

GASGUARD R REFRIGERANT SENSOR



Key Features

- R22, R134a, R404a, R507a and other refrigerant gases detected
- Gas-specific infrared sensor technology – no false alarms
- Industry standard linear 4/20 mA output
- Corrosion, weather and chemical resistant sensor enclosure
- Sensor designed to adapt to any harsh environment from -50°F to +120°F
- Real-time continuous monitoring
- 0-500 ppm and 0-3,000 ppm ranges available
- Self-diagnostics of sensor elements for fail-safe operation
- Meets California Air Resources Board specifications with 0-500 ppm range

Industrial strength refrigerant leak detector for any harsh environment

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

The **GasGuard R** is refrigerant gas specific, so false alarms from floor cleaners and food off-gasing is non-existent. The output signal is also not affected by EMI/RFI, moisture or drastic temperature variations such as washdowns, defrost cycles, etc.

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

Applications

- Refrigeration Systems
- Food Processing areas
- Perimeter Monitoring
- Bottling Plants
- Breweries
- Ice Rinks
- Supermarkets
- Rack Houses
- Compressor Rooms
- Pharmaceuticals
- Sea Vessels

Benefits

- Extremely long life
- Low cost of ownership
- Simple operation
- Rugged and reliable
- Versatile for any application

GASGUARD R

The standard **GasGuard R** 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 refrigerant monitoring system is less hassle. The 0/500 ppm model provides the highest accuracy and lowest leak detection ability, starting at 10 ppm, to meet the California Air Resources Board specifications.

The **GasGuard R** is available for two different target gas classes. The R8 model operates at approximately 8 microns wavelength and detects R134a, R404a, R410a, R507a and other HFC gases. The R9 model operates at approximately 9 microns wavelength and detects R22, R11 and other CFC/HCFC gases.

The **GasGuard R** is prepared to survive in just about any harsh industrial condition. The adaptive temperature control system allows it to automatically adjust to extreme temperature fluctuations. 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.

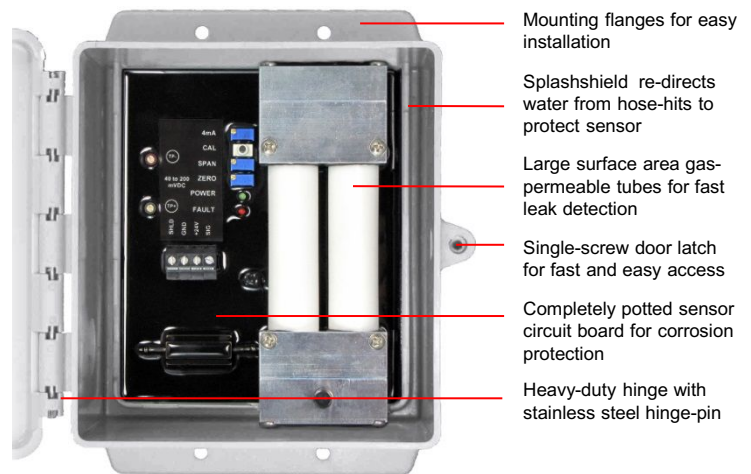
Ordering Information

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

*0/500 ppm	0/3,000 ppm
GG-R134a-500	GG-R134a-3000
GG-R404a-500	GG-R404a-3000
GG-R410a-500	GG-R410a-3000
GG-R507a-500	GG-R507a-3000
GG-R22-500	GG-R22-3000

*Meets California Air Resources Board specifications

Other gases available. Contact us if your target gas is not listed



SPECIFICATIONS

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

DETECTION PRINCIPLE:

(NDIR) Non-Dispersive Infrared

DETECTION METHOD:

Diffusion

GAS:

R8 model: R134a, R404a, R410a, R507a

R9 model: R11, R22

Contact us for more HFC / CFC / HCFC gases

RANGE:

0/500 ppm

0/3,000 ppm

Contact us for custom ranges

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

RESOLUTION:

1% of full-scale

RESPONSE TIME:

T₅₀ = less than 30 seconds

T₉₀ = 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:

+/- 1% of full-scale

WIRING CONNECTION:

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

ENCLOSURE:

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

TEMPERATURE RANGE:

-50°F to +120°F (-45°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