

# AirScan™ IRF9

## Infrared Refrigerant and CO2 detector



The industrial refrigeration industry is changing rapidly. The manufacture of R-22 and other HCFCs are being phased out, and manufacturers of cooling systems are introducing new equipment that runs on 407a, 422d, 410a, NH3 and CO2. In step with these changes, EPA fines have escalated for anyone venting ozone-depleting gases. What's your best move? With Gastech, you can green the environment—and green your bottom line.

Gastech Infrared monitoring solutions are designed to help your plant operate more efficiently and cost effectively. Unlike sample draw systems which take longer to pinpoint a gas leak, our diffusion sensing technology cuts downtime and the cost of expensive refrigerant replacement. Other technological advantages include flexible standalone or networkable configurations, long operating life expectancy (10+ years); fewer calibration requirements; self-monitoring SensorCheck technology; guaranteed EPA compliance; and accurate, reliable response to all refrigerant gases used in industrial or commercial processes.

### APPLICATIONS

Banana and Produce Rooms  
Beverage Plants  
Chemical Plants  
Confined Space Entry  
Food Processing  
Gas Bottling Plants  
Ice Rinks  
Product Coolers  
Rack Houses  
Refrigeration Systems  
Supermarkets  
Wineries

### REFRIGERANT SPECIFIC

- Rapid response to refrigerants including R-404a, R-22, R-507, R-134a, R-407a, R-410a, R-422d, NH3 and CO2
- Internal monitoring of 4/20 mA loop circuitry continuously

### DIFFUSION-DESIGN SENSOR

- Has no moving parts and doesn't require pumps or filters
- All points of detection can be monitored continuously at an affordable cost

### VERSATILITY

- Can be used with any Honeywell Analytics readout
- Standard range of 0-3,000 ppm, can be rescaled for lower trip points
- Provides a linear output of 4/20 mA as a function of refrigerant concentration
- Simple, real-time calibration eliminates maintenance downtime
- Automatically adapts to fluctuating temperatures

### LONG-LASTING PERFORMANCE

- Unique internal reference channel compensates for dust particles, source degradation, humidity and temperature fluctuation, food odours, chemical cleaners, etc.

### ATMOS™ TECHNOLOGY

- Allows for operation down to -60°F and in condensing humidity environments or during washdown
- Automatically adapts to its environment and provides accurate and reliable performance under the harshest conditions

### SENSORCHECK™ TECHNOLOGY

- Checks operating parameters of sensors and sends a notification output signal if an anomaly is identified
- Tests the sensor every 24 hours for electrical viability
- Indication can be detected by a Manning gas monitor or PLC

### HOUSING

- High-mass metal bench provides structural and thermal stability and greater immunity to vibration
- Superior EMI/RFI shielding

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Use	Infrared (diffusion) type sensor that works in conjunction with any Honeywell Analytics Manning readout or alarm unit. This sensor platform can detect either Ammonia, Carbon Dioxide, or a number of refrigerant gases.
Gases Monitored	R-404a, R-22, R-507, R-134a, R-407a, R-410a, R-422d, CO2
Gas Sampling	Diffusion method with no moving parts, real time continuous monitoring of all points
Output	Linear 4/20 mA output into a load resistor of 500 ohm maximum
Accuracy	+/- 3% full scale
Repeatability	+/- 1% full scale
Humidity	0-100% RH (condensing)
Operating Temperature	-40°C to +60°C / -60°F to +140°F
Storage Temperature	-28°C to +60°C / -20°F to +140°F
Cable Recommendation	Three conductor, stranded shielded cable with drain wire, all enclosed in a vinyl jacket. For cable runs up to 200 feet, use 18# AWG (Belden #8770 or equivalent).
Power Source	24 Volts DC regulated, 1.2 amp max.
Repeatability	+/- 1% full scale
Response Time	T90 = 10 seconds with full-scale calibration gas @ .75 litres/min. flow rate
Ranges	R Gases: 0-500 ppm, 0-1,000 ppm, 0-3,000 ppm CO2: 0-1%, 0-3%
Sensor Viability Test	SensorCheck, an internal microprocessor determines the sensor's electrical viability every 24 hours. If the viability test fails a 0.5 mA signal will indicate a fault. An internal light will show if a sensor is dried up or disconnected.
Enclosure	NEMA 4, gasketed, molded fiberglass reinforced polyester. Non-painted, non-rusting construction for food areas. UL 508 listed CSA certified for use with industrial control equipment.
Weight	4.4 lbs.
<b>Part Number</b>	<b>79-1000</b>

### Distributed By

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