensions:	1/4 DIN (96 x 96 x 65mm)
Enclosure:	Anodized Aluminum
Classification:	General Purpose
Temperature Rating:	0 - 50 deg C
Temperature Compensation:	Integral
Alarms:	2 Adjustable w/ delay mode
Power:	14 - 28 VDC or 100 - 240 VAC
Output (Analog):	4 - 20mA
Communication:	Bi-Directional MODBUS RS485 ASCII
Range ID:	1 - 5 VDC (Optional 4 -20mA)
Response time:	T90 in 7 Seconds
Sensor:	Configurable
Sensor Type:	Precision Electrochemical
Calibration:	Periodically
Temperature Compensation:	Integral
Flow Sensitivity:	0.5 - 5 SCFH
Pressure:	0.1 - 50 PSIG
Warranty:	12 Months Sensor 12 Months Electronics

\*Accuracy at constant conditions



Sensor Housing



Flow Through  
Sensor Housing



Oxygen Sensor

### Applications:

- Inert Glove Box Systems
- Nitrogen and O<sub>2</sub> PSA Generators
- Laboratories & Universities
- Medical Grade Oxygen Concentrators
- Air Separation Plants  
& Many Others

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## Oxygen Analyzer:

The model 6501X oxygen analyzer combines a rugged in-line design with precision oxygen sensors. The result is a highly reliable and cost effective compact design with easy-to-use user interface.

Trace ranges include 0 - 10 ppm, 0 - 100 ppm, 0 - 1000ppm, 0-10000ppm and 0-25%. Percent ranges include 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, and 0 - 100%. Hybrid ranges include

The analyzer can be configured for trace (parts-per-million), percent, and purity applications.

The analog output can be manual range selected through the on board menu or the user can take advantage of the auto-range feature using the RANGE ID output allowing easy interface with a PLC, DCS or other control system.

Gas connections are made with compression tube fittings or a direct fit Housing.

## Power Requirements:

Input Power:	14 - 28 V DC
Input Power:	100 - 240 V AC
Current Draw:	50 mA

## Oxygen Sensor Technology:

The oxygen sensors used in the 6501X are based on the galvanic electrochemical fuel cell principal. All oxygen sensors are manufactured in house under a strict quality program.

The standard cells are unaffected by other background gases such as H<sub>2</sub>, He or Hydrocarbons. The acidic cells work well when acid gases such as CO<sub>2</sub> or Natural Gas are present.

The sensors are self-contained and minimal maintenance is required - no need to clean electrodes or add electrolyte.

The precision oxygen sensors offer excellent performance, accuracy and stability while maximizing the expected life.

## Oxygen Sensors:

- O2-1x PPM Oxygen Sensor: Trace Analysis, Standard
- O2-2x PPM Oxygen Sensor: Trace Analysis, Acidic
- O2-160P Percent Oxygen Sensor: Percent Analysis, Standard
- O2-24P Percent Oxygen Sensor: Percent Analysis, Acidic
- O2-1120P Purity Oxygen Sensor: Purity Analysis
- O2-19 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:

6501X Oxygen Analyzer

### Selected Range & Sensor:

- |  |   |
|--|---|
| 1 Trace Analysis Standard (O2-1x):     | 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 1%, 0 - 25% |
| 2 Trace Analysis Acidic (O2-2x):       | 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 1%, 0 - 25% |
| 5 Percent Analysis Standard (O2-160P): | 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%          |
| 6 Percent Analysis Acidic (O2-24P):    | 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%          |
| 8 Purity Analysis (O2-1120P):          | 0 - 100%  |
| 9 Hybrid Analysis (O2-19):             | 0 - 1000 ppm, 0 - 10000 ppm, 0 - 25%                |

### Power Option:

- A 100 - 240 V AC Analyzer + Bidirectional MODBUS RS485 ASCII
- D 14 - 28 V DC Analyzer + Bidirectional MODBUS RS485 ASCII

### Gas Connections:

- 8 1/8" Compression Tube Fittings Flow Through Sensor Housing
- 4 1/4" Compression Tube Fittings Flow Through Sensor Housing
- 6 6mm Compression Tube Fittings Flow Through Sensor Housing
- KF Fitting for Inert Glovebox Applications

6501X - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Use This Part Number When Ordering