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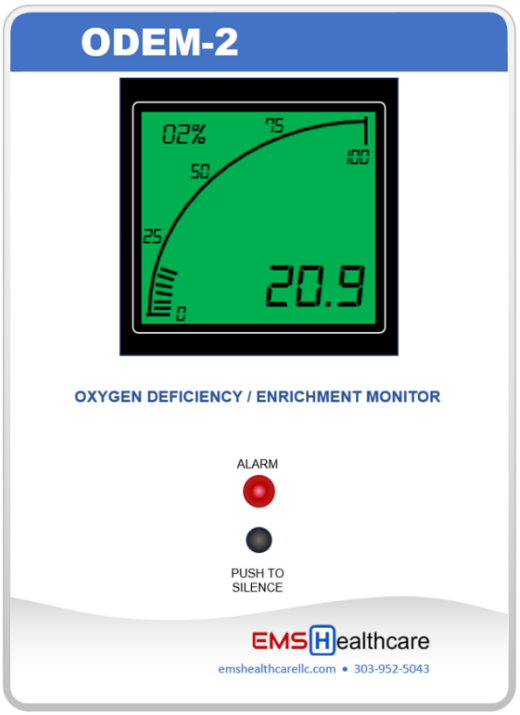
ODEM-2 Oxygen Deficiency/Enrichment Monitor

Key Features

- **10+ Year Zirconium Sensor**
- **Easy-to-read Digital + Bar Graph Display**
- **Multi-color backlight changes to flashing RED in alarm**
- **Additional Red Alarm LED with 150 deg viewing angle**
- **Alarms below 19.5%, and Above 23.5%**
- **Two relay outputs for remote monitoring**
- **4-20mA Output**
- **95dB Audible horn with silence pushbutton**
- **Local or Remote sensor mounting options**
- **Nema 4 Enclosure (Indoor / outdoor rated)**



Description

The ODEM-2 was specifically designed for detecting gas concentrations in confined spaces where gas leaks are a safety concern such as basements, storage closets, or gas manifold rooms with limited entry/exit.

The ODEM-2 performs continuous oxygen deficiency and enrichment monitoring using a highly accurate, calibrated oxygen sensor that provides oxygen concentration in real-time on a display unit which can be configured with the sensor built-in or on a 5m cable for remote sensing. The display unit includes both audible and visual indicators if the oxygen level is outside OSHA specified limits and a button to silence the audible alarm.

In either the local or remote configurations, an additional display unit can be added to the system for displaying oxygen concentration in another location. Two relay outputs are included for connection to remote alarm panels or a building automation system. Alarms can be set as latching, requiring personnel to push the reset/silence button to clear the alarm. The default is unlatched so the alarm indication will self-clear once oxygen levels return within limits.

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Specifications

Model Number		**ODEM-2095**
Description		Oxygen monitoring for deficiency (<19.5%) and enrichment (>23.5%) levels. If either level is exceeded, a local visual/audible alarm is triggered.
Performance	**Response Time**	Within 1 second of any change in oxygen levels
	Accuracy	± 0.5% of FS
	Repeatability	± 1% of reading
	Operating Temp	-22° to 122°F (-30° to +50°C)
	Humidity	0 – 98% RH, non-condensing
Oxygen Monitoring	**Range**	0 – 95% oxygen concentration
	Sensor Gas Interface	1/2" NPT male threaded connection
	Sensor Electrical Interface	M8 4-pole connector with keyway (5m connectorized cable included with remote sensing configuration)
Alarm	**Local Alarm**	Red light on front panel and 95dB audible buzzer when oxygen levels are outside safe limits
	Two Relay Outputs	2-wire dry contact, normally open relays commanded closed during normal operation (opens on alarm below 19.5% or above 23.5% O2 or loss of power). Can be connected to Facility Alarm Panel or Building Automation System.
Electrical	**Voltage Source**	110-120 VAC, 60 Hz (internal power supply includes short circuit/overload/over-voltage protection)
	Power (max)	5 Watts including oxygen transducer
Physical (Control Unit)	**Dimensions**	5" (W) x 7" (H) x 3" (D)
	Weight	6.5 pounds (2.9 kg) including transducer and wiring
	Enclosure Type	NEMA 4X rated, polycarbonate, indoor/outdoor use

Protections: Short circuit / Overload / Over-voltage

Optional Accessories



Additional Display



Remote Sensor



Power Cord

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