



## Manning Airscan™ IRF9 SPECIFICATIONS

### Refrigerant, Ammonia and Carbon Dioxide Detector

General Specification	
<b>Use</b>	Infrared (diffusion) type sensor that works in conjunction with any Honeywell Analytics Manning readout or alarm unit. This detection platform can monitor for ammonia, carbon dioxide, and a number of refrigerant gases. The IRF9 satisfies AB32 California code and is CARB compliant.
Common Operation	
<b>Gases Monitored</b>	R-404a, R-22, R-507a, R-514a, R-134a, R-407a, R-410a, R-422d, HFO-1234yf, HFO-1234ze, HFO-1233zd, NH <sub>3</sub> , CO <sub>2</sub>
<b>Gas Sampling</b>	Diffusion method with no moving parts, real time continuous monitoring of all points
<b>Output</b>	Linear 4/20 mA output into a load resistor of 500 ohm maximum
<b>Accuracy</b>	+/- 3% full scale
<b>Repeatability</b>	+/- 1% full scale
Operational	
<b>Humidity</b>	0-100% RH (condensing)
<b>Operating Temperature</b>	Standard: -30°C to +60°C / -20°F to +140°F ATMOS: -40°C to +60°C / -40°F to +140°F Superheat: -50°C to +60°C / -60°F to +140°F
<b>Storage Temperature</b>	-28°C to +60°C / -20°F to +140°F
Common Module	
<b>Cable Recommendation</b>	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).
<b>Power Source</b>	24 Volts DC regulated, 1.2 amp max.
<b>Repeatability</b>	+/- 1% full scale
Sensor Specifications	
<b>Response Time</b>	T90 = 10 seconds with full-scale calibration gas @ .75 litres/min. flow rate
<b>Ranges</b>	R Gases: 0-500 ppm, 0-1,000 ppm, 0-3,000 ppm CO <sub>2</sub> : 0-1%, 0-3%; NH <sub>3</sub> : 0-2%, 0-4%
<b>Sensor Viability Test</b>	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.
<b>Enclosure</b>	16 gauge painted steel or stainless steel. NEMA 4, UL 508 listed, CSA certified for use with industrial control equipment.
<b>Weight</b>	4.4 lbs.

#### Find out more

[www.honeywellanalytics.com](http://www.honeywellanalytics.com)

Toll-free: 800.538-0363

#### Please Note:

While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract.