

GD131 SINGLE POINT INFRA-RED REFRIGERANT GAS DETECTOR

FEATURES

- Ultra reliable and stable operation.
- Very low levels of gas concentration continuously monitored
- Not affected by humidity or temperature changes
- 3 wire 4-20 mA output or Volt free alarm contact versions available
- Wide range of CFC, HCFC and HFC gases monitored
- No separate programmer required State of the art technology
- Very robust for industrial use No moving parts, heaters or mirrors that are often the cause of failures



The **GD131** is a wall mounted single point, easy to use, reliable gas detection system. Using infra-red technology the **GD131** is specifically designed to measure very low levels of refrigerant gas in air. It eliminates the inherent problems associated with other methods of refrigerant detection such as semi-conductor and electro-chemical sensors.

The sensor is immune to poisoning and is a versatile and robust instrument, incorporating proven technology.

The GD131 is used to detect the presence of Freon's, HFC's plant rooms, ducts and freezer chests or display cabinets where a leakage of refrigerant gas may occur. The GD131 includes a changeable diffusion filter, while preventing ingress of dust and other particulates allows the atmosphere to reach the optical bench of the instrument.

The instrument generates a signal proportional to the concentration of refrigerant detected. The output is either an industry standard 4-20mA for monitoring or as a preset alarm relay contact to operate local warning or control devices.

Normally configured as a diffusion for placing directly in the detection zone. The GD131 is also available with a flow through housing for use in sampling equipment.

TQ Environmental Limited, operate a policy of continual product development which means the specification is subject to change without prior notice.

For full assistance with your application contact TQ Environmental.



Cert No. LRQ 0958602

GD131-D6-0922

SPECIFICATION

Construction	The sensor is stainless steel with a low density polypropylene surround to prevent ingress of dust. The aluminum electronics enclosure and junction box have an epoxy paint finish.
Ingress Protection	Sensor Junction Box IP65
Cable gland size	20mm
Weight	1.25 Kg
Overall Dimensions	275mm H x 180mm (including gland) W x 90mm D
Range	Typically 0-2000ppm R134a. The unit may be factory calibrated to other Refrigerants and ranges.
Outputs	4-20mA source into 600 ohms (max) or Alarm contacts rated 2A at 240V AC
Power	Operating voltage 24VDC nominal Operating Current 100mA @ 24VDC
Stability	Typically +/- 50ppm year max 5% Fsd
Accuracy	+/- 2% fsd on all ranges (linearised)
Repeatability	+/- 1% fsd
Response Time	T90 < 1 min
Temperature Range	-20°C to +40°C
Humidity Range	0 to 99% R.H (non condensing)
Built-in Self-Test	Continuous
Gases	R134a, R407c, R12, R11, R22, R404a plus many other refrigerant gases
Non-Intrusive Adjustments	Calibrated for up to 3 years
Mounting	Either wall mounting with mounting lugs or "through-duct" mounting (57mm hole)
Warranty	12 Months

PARTS LIST

131-020	GD 131 Refrigerant Diffusion Sensor with 4=20 mA output
131-021	GD 131 Refrigerant Flow Through Sensor with 4=20 mA output
131-022	GD 131 Refrigerant Diffusion Sensor with Alarm Relay outputs
131-023	GD 131 Refrigerant Flow Through Sensor with Alarm Relay outputs
317-032	Replacement Diffusion Filter

TQ Environmental Limited
Silkwood Court • Wakefield • West Yorkshire • WF5 9TP
Tel: +44 (0)1924 271013 Fax: +44 (0)1924 264420
Email: sales@tqenv.com Web: www.tqenv.com

