

# *Air check ✓ O<sub>2</sub>*

## O<sub>2</sub> Monitor 0-25% for Vacuum and Gas Lines

### **Features**

- ✓ Operates in 300 torr vacuum
- ✓ KF-25 flange connector
- ✓ No maintenance Zirconium cell
- ✓ No calibration required
- ✓ 3 year warranty
- ✓ No drift to environmental or temperature changes
- ✓ 10 + year Sensor life
- ✓ Local digital 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  
USA



The **Air check ✓ O<sub>2</sub>** Deficiency 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 and humidity levels are changing. And, the **Air check ✓ O<sub>2</sub>** is one of the only monitors suitable for monitoring directly in a vacuum.

The heart of the monitoring system is a long lasting zirconium sensor, which detects 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!

The **Air check ✓** unique sensor mounts directly into chambers or load locks through the use of a KF type vacuum fitting. Monitoring oxygen directly eliminates the need to change the environment back to ambient and can improve thru put. The **Air check ✓ O<sub>2</sub>** Deficiency Monitor also provides stable readings even in areas that contain high electro-magnetic fields.

### **Connects to DCS and PLC Controls**

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

## 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 25% 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 perfect for OEM process tool installation. 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.

## Specifications

Range	0-25% Oxygen. (Other ranges available)
Sampling Method	Diffusion (supplied with KF 25 vacuum fitting. Other sizes available)
Accuracy	± 1% of reading
Operating Temperature	-40 to +50C
Vacuum range	300 torr, 0.4 atm
Display	¾" backlit LCD digital display, 3 Alarm LED's
Sensor Type	Long life zirconium oxide sensor cell
Sensor Life	10+ years under normal conditions
Signal Outputs	Standard: 4-20 mA analog Dual User Selectable Relays (2amp 24 VDC / 24VAC)
Power Requirements	24VDC 250mA
Dimensions	5.0 (W) x 5.5 (H) x 3.25 (D) inches; (127 x 140 x 83 mm)
Weight	1.6 lbs. (.8 kg)
Enclosure	Polycarbonate general purpose
Required calibration	None (no zero or span pots supplied)
C UL Listed	Measuring Equipment E363306
CE	EN 61000-3-2:2006 EMC, EN 61000-3-3:2008 EMC, EN61010-1-3-2013 LVD



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