



FEATURES

- State-of-the Art Sensor Technology.
- Audible / Visual Alarm Indicators.
- Three Adjustable Alarm Relays.
- Rapid Speed of Response.
- Audible & Visual Alarm Indication.
- Optional RS-232 or 485.
- Minimum Maintenance.
- No Sample Pump Required.
- Factory Calibrated.

BENEFITS

- High Precision Measurement.
- Personnel Alerted Quickly of an Alarm Condition.
- Easy Set CO₂ Threshold Values.
- Senses Changes in CO₂ in Seconds.
- Alerts User of Abnormal Operating Conditions.
- Interfaces with Serial Communication Equipment.
- Low Cost of Ownership.
- Higher Reliability with Better Level of Protection.
- Ensures Accurate Readings from the Start.

System Description

The Series 9510 Carbon Dioxide Safety Monitor is designed to provide continuous, unattended measurement of parts per million (PPM) concentrations of carbon dioxide in breathing air environments. The Series 9510 features an open sensor diffuser that allows free movement of ambient air to the sensor without the use of a sample pump. For monitors that require a sample pump to transport the sample, often the reliability of the measurement is contingent on the pump working properly which may not always be the case.

The focal point of the Series 9510 is its state-of-the-art sensor technology. Alpha Omega Instruments carbon dioxide sensor features a next generation NDIR (non-dispersive infrared) measuring system. 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

Battery Backup Operation

RS-232 OR RS-485

Built-in Datalogger

Applications

Food Processing

Pharmaceutical Monitoring

R&D

Greenhouse Monitoring

HVAC

Specifications PERFORMANCE

Measurement Range:	0-5,000 Parts Per Million (PPM)
Measurement Error:	± 50 PPM CO ₂ or ± 2% of reading (whichever is greater)
Response Time:	< 35 seconds to a 63% of step change
Sensor Type:	Non-Dispersive Infrared
Gas Sampling Method:	Diffusion
Warm-up Time:	Less than one minute
Operating Temperature:	50-104 F (10-40 C)
Calibration:	Single gas calibration
Calibration Interval:	Once every two years

ELECTRICAL

Display:	3-1/2 digit liquid crystal display
Power Source:	115/230 VAC/50-60 Hz or 18-32 VDC (Battery Backup Options available with AC power sources)
Analog Output:	4-20 mA DC and 0-2 VDC
Optional Serial Communications:	RS-232C or RS-485
Alarm Relays:	Three (3) SPDT Form C contacts rated 10A @ 30VDC / 115/230 VAC
Audible and Visual Alarm Indicators:	Standard

CONSTRUCTION

Enclosure:	Polycarbonate-rated NEMA 1
Dimensions:	10.9 in. (276.86 mm) Height 6.5 in. (165.10 mm) Width 6.0 in. (152.40 mm) Depth
Weight:	7.5 lbs. (3.402 kg) (Bench-top Configuration or Wall Mount)



40 Albion Road, Suite 100, Lincoln, RI 02865
Tel: 401.333.8580, 800.262.5977 Fax: 401.333.5550
Email: salescontact@aoi-corp.com Web: aoi-corp.com

Alpha Omega Instruments Accepts VISA, Mastercard, and AMEX