



INDUSTRIAL CO₂ DETECTOR

Your Trusted CO₂ Safety Solution for Harsh Environments

With the **ESCM-900** customers can gain peace of mind and protection when working near hazardous gases like carbon dioxide in industrial applications. This device features a durable industrial enclosure designed specifically for harsh environments and washdown applications.

Features

- (3) Configurable safety alarms (Audible and Visible)
- NDIR sensor with extended lifespan
- Rugged powder coated aluminum enclosure
- Quick-release connectors are designed to last in harsh environments
- Push button configuration
(NO CONTROL PANEL NEEDED)
- 4-20mA output for communication with Building Maintenance Systems
- (3) Dry contact relays triggered by each alarm level
(NO or NC)
- Back-up battery connection available
- Easy calibration function
- Barometric pressure compensation
- Temperature compensation
- Alarm latching function
- Internal heating element for improved air flow
- Hydrophobic filters to prevent water intrusion

Applications



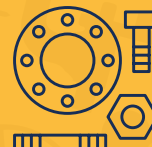
Welding



Food Processing



Food Freezing



Industrial



Breweries
& Wineries

TECHNICAL DATA

Industrial CO₂ Detector Specifications

Measurement Range	0 - 50,000ppm (5%) display
Display Resolution	10ppm at 0~10,000ppm; 100ppm at 10,001~50,000ppm
Accuracy	+/-200ppm or +/-10% reading
Pressure Dependence	Auto pressure compensation, built in barometer. (50 to 110 kPa)
Response Time	<2min by 90%
AL1	5,000ppm Default (5,000ppm or 5,000 TWA)
AL2	1.5% Default (5,000, 1.0%, 1.5%, 2.0%, 2.5%, 3.0%)
AL3	3.0% Default (2.0%, 2.5%, 3.0%, 3.5%, 4.0%)
Sound Alarm	80db@10cm
Warm-Up Time	<60 seconds at 22°C

Monitor Specifications

Power Input	9~32VDC (12~24VDC recommended), 2A.
Backup Battery	6VDC (5.4V~7.0V), recommended capacity is 12AH
Relay 1	Dry contact relay controlled by AL1 (2Amp) (NO or NC)
Relay 2	Dry contact relay controlled by AL2 (2Amp) (NO or NC)
Relay 3	Dry contact relay (Triggered by power loss to monitor)
4-20mA CO₂	Range 0-50,000ppm
4-20mA Temperature	Range 32 to 122° F (0-50°C)
Dimensions	8.25-inch x 7.8-inch x 3-inch
Weight	1.5lbs (Monitor only)
Ingress Protection	IP64

Temperature Specifications

Temperature Range	32°F to 122°F (0°C to 50°C)
Display Resolution	0.1°F (0.1°C)
Accuracy	±1.5°C(±2.7°F) when CO ₂ level is below first alarm level
Response Time	20-30 minutes (case must equalize with environment)

Operating Conditions

Temperature	32°F to 122°F (0°C to 50°C)
Humidity Range	0 ~ 95% RH non-condensing