

CO₂ Sentry

Gas Detectors

MISCELLANEOUS EQUIPMENT

Description: The CO₂ Sentry is designed to detect the presence of carbon dioxide in ambient air and warn individuals in confined spaces of an unsafe condition. Carbon Dioxide (CO₂) is a colorless, odorless gas which normally exists in air. High concentrations of CO₂ in confined spaces are dangerous, and may lead to health problems ranging from headaches and fatigue to asphyxiation and death. An audible alarm and visual indication activate when CO₂ concentration reaches a pre-set notification level. Detection of high levels of CO₂ will also activate a relay that could be used for a fan to ventilate the confined space and reduce CO₂ concentrations in the area. The CO₂ monitor can be used in cellars, breweries, beverage dispensing areas, incubator applications and CO₂ storage rooms.



Y78-CO2MNTR pictured

Design Features

- **Non-Dispersive Infra-Red technology**
used to measure CO₂ concentration up to 50,000 ppm
- **Easy-to-read digital display**
clearly indicates ambient CO₂ concentrations
- **Dual mode integrated Alarms**
provide both audible and visual indication
- **Relay output**
can automatically control a fan to ventilate a confined space
- **Weatherproof design**
provides protection from dust and water entry
- **Minimum sensor life of 5 years**

Temperature Specifications

Temperature Range	Display 32°F to 122 °F (0 °C to 50 °C)
Display Resolution	0.1°F (0.1 °C)
Display Options	°F / °C
Accuracy	± 2 °F (±1 °C)
Response Time	20-30 minutes (case must equalize with environment)

Operating Specifications

Operating Temperature	32°F to 122 °F (0 °C to 50 °C)
Humidity Range	0 ~ 95% RH non-condensing
Altitude Range	0 ~ 600 m (0 ~ 1969ft) without compensation

CO₂ Specifications

Measurement Range	0 – 50,000 ppm (5%) display
Display Resolution	10 ppm
Accuracy	± 100 ppm or ± 5% of reading
Repeatability	± 20 ppm @ 400 ppm
Annual Drift	<20 ppm/Year
Temperature Dependence	±0.2% of reading per OC or ± 2 ppm per °C, whichever is greater, referenced to 25 °C
Pressure Dependence	0.13% of reading per mm Hg (corrected via user input for altitude)
Response Time	<60 seconds for 90% response to step change
Warm-Up Time	<60 seconds at 22 °C

Equipment

Single-Stage Ordering Information

Product Number	Description	Dimensions	Power Supply
Y78-CO2MNTR	Sentry CO ₂ Ambient Gas Detector with Remote Display Unit	Sensor Unit: 4.75"H x 7.0"W x 1.75"D Sensor Unit: 4.75"H x 3.2"W x 1.0"D	AC adapter 110/220 VAC