

GD231 SINGLE POINT INFRA-RED REFRIGERANT LEAK DETECTOR

FEATURES

- Infra-red stand alone pre-calibrated REFRIGERANT gas detector
- Multi colour LED array for indication of gas concentration
- Calibrated for specific refrigerants to ensure complete accuracy
- Wide range of CFC, HCFC and HFC gases monitored. Range 0-2000 ppm with 2x factory pre-set alarm levels
- 24v DC powered. 4-20 mA output with 2 x alarm relays
- Low maintenance, ultra-stable, long life Detector with on-board auto zero facility
- Wide Temperature range



Stand alone, single point Infra-red refrigerant detector and alarm unit ideal for small installations. Using infra-red technology the **GD231** is specifically designed to measure 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 or cross sensitivity and is a versatile and robust instrument. Designed as a single point, self-contained unit but can be connected to a central control panel for group alarms.

The GD231 is used to detect the presence of Freon's, HFC's in plant rooms, freezer chests or display cabinets where a leakage of refrigerant gas may occur. The GD231 includes a diffusion filter, while preventing ingress of dust and other particulates allows the atmosphere to reach the optical bench of the instrument.

The LED multi colour array shows increasing Refrigerant levels and alarm trigger points

Integral alarm relays, with 2 distinct trigger points can be used to start extraction fans and trigger alarm beacons.

Alternatively the 4-20 mA outputs from a group of sensors could be connected to a TQ 4000 and/or TQ8000 control panel, or similar third party control system capable of providing indication of concentration levels and group alarms, if required.

The GD 231 is a low maintenance sensor but has full auto zero function so requiring no calibration in the field.

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.



Cert No. LRQ 0958602

D5-GD231-0315

SPECIFICATION

Construction	ABS wall mounted enclosure.
Indication	8 x LED multi colour array, with 2 x alarm indication LED's
Ingress Protection	IP43, increased ingress protection can be provided
Cable gland size	M12 gland entries, glands not supplied
Weight	0.5 Kg
Overall Dimensions	100mm W x 150mm H x 50mm D
Range	Typical range 0-2000ppm. The unit may be factory calibrated to other refrigerant gases
Minimum Detection Level	20ppm
Minimum Alarm Level	100ppm
Response Time	<40 seconds to T90
Recovery Time	48 Seconds
Outputs	All versions have LED visual indication of levels, 4-20mA source into 600 ohms, also 2 x relay output (C & NO contacts) Unit has a buzzer output for an external buzzer, or an internal buzzer can be fitted.
Power	Operating voltage 24vDC nominal (can be supplied from 12vDC if 4-20 mA output is not required. Operating Current 75mA @ 24VDC
Accuracy	+/- 2% fsd (4-20 mA version)
Temperature Range	-20° to +50°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. please specify on order.
Non-Intrusive Adjustments	Calibrated for up to 3 years, with manual auto zero
Life expectancy	> 5 years
Warranty	12 Months

PARTS LIST

231-022	GD 231 IR Refrigerant Sensor 0-2000 ppm. Multi colour LED array. Complete with 2 x volt free, preset alarm relays.
340-264	Wall plug type mains power supply for GD231 and GD 233 model gas detectors

TQ Environmental Limited
Flanshaw Way • Wakefield • West Yorkshire • WF2 9LP
Tel: +44 (0)1924 380700 Fax: +44 (0)1924 361700
Email: sales@tqenv.com Web: www.tqenv.com

TQ
Environmental