

Status Scientific Controls

gas detection technology...



SCIENTIFIC

FGD14 Safe Area Gas Detectors - Mains or DC Powered, With Control Relays



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
- ❖ Contains 2 control relays
- ❖ Optional weather guard
- ❖ Plug-in replaceable gas sensors
- ❖ Remote visual and audible alarm unit
- ❖ Mains version - 85 to 265v ac, 47 to 440 Hz
- ❖ DC supply version - 8 to 24 volts dc
- ❖ Industry RS 232 communications output

Description

The FGD14 series detector is a safe area fixed gas detector for the detection of gases such as oxygen (deficiency), carbon monoxide, carbon dioxide, sulphur dioxide, hydrogen sulphide, chlorine etc.

The carbon dioxide version uses the latest type of miniature **infrared** gas sensor technology.

Versions are available for either:-

- a) Mains supply operation over the voltage range of 85 to 265 volts ac at frequencies of 47 to 440Hz.
- b) DC supply operation over the voltage range 8 to 24 volts dc.

It contains 2 control relays enabling it to be used as a stand-alone detector and controller in a range of applications as detailed in the following table:-

Application	Gas hazard
Confined Spaces	Oxygen Deficiency
Swimming pools	Chlorine
Boiler rooms, car parks	Carbon Monoxide
Breweries and Cellars	Carbon Dioxide
Food Processing & Drinks	Carbon Dioxide
Building Health Management	Carbon dioxide
Greenhouses	Carbon monoxide, carbon dioxide, oxygen
Animal Processing	Ammonia

The FGD14 comprise an instrument housing with one cable gland entry and one side entry for connection of the remote unit. 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).

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

Specification	
Materials	: Bayblend (ABS and Polycarbonate blending)
Cable entries	: 1 x M20 or ½" NPT or ¾" NPT (for mains input) 1 x M12 (for connection to Remote Unit)
Weights	: FGD14 (excluding weatherguard) - 900grams Weatherguard - 225 grams
Gas types	: Oxygen or Toxic,
Supply voltage	: Mains Version - 85 to 265 volts ac, 47 to 440Hz DC Version - 8 to 24 volts dc
Alarm set points	: 2 user adjustable set points - adjustable ranges dependant on gas type
Alarm relay outputs	: Voltage free, single pole change-over contacts. User selectable for either normally energised or normally de-energised operation
Alarm contact rating	: 1A, 30Vd.c. non-inductive load
Communications output	: RS232
Visual alarm indication	: Flashing red LED on front panel and on remote indicator unit
Audible alarm indication	: Intermittent alarm tone on front panel and on remote indicator unit
Sensor types	: NDIR Infrared or Electrochemical
Measurement range	: Dependant upon sensor type
Response time	: Sensor response times vary according to the sensor type.
IP rating	: Enclosure IP66, Sensor IP65
Operating temperature	: - 10 to +40 °C
Storage temperature	: - 20 to +50 °C
Humidity range	: 0 to 95% RH non-condensing
Operating pressure	: Atmospheric + or - 10%