

# *Air check ✓ O<sub>2</sub>*

## Oxygen Deficiency Monitor for Glove Box and Chambers

### Features

- ✓ Designed for mounting on Glove Boxes
- ✓ No maintenance Zirconium cell
- ✓ No calibration required
- ✓ 3 year warranty
- ✓ No drift due to environmental or temperature changes
- ✓ Operates at -40°C in freezers
- ✓ 10 + years sensor life
- ✓ Local display, 4-20mA output
- ✓ Joystick adjustable dual alarm relays
- ✓ Integral computer controlled electronics
- ✓ C UL listed Measuring Equipment E363306
- ✓ Ce approved EMC EN 61326-1:2006  
EN 61010-1-3-2013 LVD



Made in  
US



The **Air check ✓ O<sub>2</sub>** Deficiency Monitor is a compact gas monitoring system that's ideal for the continuous monitoring of glove boxes, fume hoods any sealed chamber areas where low or no oxygen levels need to be measured and controlled. Unlike electrochemical sensor cells the **Air check ✓ O<sub>2</sub>** zirconium cell provides stable oxygen readings even in areas where temperature, barometric pressure and humidity levels are changing. The PureAire **Air check ✓ O<sub>2</sub>** Deficiency Monitor is suitable for either indoor or outdoor use.

The heart of the monitoring system is a long lasting zirconium sensor, which responds to low oxygen conditions within seconds and provides accurate measurements over a wide temperature and humidity range. The zirconium O<sub>2</sub> sensor cell will operate continuously for 10 or more years and requires an absolute minimum of maintenance. There are no zero or span calibration pots to adjust and when compared to disposable type sensors, our long life zirconium O<sub>2</sub> sensor can save up to \$475 annually and will pay for itself in just over 3 years!

Ideal for continuously monitoring oxygen levels in sealed confined spaces or areas where inert gases are used, the **Air check ✓ O<sub>2</sub>** Deficiency Monitor does not drift or loose sensitivity when the weather or temperature changes.

### **Connects to SCADA and PLC Controls**

The **Air check ✓ O<sub>2</sub>** Deficiency Monitor is 24VDC powered and transmits continuous oxygen concentration levels to any system control data acquisition system, or programmable logic controller.

The PureAire's Oxygen Deficiency Monitor can also be operated remote up to 1,000 meters or 0.6 miles from centralized controllers.

## **PureAire's Oxygen Sensor Cell**

The **Air check ✓ O<sub>2</sub>** Deficiency Monitor uses an exclusive Current Limiting Zirconium Oxide Oxygen sensor that never requires a reference gas. Unlike concentration type zirconium cells that must have a reference gas, PureAire's O<sub>2</sub> monitor can operate in 100% nitrogen environments. Capable of detecting 0% up to 95% oxygen levels, the current limiting O<sub>2</sub> sensor operates at a lower temperature than competitive concentration type cells. The average life of PureAire's O<sub>2</sub> sensor is over 10 years in most environments.

The **Air check ✓ O<sub>2</sub>** Deficiency Monitor never needs calibration. The earth is a wonderful source of calibrated oxygen and under ambient levels, PureAire's O<sub>2</sub> monitor is continuously being challenged to 20.9%. There are no zero or span adjustments to make; the only optional response test required is to subject the O<sub>2</sub> system to nitrogen periodically.

## **O<sub>2</sub> Monitor System Features**

The **Air check ✓ O<sub>2</sub>** Deficiency Monitor is available in many different configurations. PureAire uses a sophisticated built-in CPU that is flexible to provide users with a low cost basic display only monitor or a full featured monitor with dual level, user selectable alarm relays. Other options available are remote digital displays and remote horn and strobe combination.

## **Specifications**

|                                   |   |
|-----------------------------------|---|
| Sampling Method & Range           | Diffusion, 0-25% O <sub>2</sub>   |
| Accuracy                          | ± 1% of full scale  |
| Operating Temperature             | -40 to + 55 C   |
| Display                           | ¾" backlit LCD digital display  |
| Sensor Type                       | Long life zirconium oxide sensor  |
| Sensor Life                       | 10+ years under normal conditions   |
| Signal Outputs                    | Standard: 4-20 mA analog output<br>Optional: Dual User Selectable Relays (2amp 30VDC / 240VAC)<br>Audible alarm |
| Power Requirements                | 24VDC 100mA without relays; 500mA with relays   |
| Dimensions O <sub>2</sub> monitor | 5.125 (W) x 4.5 (H) x 3.25 (D) inches; (130.1 mm x 114.3 x 82.5 mm)   |
| Dimensions mounting plate         | 2.5 (W) x 7.0 (D) inches; (64 x 178 mm)   |
| Weight                            | 1.6 lbs. (.8 kg)  |
| Enclosure                         | Polycarbonate   |
| Required calibration              | None (no zero or span pots supplied)  |



**PureAire**  
monitoring systems, inc.

1140 Ensell Road  
Lake Zurich, IL 60047  
Toll-Free: 888-788-8050  
Phone: 847-726-6000  
Fax: 847-726-6051  
Email: info@pureaire.net

