



# **Oxygen Deficiency Monitor**

## Model O2000

This unique and compact oxygen monitoring system from Air Liquide should be installed in any confined space where inert gases might accumulate. This includes gas storage areas, freezers, confined spaces and other locations where low oxygen levels may pose an asphyxiation hazard.

Unlike electrochemical sensor cells, Air Check features an exclusive, current limiting zirconium oxide oxygen sensor that will operate continuously for 10 or more years with little or no maintenance. It responds to low oxygen conditions within seconds, providing drift-free oxygen readings, even in areas where temperature, barometric pressure and humidity levels are variable.

With the Air Liquide Air Check monitoring system, there are no zero or span calibration pots to adjust. Exposure to a reference gas is never necessary. Moreover, when compared to disposable-type sensors that are no longer effective after approximately one year of service, Air Check is easily the more cost-effective oxygen monitoring solution. Our Air Check monitor with long-life zirconium O2 sensor pays for itself in as little as three years!

Air Check transmits continuous oxygen concentration levels to any system control data acquisition system or programmable logic controller. It can be configured as a display-only monitor or a full-featured monitor with dual-level, user-selectable alarm relays that can be operated remotely up to 1,000 meters from centralized controllers. Suitable for both indoor and outdoor applications, Air Check electronics are housed in a Nema 4X housing, with an optional EX available for hazardous areas.

#### **Benefits/Features**

Zero maintenance zirconium cell No calibration required Unaffected by environmental temperature, humidity and barometric variations Operates at -40°F (-40°C) in freezers 10+ year sensor life Local display, 4-20mA output Joystick adjustable dual-alarm system relays Computer controlled electronics Mounting feet can be oriented in any direction or removed for flush mounting Furnished with UL listed 110 VAC/24 VDC regulated power adapter

	Model Number	Gas Detected	Factory Default Alarm Threshold Settings		
	Q3-O2000	Oxygen	Alarm 1	19.5%*	Orange LED
			Alarm 2	18.0%*	Red LED
			Audible Alarm	19.5%*	90 db Alarm

<sup>\*</sup> Alarms are factory (default) set to automatically reset (non-latching) when level exceeds threshold settings.



### **Specifications**

Sampling Method and Range:

Diffusion, 0-25% O2

Accuracy: ±0.5% of full scale

Operating Temperature:
-40°F to 131°F (-40°C to 55°C)

Humidity: 0–95%

Display: 3/4" backlit LCD digital Audible Alarm (Sound Output): 90 db Response Time: Within 1 second of any

Repeatability: ±1%

change in O2

**Approvals:** Ce approved and factory-calibrated against a NIST-traceable reference standard **Required Calibration:** None (no zero or span

pots supplied)

Minimum Detection: 1000 ppm signal

Outputs: DC 4-20mA analog output; dual-level user-selectable alarm relays and one fault relay (2 amps @30 VDC/240 VAC)

Power Requirements: 24 VDC 100mA without relays, 500mA with relays (unit supplied with 110 VAC power adapter with 6 ft. power cord)

#### Dimensions:

5.5" W x 3.5" H x 3.25" D (140 mm x 89 mm x 83 mm)

**Enclosure:** ABS plastic, Nema 4X rated general purpose (optional EX available for hazardous areas)

Weight: 1.6 lbs. (0.8 kg)