

# Status Scientific Controls

## Gas Detection Technology



### FGD5/6-IR Infrared Gas Detector For Direct Replacement of Oil & Gas Industry Pellistors

- No routine maintenance required\*
- Lowest operating costs
- Lowest price IR Detector
- Smallest size IR Detector
- Eliminates all poisoning problems associated with pellistors
- Patent No. GB2401679

**SHELL THORNTON LABORATORY  
TESTED & APPROVED**



### Plug-in Infrared Sensor



### Features

- MTBF of 5 years
- Compatible with industry standard control panels
- Remote gas testing facility
- Constructed in grade 316 stainless steel and nylon
- Self heating to protect against obscuration
- Does not utilise mirrors, lenses or separate heaters
- Output signal can be set as rising or falling

\* Routine gas testing only is required because the test gas is applied externally, all physical and electrical elements of the instrument are tested to confirm continued safe operation.

# FGD5/6-IR Infrared Gas Detector

## For Direct Replacement of Oil & Gas Industry Pellistors



### Sensor and weatheguard with gas testing facility

Mounted vertically to maximise resistance to water ingress

**OVERALL LENGTH WHEN MOUNTED IN WEATHERGUARD = 170mm (6 3/4")**

#### Specification

Size	Body 94mm long x 50mm diameter, thread 20mm long. Overall body length with weatheguard fitted = 170mm
Material	<b>Sensor Body</b> - Stainless Steel Grade 316 <b>Weatheguard</b> - Stainless Steel Grade 304 & Nylon 66
Mounting thread	M20 X 1.5 or M25 X 1.5 or 1/2" NPT
Weights	1 Kg including Weatheguard
Recommended operating current	160 to 250mA (200mA version) 250 to 350 mA (300mA version)
Gas types	Hydrocarbons. <b>Note: Infrared sensors have no response to Hydrogen</b>
Operating voltages	3.2 to 7.5 volts dc at detector head
Max. short term overload voltage	24 volts dc
Output signal	15 to 30 mV / % CH4
Sensor type	NDIR Infrared
Measurement range	0-100% LEL (5% vol. CH4) or 0-100% volume CH4
Measurement resolution	1% LEL or 1% volume (CH4)
IP rating	Enclosure IP66, Sensor IP65
Operating temperature	- 20 to +50°C
Storage temperature	- 20 to +50°C
Humidity range	Infrared – 0 to 95% RH non-condensing
Operating pressure	Atmosphere + or - 10%

#### Connections

Red	V+
Black	0 volts
White	Signal, proportional to gas level
Blue	Signal direction: <b>Falling</b> , connect to Ov (Black) <b>Rising</b> , connect to V+ (Red)
Green/ Yellow	Earth



Sensing head mounted in associated weatheguard constructed in Grade 304 stainless steel and nylon

Push-in connector suitable for 6mm O/D tubing to facilitate remote gas testing

#### European Hazardous Area 'ATEX' Certification

Certificate numbers	KEMA 03ATEX2247U IECEX KEM 06.0022U
Certification code	II 2 G Ex d IIC T4(-20°C<Ta<+60 °C)
Standards	EN 60079-0:2018 EN 60079-1:2014 IEC 60079-0:2004 Edition 4.0 IEC 60079-1:2003 Edition 5.0
Zones	1 & 2