



ALPHA OMEGA
INSTRUMENTS

SERIES 9610

Carbon Dioxide Analyzer



Standard Bench-Top Enclosure

FEATURES

State-of-the-Art IR Sensor Technology.

Wide Range.

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 Measurement.

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 9610 Carbon Dioxide Analyzer provides continuous, unattended measurement of either percent or trace levels of carbon dioxide in other gases. The product is ideally suited for both continuous or spot monitoring requirements.

The focal point of the Series 9610 is its state-of-the-art sensor technology that features a next generation NDIR (non-dispersive infrared) measuring system. This 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

- √ RS-232 or RS485 Serial Communications
- √ Sample Pumps
- √ Sample Filters
- √ Pressure Regulators
- √ Flow meters
- √ Built-in Data Logger
- √ Remote Sensor

Applications

- ◆ Food Processing
- ◆ Pharmaceutical Manufacturing
- ◆ Environmental Monitoring
- ◆ R&D
- ◆ Laboratory Growth Chambers
- ◆ Fermentors
- ◆ Glove Boxes and Isolators
- ◆ Incubators

Series 9610 Carbon Dioxide Analyzer

PERFORMANCE SPECIFICATIONS

- Ranges:** **Percent:** 0-20%
 Trace: 0-5,000 Parts Per Million (PPM).
- Error Band:** Percent Range: 0.1% or $\pm 5.0\%$ of reading, whichever is greater.
 Trace Range: ± 30 ppm or $\pm 2\%$ of reading whichever is greater (error stated at 77°F and 14.7 psig.)
- Repeatability:** Percent Range: $\pm 0.1\%$ CO₂
 Trace Range: ± 20 ppm CO₂
- Response Time:** < 35 seconds to 63% of step change @ a sample flow rate of 200 ml/minute (recommended sample flow rate).
- Sensor Type:** Non-dispersive infrared (NDIR).
- Operating Humidity Range:** 0-99% RH non-condensing.
- Warm-up Time:** Less than one minute.
- Sample Connections:** 1/4" SS compression fitting.
- Sample Delivery:** Pressurized sample or optional pump.
- Alarm Relays:** Two (2) SPDT Form C contacts rated 10 A (250 VAC) /5A (100 V DC)
- Display:** 4 line x 20 character LCD for both O₂ and CO₂.
- Analog Outputs:** Two 4-20 mADC outputs that are range configurable. Either or both outputs can be set to provide 0-20 mADC.
- Calibration:** Single gas calibration.

GENERAL SPECIFICATIONS

- Power Requirements:** 90-264 VAC, 50-60 Hz
- Ambient Temperature Range:** 32-122 °F (0-50°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).



ALPHA OMEGA
INSTRUMENTS

Call Us Toll Free
800-262-5977

30 Martin Street, Cumberland, RI USA 02864
Tel: 401.333.8580; Fax: 401.333.5550
Email: contact@aoi-corp.com
Web: <http://www.aoi-corp.com>

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