

GD133 SINGLE POINT INFRA-RED CARBON DIOXIDE GAS DETECTOR

FEATURES

- Pre-calibrated Safe area CO₂ gas detector
- Available in 0-1%, 0-2% Or 0-5% ranges - No separate programmer needed
- Low maintenance, ultra-stable Infra-red technology.
- 3, wire 4-20 mA output. Pre-set alarm relay version optional.
- Onboard self test, zero and span facility.
- Gas concentration continuously monitored
- No heaters/mirrors or optics to get dirty, State of the art SMT Components
- Wide range of temperature operation



Safe area version of our GD129 range of hazardous area gas sensors. The **GD133** operates on tried & tested infra-red adsorption principle. A unique sensor protection system permits operation in the harshest conditions and in dusty, humid environments. Remote sensor capability eliminates the need for using expensive open path systems in inaccessible locations, ducts and heated enclosures. The sensor is immune to poisoning and high gas concentrations. Designed with a rugged construction and with a protection rating IP55, the **GD133** is a versatile and robust instrument incorporating proven technology.

The GD133 is used to detect the presence of Carbon Dioxide gas. The 4-20 mA output of the sensor would normally be connected to a TQ control panel or similar third party control system capable of providing indication and alarm generation.

The GD133 is used for diffusion sensing applications where the sensor is positioned at the point of monitoring and the gas diffuses through the sensor's optical path. These sensors are not affected by being over range and can be used in inert atmospheres as the sensor does not rely on oxygen being present to operate correctly.

The GD 133 is a low maintenance sensor but has full auto zero and span functions allowing calibration in the field.

Options are available for duct and through bulkhead mounting providing a very versatile sensor.

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.

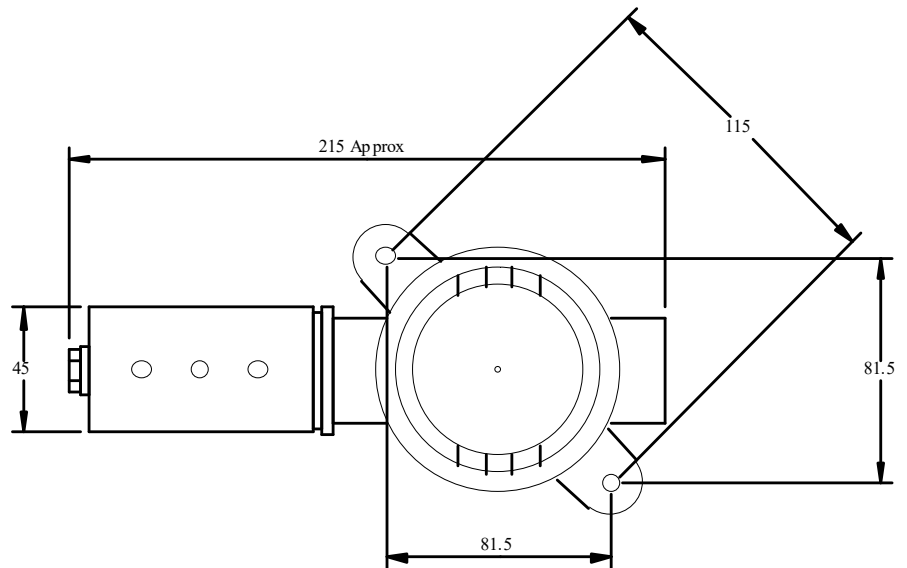


Cert No. LRQ 0958602

GD133-D6-0922

SPECIFICATION

Construction	Sensor Housing - 316 Stainless Steel with hydrophobic protection barrier Protection guard - Stainless Steel Junction box - Cu free aluminium with polyester paint finish
Ingress Protection	IP55
Conduit Entry	M20
Weight	ca 2.1Kg
Overall Dimensions	130mm W x 230mm H x 120mm D
Temperature Range	-20° to +60°C (-30 by request)
Humidity Range	0 to 99% R.H (non condensing)
Shock & Vibration	Shock: Half Sine 15g, 20ms duration on all axis Vibration: 3 - 10 Hz, Displacement 0.5mm
Resistance	10 - 50 Hz, 2m/s ²
Outputs	4-20mA source into 600 ohms (max) as standard, relay output version available
Power	Operating voltage 24VDC (11-30VDC) Operating Current 75mA @ 24VDC, 2.1 watts
Accuracy	+/- 2% fsd on all ranges (linearised)
Repeatability	+/- 1% fsd
Gas Range	10,000 to 50,000ppm (0-1%, 0-2% & 0-5%v/v CO ₂)
Response Time	<10 seconds to T50, <20seconds to T90 on CO ₂
Built-in Self Test	Continuous
Non-Intrusive Adjustments	Calibrated for up to 2 years, with full auto zero and calibration facility.
Life expectancy	>5 years
Warranty	12 Months



PARTS LIST

340-060	GD133 IR Sensor Carbon Dioxide 0-2% Vol – Uncertified, complete with crash guard and weather protector
340-063	GD133 IR Sensor Carbon Dioxide 0-2% Vol – Uncertified, complete with crash guard, weather protector & 2 x Alarm Relays
	Can also be supplied with a flow through housing. Please consult TQ Environmental for other options, ranges available

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