DualAir ✓ O₂-CO₂

Oxygen—Carbon Dioxide Monitor

Model O2CO2000

This unique and compact dual monitor from Air Liquide is ideal for the continuous monitoring of both O_2 and CO_2 gases simultaneously to alert and protect personnel from entering potentially hazardous situations where inert gases may accumulate. This includes nitrogen gas storage areas, CO_2 beverage gas distribution areas, confined spaces and other locations where low oxygen or elevated carbon dioxide levels may pose a health hazard.

Unlike continuously depleting electrochemical sensor cells, the Dual Air Check monitor features exclusive zirconium and patented NDIR cells to provide stable readings. O_2 and CO_2 readings are stable even in areas where temperature, barometric pressure and humidity levels are continually changing. The O_2 sensor requires no quarterly calibration or annual maintenance, while the CO_2 sensor automatically adjusts to ambient levels. Dual Air Check automatically adjusts to ambient CO_2 levels on a weekly basis, or on-demand if desired. In addition, there are no zero or span adjustments to make or expensive maintenance required. Simply plug Dual Air Check into any standard AC outlet and depend on continual, maintenance and error-free air monitoring.

Dual Air Check has individual dedicated user-selectable relays that can be used to operate on-off valves for the control of CO_2 injection in grow rooms while simultaneously activating alarms when O_2 levels get too low. The O_2 sensor can also be used for controlling nitrogen generators for hypobaric rooms while using the CO_2 sensor to alarm to TLV levels of CO_2. A built-in CPU provides an inexpensive monitor with local display, safety alarms and control for both O_2 and CO_2 simultaneously.

Model O2CO2000

Benefits/Features

Zero maintenance zirconium O_2 cell and long life CO_2 sensor

No calibration required for O_2

Self-calibrating CO_2 sensor

Unaffected by environmental temperature, humidity and barometric variations

Three (3) year warranty

Local backlit concentration display

Built-in visual LED alarm indicators and audible horn

Alarm level 1 and 2 for O_2 and CO_2

Mounting feet can be oriented in any direction or removed for flush mounting

Furnished with UL listed 110 VAC/24 VDC regulated power adapter

Specifications

Sampling Method and Range:
Diffusion, 0–25% O_2, 0–10,000 ppm CO_2

Accuracy: ±1% of full scale

Operating Temperature:
32°F to 131°F (0°C to 55°C)

Humidity: 0–95% RH (non-conforming)

Display: 3/4" backlit LCD digital

Signal Outputs:
Audible Alarm: 90 db
Alarm Indicator for O_2: Red LED
Alarm Indicator for CO_2: Orange LED

Response Time: Within 1 second of any change in O_2

Repeatability: ±1%

Approvals: Ce approved and factory-calibrated against a NIST-traceable reference standard

Required Calibration:
O_2: none
CO_2: none when Auto Cal function is activated

Minimum Detection: 200 ppm

Signal Outputs: One user-adjustable alarm relay for O_2, one user adjustable alarm relay for CO_2 (rated at 2 amps 24 VDC/240 VAC)

Analog Output: 4-20mA selectable for either O_2 or CO_2

Power Requirements: 24 VDC 350mA (unit supplied with 110 VAC power adapter with 6 ft. power cord)

Dimensions:
6.5" W x 3.5" H x 3.25" D
(165 mm x 89 mm x 83 mm)

Enclosure: Polycarbonate plastic, general purpose

Weight: 1.6 lbs. (0.8 kg)

Model Number	Gas Detected	Factory Default Alarm Threshold Settings		
Q3-O2CO2000	Oxygen	Alarm 1	19.5%*	Red LED
	Carbon Dioxide	Alarm 2	5000 ppm*	Orange LED
		Audible Alarm	19.5% O_2 or 5000 ppm CO_2*	90 db Alarm

* Alarms are factory (default) set to automatically reset (non-latching) when level exceeds (O_2) or is below (CO_2) threshold settings.