

MEDICAL SHIELDING ACCESORIES OXYGEN MONITORING SYSTEM (OMS)



OMS

- No Maintenance Zirconium Sensor
- Long-life 10+ Year Average Sensor Life
- No Calibration Required
- Two Alarm Set Points for 19.5% and 18%
- Built-in Flow Sample Pump
- Built-in Audible Alarm 90 dB
- Digital Display, and 4-20 mA Analog Output
- UL, c UL and CE Approvals
- 1 Year Warranty

ETS-Lindgren's Oxygen Monitoring System (OMS) is a sample-draw system designed to detect and alert users when oxygen levels drop below safe thresholds. While normal air contains an oxygen concentration of 20.9%, levels below 19.5% are considered hazardous to human health. The OMS continuously monitors the air in environments such as MRI rooms, laboratories, freezers, and confined spaces, where inert gases like helium, nitrogen, and argon can displace oxygen, posing a risk to patients and staff. Designed for versatility, the OMS is suitable for both indoor and outdoor use, providing a reliable safeguard in areas where oxygen depletion may occur.

Product Features

Zirconium Oxide Sensor

At the heart of the OMS is a non-depleting zirconium oxide sensor that has a 10-year service life. The sensor does not require a reference gas for calibration and can operate in nitrogen environments of up to 100%. The sensor responds to low oxygen conditions within seconds, and readings are not affected by changes in temperature, humidity, or barometric pressure. Other systems using less sophisticated technology require periodic calibration and sensor replacement. They can also be susceptible to false triggering caused by temperature extremes or sudden changes in barometric pressure. The OMS non-depleting zirconium oxide sensor avoids these problems and is virtually maintenance and worry-free.

Air Draw Flow Pump

The OMS uses a flow pump that continuously samples air drawn from end points up to a maximum of 30 m (100 ft) from the unit. The draw tube is made of transparent polyurethane 7 mm (1/4 in) in diameter, and can be passed through RF shielded waveguides when required. For optimal sensing, the tubes end point should be positioned near the ceiling of the space being monitored.

On-Board CPU

An on-board CPU provides the systems logic and control. A local back-lit display shows the oxygen concentration from the sample point as a percentage. This information can be transmitted to any distributive control system, or programmable logic controller. The OMS also has user selectable, dual alarm relays for activating remote audio alarms and strobe lights. The OMS can be operated remotely up to 1,000 m (0.6 miles) from centralized distributive control systems.

Technical Specifications

Electrical	
Power	110/220V Plug in Power Supply
Input Voltage	24 DVC (300 mA)
Signal Outputs	4 to 20 mA Analog Output
Dual level Alarm Relay Contacts	-40° C to +55° C (-40° F to +122° F)
Mechanical	
Case	Polycarbonate
Mounting	Wall Mount Brackets
Physical	
Dimensions	178 mm x 127 mm x 127 mm (7.0 in x 5.0 in x 5.0 in)
Weight	2.0 kg (4.41 lb)