

# Air check ✓ O<sub>2</sub>

## Oxygen Analyzer 0-1000ppm

### Features

- ✓ 0-1000ppm Range Sensor
- ✓ Works under vacuum
- ✓ Two-Alarm Relays
- ✓ No Maintenance Required
- ✓ Ultra Loud Built-in audible alarm 90 db
- ✓ Remote sensor capability up to 10 feet
- ✓ Digital Display, 4-20mA Analog Output
- ✓ Zirconium Oxide Sensor
- ✓ No Drift due to Thunderstorms or barometric pressure changes
- ✓ Wall mounting brackets
- ✓ Ce approved EMC EN 61326-1:2006



The **Air check ✓ O<sub>2</sub>** Monitor is a compact gas monitoring system that's ideal for the continuous monitoring of gas lines, 3D printers, nitrogen gas compressors, vacuum chambers, and locations where low oxygen levels need to be monitored. 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. 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 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. The electronics are housed in a polycarbonate housing or optional EX for hazardous areas.

### 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 be completely inserted into 100% nitrogen, argon and other oxygen depleting gases. Capable of detecting 0-1000ppm, the current limiting O<sub>2</sub> sensor operates at a lower temperature than competitive concentration type cells.

## 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 Modbus digital communications or full Wireless radio communications.

## Specifications

|                         |   |
|-------------------------|---|
| Sampling Method & Range | Diffusion, 0-1000ppm O <sub>2</sub> (0-25% and other ranges available)  |
| Accuracy                | ± 5% of full scale  |
| Operating Temperature   | -40 to + 55 C   |
| Display                 | ¾" backlit LCD digital display  |
| Sensor Type             | Long life zirconium oxide sensor  |
| Sensor Life             | TBD   |
| Signal Outputs          | Standard: 4-20 mA analog output<br>Optional: Dual User Selectable Relays (2amp 30VDC / 240VAC)<br>Audible alarm<br>Digital RS-232 |
| Power Requirements      | 24VDC 100mA without relays; 500mA with relays   |
| Dimensions              | 5.125 (W) x 3.15 (H) x 3.25 (D) inches; (130.1 x 80 x 83 mm)  |
| Weight                  | 1.6 lbs. (.8 kg)  |
| Enclosure               | Polycarbonate   |
| Approvals               | Ce approval & factory calibrated against a NIST traceable reference standard  |
| Required calibration    | None (no zero or span pots supplied)  |

