

### Features

- ✓ Suitable for remote sampling to 100 feet
- ✓ No maintenance Zirconium cell
- ✓ No calibration required
- ✓ 3 year warranty
- ✓ No drift to environmental or temperature changes
- ✓ 10 + year Sensor life
- ✓ Local display
- ✓ 4-20 mA analog output.
- ✓ Built-in flow sample pump
- ✓ Built-in user adjustable alarms & relays
- ✓ Optional built-in audiohorn



The **Air check ✓ O<sub>2</sub>** Deficiency Monitor is a compact sample draw gas monitoring system that's ideal for the continuous monitoring of inert gas storage areas, confined spaces, and other locations where low oxygen levels may pose a hazard to personnel. Unlike electrochemical sensor cells the **Air check's** zirconium oxygen cell provides stable readings even in areas where temperature 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 and linear concentration readings over the entire measurement range. PureAire's 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!

The monitor's built-in pump is ideal for continuously monitoring oxygen levels in remote confined spaces or under floor areas where inert gases are used. The **Air check ✓ O<sub>2</sub>** Sample Draw Monitor does not drift or loose sensitivity when the weather or temperature changes. The electronics are housed in a NEMA 4 general purpose wall mounted weather resistance housing.

### Connects to DCS and PLC Controls

The **Air check ✓ O<sub>2</sub>** Sample Draw Monitor is 24VDC powered and transmits continuous oxygen concentration levels to any distributive control system, programmable logic controller or PureAire's proprietary single and multichannel controllers. The **Air check ✓ O<sub>2</sub>** Monitor also has dual user selectable alarm relays for activating remote horns and strobes. The monitor can be operated remote up to 1,000 meters, 0.6 miles from centralized distributive control systems

# 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 percent 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. When supplied with built-in alarm relays, the Air check ✓ program continuously monitors electronics, sensor cell and sample flow status. Fault information is sent to the mA output, alarm relay and front panel LED.

## Specifications

Sampling Method & Range	Sample Draw, 0-25%
Accuracy	± 1% of full scale
Operating Temperature	-40 to +122F (-40 to +50C)
Display	3/4" backlit digital display
Sensor Type	Long life zirconium oxide sensor cell
Sensor Life	10+ years under normal conditions
Signal Outputs	4-20 mA analog output Dual level alarm relay contacts Optional built-in horn
Power Requirements	24VDC 700mA
Dimensions	7.25 (W) x 6.0 (H) x 5.0 (D) inches; 184.2 mm x 152.4 mm x 127 mm
Weight	4 pounds (1.81 kg)
Enclosure	NEMA 4X wall mount general purpose; not intended for explosive atmospheres.
Required calibration	None (no zero or span pots supplied)



AUTHORIZED DISTRIBUTOR:  
GasDetectorsUSA.com  
Houston, Texas USA  
sales@GasDetectorsUSA.com  
832-615-3588

**PureAire**  
*monitoring systems, inc.*  
557 Capital Drive  
Lake Zurich, IL 60047  
Toll-Free: 888-788-8050  
Phone: 847-726-6000

Fax: 847-726-6051  
Email: [pureaire@dls.net](mailto:pureaire@dls.net)  
Internet: [www.pureairemonitoring.com](http://www.pureairemonitoring.com)