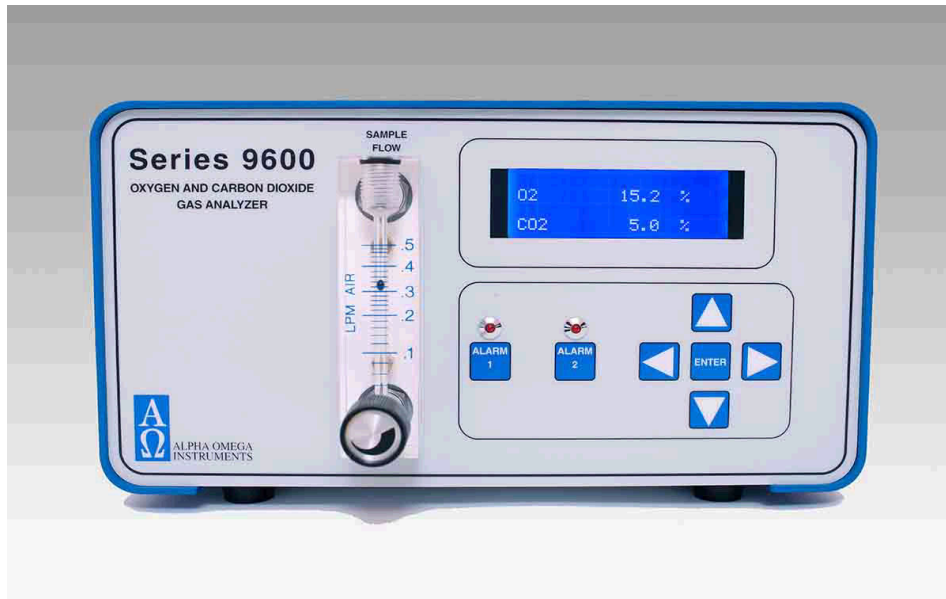




ALPHA OMEGA
INSTRUMENTS

SERIES 9600

Oxygen & Carbon Dioxide Analyzer



Standard Bench-Top Enclosure

FEATURES

State-of-the-Art Sensor Technologies.

Wide Ranges.

User Scalable Analog Outputs.

Rapid Speed of Response.

Dual Adjustable Alarm Setpoints.

Advanced Digital Electronics.

Minimum Maintenance.

4 Line Back-lit LCD

BENEFITS

High Precision Measurements.

Provides Greater Instrument Versatility.

Better Defines the Concentrations of Interest.

Quickly Senses Changes in Gas Composition.

Set Critical Process Limits.

Helps to Ensure Accurate Measuring Values.

Low Cost of Ownership.

Easy to Read in a Variety of Ambient Conditions

System Description

The Series 9600 Oxygen and Carbon Dioxide Analyzer is designed to provide continuous, unattended monitoring of both oxygen and carbon dioxide. The focal point of the Series 9600 is its state-of-the-art sensor technologies. The oxygen sensor is an extended life electrochemical sensor with EES (enhanced electrolyte system). This sensor provides exceptional accuracy and stability. 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 a significant increase in sensor life. In addition, the enhanced mechanical design of the sensor helps to ensure long life and virtually eliminates leakage of electrolyte, a nagging (and expensive) problem associated with other types of sensors.

Alpha Omega Instruments has complemented its oxygen measuring capabilities with a next generation NDIR (non-dispersive infrared) sensor. The carbon dioxide sensor incorporates closed-loop control for enhanced long-term calibration stability. The control signal is generated by means of an optical referencing element that monitors source intensity. This methodology, coupled with a novel source homogenizing gas sampling chamber, yields a system with greatly improved tolerance to changes in the infrared source outputs.

Options/Accessories

- ✓ RS232 & RS485 Serial Communications
- ✓ Sample Pumps
- ✓ Sample Filters
- ✓ Pressure Regulators
- ✓ Flow meters
- ✓ Built-in Data Logger
- ✓ Remote Sensors

Applications

- ◆ Food Processing
- ◆ Pharmaceutical Manufacturing
- ◆ Environmental Monitoring
- ◆ Chemical/Petrochemical
- ◆ R&D
- ◆ Laboratory Growth Chambers
- ◆ Glove Box/Dry Box
- ◆ Incubators
- ◆ Fermentors
- ◆ Isolators

PERFORMANCE SPECIFICATIONS

| | Oxygen | Carbon Dioxide |
|----------------------------------|---|---|
| Ranges: | Percent: 0-100. | Percent: 0-20% Trace: 0-5,000 Parts Per Million (PPM). |
| Error Band: | ± 1% of full scale. | Percent Range: 0.1% or ± 5.0% of reading, whichever is greater. Trace Range: ± 30 ppm or ± 2% of reading whichever is greater (error stated at 77°F and 14.7 psig.) |
| Response Time: | 90% of full scale response in < 20 seconds. | < 35 seconds to 63% of step change @ a sample flow rate of 200 ml/minute (recommended sample flow rate). |
| Sensor Type: | Long-life electrochemical sensor with EES. | Non-dispersive infrared (NDIR). |
| Operating Humidity Range: | 0-99% RH non-condensing. | 0-99% RH non-condensing. |
| Gas Sample Connections: | 1/4" SS compression fitting. | 1/4" SS compression fitting. |
| Sample Delivery: | Pressurized sample or optional pump. | Pressurized sample or optional pump. |
| Alarm Relays: | Two (2) SPDT Form C contacts rated 10 A (250 VAC) /5A (100 V DC) User configurable to alarm on either O ₂ or CO ₂ levels. | |
| Display: | 4 line x 20 character LCD for both O ₂ and CO ₂ . | |
| Analog Outputs: | Two 4-20 mADC outputs that are range configurable. Either or both outputs can be set to provide 0-20 mADC. | |

GENERAL SPECIFICATIONS

| | |
|-----------------------------------|---|
| Power Requirements: | 90-264 VAC, 50-60 Hz |
| Ambient Temperature Range: | 40-100 °F (5-38 °C). |
| Sample Pressure Limits: | <2.0 psig. |
| Enclosure: | NEMA 1, Powder coated, painted aluminum enclosure suitable for bench-top use. |
| Enclosure Dimensions: | 10.75 W x 6.30 H x 13.10 D |
| Warranty: | Two years electronics and sensor. |
| Weight: | <10 pounds (uncrated). |



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Alpha Omega Instruments reserves the right to change specifications at any time. 02/2011