PureAire monitoring systems, inc.

# Oxygen Deficiency Monitor and Oxygen Analyzers


## Oxygen Sensors for 0-25% and 0-1000ppm

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# Who is PureAire Monitoring Systems

- We are an industry leader in gas detection. Our mission at PureAire is simple. Keep people safe. We do that in the best way we know how; we manufacture monitors that are effective, innovative, and reliable.  At PureAire we can solve customers safety concerns, as well as environmental needs. As a manufacturer, we are capable of handling any size project.

- PureAire's proprietary sensor cell technology and cutting edge electronics are designed to interface with the latest distributive control systems. Our engineers are always on hand to brainstorm and create the perfect solution for our individual clients. We will work with you to get your space outfitted with the best monitor for your specific needs.

- Our growth and success have been a result of our decades of experience and total commitment to supporting our customers. Our goal is to provide the best service and support in the industry. We can be reached 24 hours a day, 7 days a week.  At PureAire we take the extra step to ensure your complete safety and satisfaction.

# Why Do I Need An Oxygen Monitor?


**O2 monitors are used to protect people in the workplace.**

*"Under normal conditions, we breathe 20.9% oxygen. OSHA states "Anything below 19.5% is hazardous to our health."*

PureAire's O2 deficiency monitor is a stand-alone monitor with built-in audible alarm and alarm relay to alert employees when ambient oxygen levels go below 19.5%.

An oxygen monitor is a safety device used in cryogenic areas to alert if there is a low level of oxygen in a room that may be caused by a nitrogen, helium or argon spill.

# Who Needs an Oxygen Monitor?

| Industry | Risk Site |
|---|---|
| Government/ Education | Labs ($LN_2$ – Equipment Cooling) |
| Healthcare | MRI Rooms (He – Magnet Cooling) |
| Additive Manufacturing | 3D printing chamber |
| Semiconductor | $N_2$ and Cryogenics for wafer manufacturing |
| Pharmaceutical | Cryogenic Freezers |
| Misc. | Dewars ($N_2$, Ar, He) Confined Spaces |

# Benefits and Features

- 10+ year sensor life
- Unaffected by environmental temperature, humidity and barometric variations
- Operates at -40°F (-40°C) in freezers
- Local display, 4-20mA output
- 2 adjustable or configurable relays
- Computer controlled electronics
- UL / CUL listed and Ce approved
- Furnished with UL-listed 110 VAC/24 VDC regulated power adapter

## Oxygen Monitor's We Offer

- Standard $O_2$ monitor with audible alarm:


### Optional Configurations:

- Sample draw $O_2$ monitor (built-in pump for remote sampling up to 100 ft.)
- Explosion-proof $O_2$ monitor (explosion proof housing suitable for Class 1, Div.1, Group B, C, D locations)
- Glove box and vacuum $O_2$ (monitor where low or no oxygen levels need to be measured and controlled)



# Comparison of Annual Maintenance

## 1-Point $O_2$ Monitoring System

| | PureAire's O2 Zirconium Oxide | Disposable O2 Cells |
|---|---|---|
| | No replacement sensors | Replacement sensor recommended once per year |
| | No calibration required | Quarterly calibration required |
| | Average life 10+ years | Replacement cells: average $300/year per O2 sensor cell |
| Total (annual): | $0.00 | $360 |
| Total (five years): | $0.00 | $1,800 |

## Common Issues For Monitors With Disposable Sensors

- Monitors require new sensors every 6 to 18 months. Sensors are costly, averaging $200 – 400 per sensor.
- Sensors must be calibrated quarterly with a calibration gas, an additional cost to client.
- Sensors false alarm due to thunderstorms, changes in temperature, and changes in barometric pressure.
- Additional technicians are needed to maintain and calibrate sensors. Time is money.

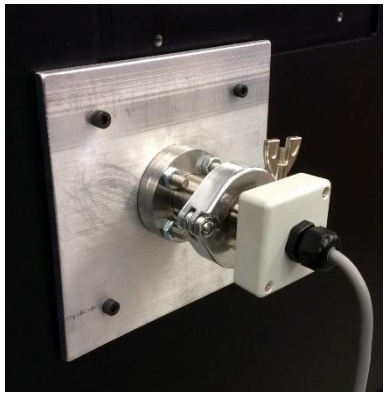
**"PureAire Monitoring Systems, LLC has sold over 10,000 monitors to broad range of industries worldwide. Our website lists a few customer testimonials along with reviews on google."**

# Where Are Oxygen Monitors Installed?


Nitrogen tanks

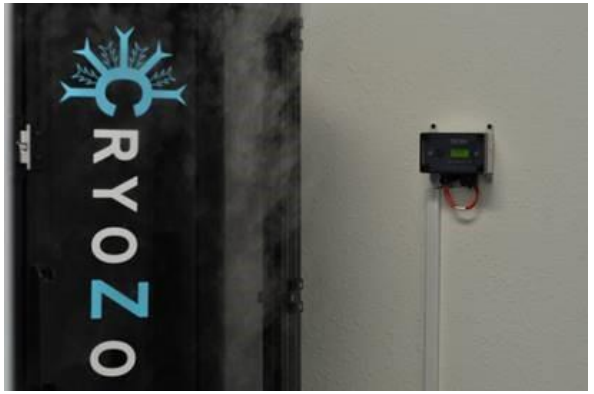
MRI Rooms

Semiconductor



Additive Manufacturing 3D Chamber

Nitrogen Freezers




Cryotherapy

# End of presentation

Thank you for your attention


Air✓$O_2$™