CALIBRATION TECHNOLOGIES INC.

Specialists in Gas Detection

Authorized Distributor:
GasDetectorsUSA.com
Houston, TX USA
832−615−3588
sales@GasDetectorsUSA.com

GASGUARD CO2   CARBON DIOXIDE SENSOR

Key Features

- CO2 specific infrared sensor technology.

- No more special-order guesswork or added costs for heated or stainless enclosures

- Industry standard linear 4/20 mA output

- Corrosion, weather and chemical resistant polycarbonate sensor enclosure

- Sensor designed to adapt to any harsh environment from -60°F to +120°F

- Accurately monitor OSHA's PEL and STEL setpoints for personnel protection

- Real-time continuous monitoring

- 0-3% range (0/30,000 ppm) allows setpoints at both critical levels (0.5% & 3.0%)

Industrial strength CO2 monitoring…for any harsh environment

The GasGuard CO2 utilizes proven infrared sensor technology for fast and accurate leak detection. With no moving parts and no cells to replace, the GasGuard CO2 provides real-time continuous monitoring and inexpensive long-term operating costs.

The GasGuard CO2 is carbon dioxide specific, so false alarms from floor cleaners and food off-gasing is non-existent. The output signal is also not affected by moisture or drastic temperature variations such as washdowns, defrost cycles, etc.

The GasGuard CO2 provides an industry standard linear 4/20 mA output signal compatible with most gas detection systems and PLCs. The high-quality injection-molded polycarbonate enclosure offers excellent chemical corrosion protection and high impact resistance.

.

Applications

- Wineries
- Food Processing areas
- Indoor Air Quality
- Bottling Plants

- Breweries
- Refrigeration Systems
- Perimeter Monitoring
- Chemical Plants

Benefits

- Versatile for any application
- Low cost
- Simple operation
- Rugged and reliable

GASGUARD CO2

The standard **GasGuard CO2** sensor comes equipped with a corrosion proof enclosure and adaptive temperature control, and is designed to work anywhere. With only one sensor for any application, designing, ordering and maintaining your CO2 monitoring system is less hassle. The 0/3% range (0/30,000 ppm) is broad enough to handle OSHA's recommended alarm levels (0.5% and 3.0%), providing plenty of upper range detection for high output systems.

Designed "Food Industry" tough

The **GasGuard CO2** is prepared to survive in just about any harsh industrial condition. Every sensor circuit board is sealed forever in potting compound, protecting electronic components and copper tracing from corrosion. A specially vented chemical-resistant polycarbonate enclosure protects the sensor from accidental damage, weather and even direct hose-hits from clean-up crews.

Ordering Information

The **GasGuard CO2** is delivered calibrated and ready to install. Use the model numbers below to order.
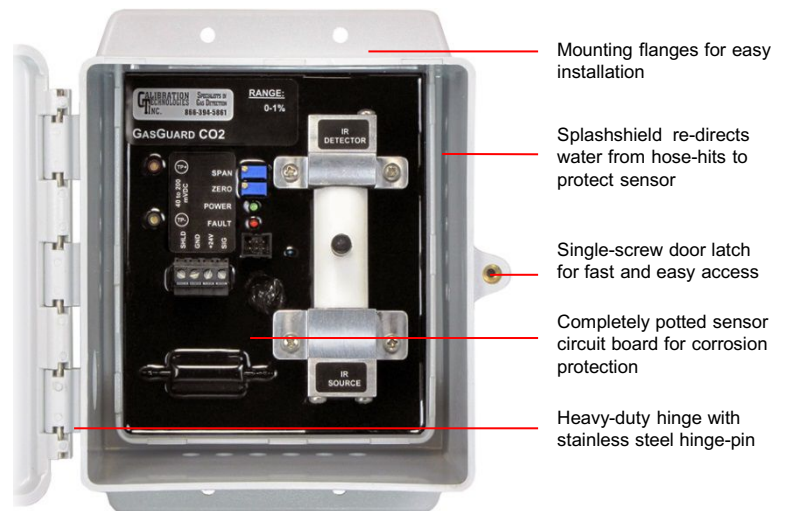
Polycarbonate
GG-CO2-1%
GG-CO2-3% (*standard*)
GG-CO2-5%

Stainless steel
GG-CO2-3%-ST

NEW

Stainless steel enclosure option

Mounting flanges for easy installation

Splashshield re-directs water from hose-hits to protect sensor

Single-screw door latch for fast and easy access

Completely potted sensor circuit board for corrosion protection

Heavy-duty hinge with stainless steel hinge-pin

SPECIFICATIONS

DUE TO ONGOING RESEARCH AND PRODUCT IMPROVEMENT, SPECIFICATIONS ARE SUBJECT TO CHANGE

DETECTION PRINCIPLE:
(NDIR) Non-Dispersive Infrared

DETECTION METHOD: Diffusion

GAS: Carbon Dioxide (CO2)

RANGE:
0/1%
0/3% (standard)
0/5%

OUTPUT SIGNAL:
Linear 4/20 mA (max input impedance: 700 Ohms)

POWER SUPPLY:
+24 VDC, 350 mA

ACCURACY:
+/- 5% of value, but dependant on calibration gas accuracy

RESPONSE TIME:
T_{50} = less than 30 seconds
T_{90} = less than 60 seconds

ZERO DRIFT:
Less than 1% of full-scale per month, non-cumulative

SPAN DRIFT:
Less than 1% of full-scale per month, non-cumulative

LINEARITY:
+/- 3% of full-scale

REPEATABILITY:
+/- 3% of full-scale

WIRING CONNECTIONS:
3 conductor, shielded, stranded, 20 AWG cable (Belden 8772 or equivalent) up to 1500 ft.

ENCLOSURE:
Injection-molded NEMA 4X polycarbonate Hinged lid. For non-classified areas.

TEMPERATURE RANGE:
-60°F to +120°F (-51°C to +49°C)

HUMIDITY RANGE:
5% to 100% condensing

DIMENSIONS:
7.5" high x 6.5" wide x 3.75" deep

WEIGHT: 3 lbs