

GASGUARD NH₃ AMMONIA SENSOR



Key Features

- Electronics completely potted to eliminate corrosion in harsh, wet environments
- Ammonia specific electrochemical sensor technology. Absolutely no false alarms
- 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
- Intelligent-design enclosure temperature control for improved cell life
- Sensor designed to adapt to any harsh environment from -50°F to +140°F
- Accurately monitor OSHA's PEL, STEL and IDLH setpoints for personnel protection
- Real-time continuous monitoring for early leak detection.
- Just select the range: 0-100 ppm (standard), 0-250 ppm, 0-500 ppm or 0-1000 ppm
- Any sensor can be field calibrated to any range listed

Finally, one sensor designed to perform in all environments.
The intelligently adaptive GasGuard NH₃ goes anywhere.

The GasGuard NH₃ utilizes proven electrochemical sensor technology for fast and accurate leak detection. The standard detection range of the GasGuard NH₃ provides real-time continuous monitoring of ammonia concentrations accurately down to 5 ppm, with no false alarms.

Every GasGuard NH₃ 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 NH₃ 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 variations such as washdowns, defrost cycles, etc.

Applications

- Food Processing areas
- Cold Storage
- Compressor Rooms
- Tank Rooms
- Ventilation Ducts
- Sea Vessels
- Refrigeration Systems
- Perimeter Monitoring
- Pulp and Paper
- Heat Treatment
- Breweries
- Refineries
- Chemical Plants

Benefits

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

GASGUARD NH₃

One sensor for any environment = low cost & easy ordering

The standard **GasGuard NH₃** sensor is designed to work anywhere, and at a lower base-model price than most of our competition. With only one electrochemical sensor for any application, designing, ordering and maintaining your ammonia detection system is less hassle. We typically recommend a 0/100 ppm range for all personnel and product protection areas. Higher ranges (0/250, 0/500, 0/1000) are an option to suit your higher alarm setpoint areas such as Engine Rooms.

Designed "Food Industry" tough

From -50°F blast cells, to +140°F engine rooms, to chemical washdowns of processing areas, the **GasGuard NH₃** is prepared to survive in just about 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 even direct hose-hits from clean-up crews. Stainless steel enclosures are available for applications which require them.

Ordering Information

The **GasGuard NH₃** is delivered calibrated and ready to install. Use the model numbers below to specify your factory calibrated range. Keep in mind, every sensor can be field calibrated to any range listed below.

GG-NH3-100 (standard)

GG-NH3-250

GG-NH3-500

GG-NH3-1000

GG-NH3-RC (replacement cell)

GG-NH3-xxx-ST (stainless steel enclosure – add ST to end of order #)

NEW
Stainless Steel
enclosure option



SPECIFICATIONS

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

DETECTION PRINCIPLE:

Electrochemical

DETECTION METHOD:

Diffusion

GASES:

Ammonia (NH₃)

Other gases available. Call for more information

RANGES:

0/100 ppm (standard)

0/250 ppm

0/500 ppm

0/1000 ppm

Custom ranges available. Call for more information

OUTPUT SIGNAL:

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

POWER SUPPLY:

+24 VDC, 350 mA

RESPONSE TIME:

T₅₀ = less than 20 seconds

T₉₀ = less than 60 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 3% per month

LINEARITY:

+/- 1% of full-scale

REPEATABILITY:

+/- 1% of full-scale

WIRING CONNECTIONS:

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

ENCLOSURE:

Injection-molded NEMA 4X polycarbonate with hinged lid and captive screw. For non-classified areas.

TEMPERATURE RANGE:

-50°F to +140°F (-46°C to +60°C)

HUMIDITY RANGE:

5% to 100% condensing

DIMENSIONS:

7.5" high x 6.5" wide x 3.75" deep

WEIGHT:

3 lbs