## ESRAD-002



# REMOTE OXYGEN DEFICIENCY SAFETY ALARM FOR LOW TEMPERATURES

#### Our #1 Oxygen Safety Device

The ESRAD-002 Oxygen Deficiency Safety Monitor is designed to detect extremely low concentrations of oxygen in enclosed spaces and to warn occupants of low oxygen levels. This device can also monitor either O2 depletion or O2 enrichment, as hazardous concentrations of oxygen (O2) in confined spaces are dangerous, and may lead to health problems ranging from headaches and fatigue to asphyxiation and even fatality.

This monitor has both audible and visual alarms, which will alert individuals should hazardous concentrations be present. Detection of low levels of O2 will also activate relays that can be used for a fan or air-handling system to ventilate the confined space and improve O2 concentration in the area.

#### **Features**

- Large digital LCD display
- Separate SEU (Main Sensor) and RDU (Remote Display)
- 3 Relay outputs to control ventilation devices
- 4-20mA Outputs O2: 0~25%, Temp: -50°C
- · Audible and visual indications at 3 alarm levels
- Ability to add strobes for additional indication
- Automatic barometric pressure compensation

#### Accessories

• CM-1027 | Dual Strobe Add-On Kit

#### Compliance

- IFC 2021 Edition
- NFPA 55
- NBIC
- OSHA/NIOSH

## Applications



Cryogenics



Commercial Freezers



**Laboratories** 



Food Production



Process Cooling



Exclusively Distributed & Supported By:
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### **TECHNICAL DATA**

#### Remote Oxygen Depletion Safety Alarm For Low Temperatures

**Range** 0 - 25% display

**Display Resolution** 0.1%

**Accuracy** Better than 2%FS

**Response Time** O2: <2min by 90%

**O2 Depletion AL1**15.5%, 16%, 16.5%, 17%, 17.5%, 18.0%, 18.5%, 19.0%, 19.5%, 20%.

The default AL1 is 19.5%

**O2 Depletion AL2**12.5%, 13.0%, 13.5%, 14.0%, 14.5%, 15%, 15.5%, 16.0%, 16.5%.

The default AL2 is 16.5%

O2 Depletion AL3 The AL3 Depletion of O2 is 12%

**O2 Enrichment AL1** 22.0%, 22.5%, 23.0%, 23.5%. The default AL1 is 22.0%

**O2 Enrichment AL2** 24.0%, 24.5%, 25.0%. The default AL2 is 24.0%

O2 Enrichment AL3 The AL3 Enrichment O2 is 25%

**Operating Temperature** -58°F to 122°F (-50°C to 50°C)

#### **Electrical and Mechanical Specifications**

**Power Supply** Output: 12VDC, 2000mA.

**Power Input** 100~240 VAC,50/60Hz, 0.6A

**Power Consumption** 6VDC (5.4V~7.0V), recommended capacity is 12AH

Relays

Peak current for each relay < 2A @ 30VDC or 250VAC

& Relay configuration: SPDT

**4-20mA Outputs** CL01:420mA O2: 0~25% | CL02:420mA Temp: 32 to 122° F (0-50°C)

**Mounting Height** 60-72 inches from floor height





