

GASGUARD H₂S

HYDROGEN SULFIDE SENSOR



Key Features

- H₂S specific electrochemical sensor technology. Absolutely no false alarms
- Industry standard linear 4/20 mA output
- Corrosion, weather, and chemical resistant polycarbonate sensor enclosure
- Intelligent-design enclosure temperature control for improved cell life
- Temperature compensated
- Sensor designed to adapt to any harsh environment from -40°F to +120°F
- Accurately monitor OSHA's PEL and STEL setpoints for personnel protection
- Real-time continuous monitoring for early warning
- Detection range of 0-50ppm H₂S

Long cell life. Simple operation.

Rugged enough to survive the harshest industrial environments.

The GasGuard H₂S utilizes proven electrochemical sensor technology for fast and accurate leak detection. The standard detection range of the GasGuard H₂S provides real-time continuous monitoring of carbon monoxide concentrations accurately down to 10 ppm, with no false alarms.

Every GasGuard H₂S sensor comes equipped with an intelligent internal temperature control designed to perform in the harshest of areas. The controlled environment provides optimum moisture control for extended cell life. The high-quality injection-molded polycarbonate enclosure offers excellent chemical corrosion protection and high impact resistance.

The GasGuard H₂S provides an industry standard linear 4/20 mA output signal compatible with most gas detection systems and PLCs. The output signal is not affected by drastic temperature and humidity variations during washdown. Expect an average of 4-years of cell life for most applications.

Applications

- Sewer Gas Monitoring
- Paper Mills
- Petroleum Refineries
- Tanneries

Benefits

- Low cost
- Simple operation
- Rugged and reliable

**CALIBRATION
TECHNOLOGIES
INC.**



Easy ordering

The standard **GasGuard H₂S** sensor is designed to work anywhere, and at a lower price than most competing models. With only one sensor for any application; designing, ordering, and maintaining your hydrogen sulfide monitoring system is simple.

Developed for corrosive environments, the **GasGuard H₂S** is prepared to survive in almost any harsh industrial condition. Every 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 direct hose-hits from clean-up crews.

Ordering Information

The **GasGuard H₂S** is delivered calibrated and ready to install. Use the model numbers below to order.

Order #: [GG-H2S-50](#) (standard)
[GG-H2S-50-ST](#) (stainless enclosure)
[GG-H2S-RC](#) (replacement cell)



Stainless steel enclosure option



Circuit board and components potted to completely prevent corrosion

Intelligent heater for temperature and moisture control

Internal splash guard re-directs water from high-pressure hose-hits

Washdown-duty polycarbonate or stainless steel enclosure options

SPECIFICATIONS

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

Input Power:
+24 VDC, 350 mA

Detection Principle:
Electrochemical

Detection Method:
Diffusion

Gases:
Hydrogen Sulfide (H₂S)

Ranges:
0/50ppm

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 10 seconds
T90 = less than 30 seconds

Accuracy:
+/- 5% of value, but dependant on calibration gas accuracy and time since last calibration

Zero Drift:
Less than 0.1% of full-scale per month, non-cumulative

Span Drift:
Application dependant, but generally less than 2% per month

Temperature Range:
-40°F to +120°F (-40°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:
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:
3 lbs

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

Warranty:
2 years (including replacement cell)

