GG-CO$_2$

CARBON DIOXIDE SENSOR

Key Features

- CO2 specific infrared sensor technology
- Industry standard linear 4-20 mA output
- Corrosion, weather, and chemical resistant sensor enclosures
- 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 (30,000 ppm) allows setpoints at both critical levels (0.5% & 3.0%)
- 2-year warranty

Industrial strength CO2 monitoring for any harsh environment

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

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

The GG-CO2 provides an industry standard linear 4-20 mA output signal compatible with most gas detection systems and PLCs. The high-quality polycarbonate or optional stainless steel enclosures offer 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
- Livestock/Poultry stunning

Benefits

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

CALIBRATION TECHNOLOGIES INC.
GAS DETECTION SPECIALISTS

SGS
C   US

920 N Tradewinds Pkwy, Columbia, MO 65201   866-394-5861   www.ctigas.com   sales@ctigas.com

The standard **GG-CO2** sensor comes equipped with a corrosion proof enclosure and adaptive temperature control designed to work anywhere. With only one sensor for any application; designing, ordering, and maintaining your CO2 monitoring system is easy. 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 **GG-CO2** is prepared to survive in just about any harsh industrial condition. Every circuit board is sealed forever in potting compound, which protects electronic components and copper tracing from corrosion. A specially vented chemical-resistant polycarbonate enclosure protects the sensor from accidental damage, weather, and direct hose-hits from clean-up crews. An 18 ga stainless steel sensor enclosure is also available for applications that require it.
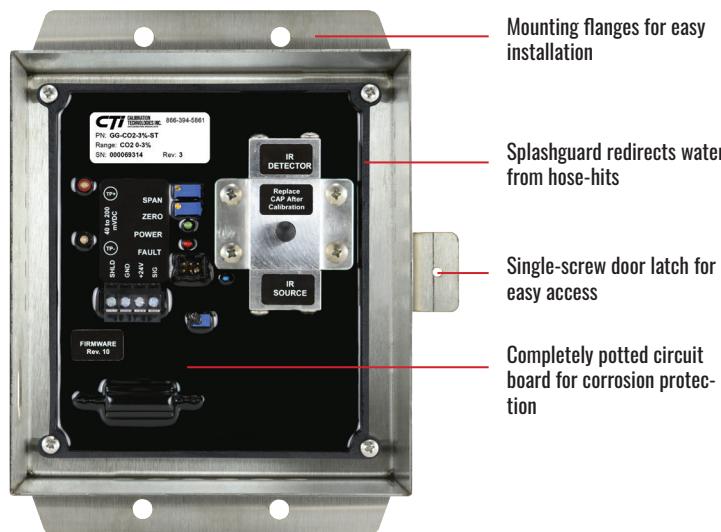
Ordering Information

The **GG-CO2** is delivered calibrated and ready to install. Use the model numbers below to order.

Order #:
GG-CO2-1%
GG-CO2-3% (standard)
GG-CO2-5%
GG-CO2-20%
GG-CO2-100%
GG-CO2-xxx-ST (stainless enclosure)
GG-CO2-xxx-DM (duct mount)

Standard polycarbonate enclosure

Mounting flanges for easy installation

Splashguard redirects water from hose-hits

Single-screw door latch for easy access

Completely potted circuit board for corrosion protection

SPECIFICATIONS

Due to ongoing research and product improvement, specifications are subject to change

Input Power:
+24 VDC, 350 mA

Detection Principle:
(NDIR) Non-Dispersive Infrared

Detection Method:
Diffusion

Gas:
Carbon Dioxide (CO2)

Range:
0/1%
0/3% (standard)
0/5%
0/20%
0/100%

Output Signal:
Linear 4-20 mA (max input impedance: 700 Ohms)

Linearity:
+/- 0.5% of full-scale

Repeatability:
+/- 1% of full-scale

Response Time:
T50 = less than 30 seconds
T90 = less than 60 seconds

Accuracy:
+/- 2% of value, but dependent on calibration gas accuracy

Zero Drift:
Less than 0.5% of full-scale per month, non-cumulative

Span Drift:
Less than 1% of full-scale per month, non-cumulative

Temperature Range:
-60°F to +120°F (-51°C to +49°C)

Humidity Range:
5% to 100% condensing

Wiring Connections:
3 conductor, shielded, stranded, 20 AWG cable (General Cable C2525A or equivalent) up to 1500 ft

Terminal Block Plugs: (Field Wiring)
12-26 AWG, torque 4 lbs-in

Enclosure:
NEMA 3RX injection-molded, washdown-duty polycarbonate sensor housing with hinged lid and captive screw. For non-classified areas. Optional 316 18 GA, NEMA 3RX washdown-duty stainless steel housing with hinged lid and captive screw. For non-classified areas

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

Weight:
2.35 lbs

Certification:
SGS listed to UL 61010-1, and CSA C22.2 No. 61010-1-12

Warranty:
2-years