GG-R

**Key Features**
- R22, R134a, R404a, R507a, R422d and other refrigerant gases detected
- Gas-specific infrared sensor technology
- 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, 0-1,000 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

**Applications**
- Refrigeration Systems
- Food Processing areas
- Perimeter Monitoring
- Pharmaceuticals
- Sea Vessels

**Benefits**
- Extremely long life
- Low cost of ownership
- Simple operation
- Rugged and reliable

**HFC’s, CFC’s and HCFC’s.**
Industrial strength refrigerant leak detection.

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

The GG-R is refrigerant gas specific, so false alarms from floor cleaners and food off-gassing is nonexistent. The output signal is not affected by EMI/RFI, or moisture. R11, R22, R134, R507, R401, R402, R404, R407, R410, R448, R422D are a few common refrigerants the GG-R sensor can detect.

The GG-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.

**Intelligent heater for temperature and moisture control of optics**
**Internal splash guard re-directs water from high-pressure hose-hits**
**Single-screw door latch for easy access**
**Large surface area gas-permeable tubes for fast leak detection**
**Potted sensor circuit board for complete corrosion protection**
The standard GG-R sensor comes equipped with a corrosion proof enclosure. With only one sensor for any application; designing, ordering, and maintaining your refrigerant monitoring system is simple. 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 GG-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 adaptive temperature control system allows the GG-R to automatically adjust to temperature fluctuations. Each 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 GG-R is delivered calibrated and ready to install. Use the model numbers below to order.

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

**Input Power:**
+24 VDC, 350mA

**Detection Principle:**
NDIR (Non-Dispersive Infrared)

**Detection Method:**
Diffusion

**Gases:**
- **R8 model:** R123, R125, R134a, R404a, R410a, R422d, R434a, R507a
- **R9 model:** R11, R22, R401a, R402a

**Ranges:**
- 0-500 ppm (standard)
- 0-1,000 ppm
- 0-3,000 ppm

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

**Accuracy:**
+/- 2% of full-scale

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

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

**Temperature Range:**
-50°F to +120°F (-45°C to +49°C)

**Humidity Range:**
5% to 100% condensing

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

**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.

**Terminal Block Plugs:** (Field Wiring)
26-12 AWG, torque 4.5 lbs-in

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

**Weight:**
3 lbs

**Warranty:**
2-years

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**SPECIFICATIONS**

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