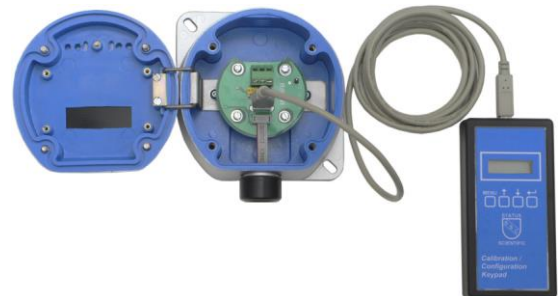


Status Scientific Controls

gas detection technology...



FGD4 Safe Area Gas Detectors - Loop Powered *, 4 to 20mA Transmitter



Optional Configuration Unit - see text



Optional Weatherguard
(may not be suitable for use with absorbent gases)

Versions available for the detection of:-

- ❖ Carbon Dioxide - using temperature-compensated infrared sensors.
- ❖ Oxygen or Toxic Gases - using electrochemical sensors.

Features

- ❖ Competitively priced
- ❖ Compact and lightweight
- ❖ Optional weather guard
- ❖ Plug-in replaceable gas sensors
- ❖ Wide power supply range of 8 to 24 volts dc
- ❖ Industry standard 4 to 20 mA output

Description

The FGD4 series gas detectors are powered from an 8 to 24 volts dc power supply using the industry standard 4 to 20mA two-wire current loop to transmit the gas level to a separate control panel such as the Status Scientific Controls LC Series. * The Carbon Dioxide version uses infrared gas detection technology and requires a third connection to power the infrared sensor.

The detector is a safe area fixed gas detector for the detection of gases such as oxygen, carbon monoxide, carbon dioxide, sulphur dioxide, hydrogen sulphide, chlorine etc.

It comprises an instrument housing with one cable gland entry. The housing contains the connection terminals, electronics and gas sensor which is screwed into the bottom of the housing. The unit may be optionally fitted with a protective weather guard (see above).

Calibration of the FGD4 can be carried out simply by using ZERO and SPAN buttons inside the instrument provided that the concentration of the calibration gas is the same as that used for factory calibration of the detector (refer to the instrument calibration certificate for details).

Alternatively, the purpose designed plug-in hand held configuration unit shown above may be used together with any appropriate test gas concentration.

Refer to our website for details of order codes and gas sensor ranges.

Specification

Materials	:	Bayblend (ABS and Polycarbonate blending)
Cable entries	:	1 x 20mm or ½” NPT or ¾” NPT
Weights	:	FGD4 (excluding weatherguard) - 500grams Weatherguard - 225 grams
Gas types	:	Oxygen or Toxic,
Input voltage	:	8 to 24 volts dc
Input power	:	5 Watts maximum
Internal fuse	:	1 Amp antisurge 'Nanofuse'
Analogue output	:	4 to 20mA (10 bit resolution)
Sensor types	:	NDIR Infrared or Electrochemical
Measurement range	:	Dependant upon sensor type
Response time	:	Toxic and Oxygen sensor response times vary according to the sensor type.
Measurement resolution	:	Toxic gases - 0.1ppm for FSD < 50ppm, 1ppm for FSD> 50ppm. Oxygen - 0.1% volume.
IP rating	:	Enclosure IP66, Sensor IP65
Operating temperature	:	- 20 to +60 °C
Humidity range	:	0 to 95% RH non-condensing
Operating pressure	:	Atmospheric + or - 10%

Warning - These gas detectors must only be used in applications where there is no risk of potentially explosive gases being present or of them being created through industrial processes or other activities within the area concerned.

Available gas types and sensor ranges.

Gas Type	Sensor Type	Ranges Available	Resolution
Ammonia	Electrochemical	0-100ppm	1ppm
		0-1000ppm	<12ppm
Carbon Dioxide	Infrared	0-500ppm	10ppm
		0-1000ppm	
		0-2000ppm	
		0-5000ppm	0.1%
		0-10000ppm	
		0-2%	
	0-5%	1%	
	0-100%		
Carbon Monoxide	Electrochemical	0-50ppm	1ppm
		0-100ppm	<12ppm
		0-1000ppm	
Chlorine	Electrochemical	0-20ppm	0.1ppm
Hydrogen Chloride	Electrochemical	0-30ppm	1ppm
Hydrogen Cyanide	Electrochemical	0-30ppm	1ppm
Hydrogen Sulphide	Electrochemical	0-50ppm	1ppm
		0-100ppm	
		0-200ppm	
Nitrogen Dioxide	Electrochemical	0-20ppm	0.1ppm
Oxygen	Electrochemical	0-21%	0.1%
Sulphur Dioxide	Electrochemical	0-20ppm	0.1ppm
VOC	Electrochemical	0-20ppm	0.1ppm

* Specifications are valid at 20°C, 50% RH and 1013 mBar.

Designed and Manufactured in the UK

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