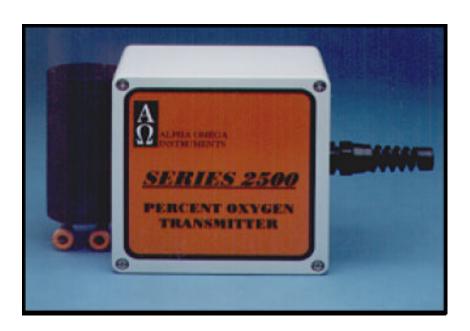


Series 2500 Percent Oxygen Transmitter



	ı	

BENEFITS

A

Wide Number of Ranges

Measure from <0.1% to 100% Oxygen

A

Exceptional Speed of Response

Responds Instantaneously to Changes in Oxygen

la

Rugged and Versatile Construction

NEMA 4 Housing Withstands Harsh Environments

A

Economically Priced

Save Thousands of Dollars vs Other Methods

A

Patented Extended Life Sensor Eliminate

Eliminates Frequent Sensor Replacement



Acid Gas Resistant Sensor

Eliminates Samples Conditioning for Many Applications



General System Description

The Series 2500 Percent Oxygen Transmitter is a true two wire transmitter offering an economical way to make accurate and dependable percent oxygen measurements in a variety of gases. The Series 2500 Percent Oxygen Transmitter is both dustproof and waterproof, and is rated for NEMA 4 (IP66) service. The instrument is loop powered from 14-32 VDC, and provides a 4-20 mADC output that can be transmitted to a datalogger, recorder, PLC, DCS, etc. Internal shielding of the electronics offers excellent protection from EMI/RFI noise. Accessories for the Series 2500 Percent Oxygen Transmitter include a pressure regulator and in-line sample filter. Additional sample conditioning is available.



Patented Oxygen Sensor with EES

The Series 2500 Percent Oxygen Transmitter features a patented, extended life oxygen sensor with EES (Enhanced Electrolyte System). This sensor provides exceptional performance, accuracy, and stability. For applications where carbon dioxide is present in the sample gas, the EES retards passivation of the sensor anode by allowing the products of oxidation to dissolve in the electrolyte. In effect the sensor is renewed continuously, resulting in an **increase in sensor life**, even if exposed to limited amounts of carbon dioxide. The output from the sensor is **temperature corrected** to provide optimum performance over a wide range of operating conditions.

SPECIFICATIONS

Performance

Measurement Ranges (percent oxygen)

0-2, 0-5, 0-10, 0-25, 0-50 and 0-100.

Accuracy 1 $\pm 1\%$ of full scale.

Linearity $\pm 1\%$ of full scale.

Response Time 90% of full scale in less

than 20 seconds typical.

Sensor Type Patented Electrochemical

Sensor.

Temperature Standard.

Compensation

Operating 32°-122°F (0° to 50°C).

Temp. Range

Sample Gas 0.1 to 1.0 psig (1.4 to 14.2 kg/cm²).

Pressure Limits

Sample 1.0 to 2.0 SCFH (0.5 to 1.0 liters/min.)

Flow Rate

Electrical 14-32 VDC @ 4-20 mADC.

Input/Output

Loop R_L (K ohms max)= Input VDC-12

Resistance 20

Warranty 2 years electronics/1 year sensor.

CONSTRUCTION

Enclosure Polycarbonate-rated NEMA 4 (IP66).

Gas ¼" Compression fittings or Quick

Connections Connect fittings for 1/4" flex tubing

Dimensions 5.5 in. (139.9 mm) length.

8.8 in. (223.5 mm) width. 3.4 in. (86.4 mm) deep.

¹Stated at constant temperature and constant pressure.

Alpha Omega Instruments reserves the right to change specifications at any time.

APPLICATIONS

- Heat Treating
- Air Separation
- ♦ Glove Boxes
- Inert Gas Generators
- Chemical Manufacturing
- Process Dryers

- Vessel Blanketing
- Petrochemical Processing
- Pharmaceutical Manufacturing
- ♦ Anaerobic Chambers
- Food Processing
- Beverage Processing



30 Martin Street Cumberland, RI 02864 Telephone 800.262.5977 401.333.8580 FAX: 401.333.5550 Email: info@aoi-corp.com Visit our Web Site http://www.aoi-corp.com Represented by: