

# STATUS SCIENTIFIC CONTROLS

## FGD5/6 - IR

STATUS



SCIENTIFIC

Incorporated  
since 1988

### INTRODUCING A TOTALLY ENCLOSED INFRARED GAS DETECTOR

For direct replacement of oil & gas industry pellistors

★ **NO ROUTINE  
MAINTENANCE  
REQUIRED**

★ **LOWEST OPERATING  
COSTS**

★ 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.

SHELL THORNTON  
LABORATORY  
TESTED AND APPROVED



Plug-in  
Infrared Sensor



ACTUAL SIZE

★ **LOWEST PRICE  
IR DETECTOR**

★ **SMALLEST SIZE  
IR DETECTOR**

★ **ELIMINATES ALL  
POISONING PROBLEMS  
ASSOCIATED WITH  
PELLISTORS**

UK and International  
Patents Pending

### FEATURES

- ★ **MTBF OF 10 YEARS**
- ★ **COMPATIBLE WITH INDUSTRY STANDARD CONTROL PANELS**
- ★ **REMOTE GAS TESTING FACILITY**
- ★ **CONSTRUCTED IN GRADE 316 STAINLESS STEEL & NYLON**
- ★ **SELF HEATING - TO PROTECT AGAINST OBSCURATION**
- ★ **DOES NOT UTILISE MIRRORS LENSES OR SEPARATE HEATERS**
- ★ **OUTPUT SIGNAL CAN BE SET AS RISING OR FALLING**





## Specification

<b>Size</b>	: Body 94mm long x 50mm diameter, thread 20mm long Overall body length with weatherguard fitted = 170mm
<b>Material</b>	: Sensor Body – Stainless Steel Grade 316 Weatherguard – Stainless Steel Grade 304 & Nylon 66
<b>Mounting thread</b>	: M20 X 1.5 or M25 X 1.5 or ½" NPT
<b>Weight</b>	: 1Kg including weatherguard
<b>Gas types</b>	: Hydrocarbons <b>(Note – Infrared sensors have no response to Hydrogen)</b>
<b>Operating voltage at detector head</b>	: 3.2 to 7.5 volts dc
<b>Maximum short term overload voltage</b>	: 24 volts dc
<b>Recommended operating current</b>	: 160 to 200mA
<b>Output signal</b>	: 15 to 30 mV / % CH <sub>4</sub> ( Supplied as 20 mV / % CH <sub>4</sub> unless otherwise requested)
<b>Sensor type</b>	: NDIR Infrared
<b>Measurement range</b>	: 0 – 100% LEL (5% vol. CH <sub>4</sub> ) or 0 – 100% volume CH <sub>4</sub>
<b>Response time</b>	: Typically T <sub>90</sub> < 30 sec (CH <sub>4</sub> )
<b>Measurement resolution</b>	: 1% LEL or 1% volume (CH <sub>4</sub> )
<b>IP rating</b>	: Enclosure IP66, Sensor IP65
<b>Operating temperature</b>	: - 20 to +50 °C
<b>Humidity range</b>	: 0 to 95% RH non-condensing
<b>Operating pressure</b>	: Atmospheric + or - 10%
<b>Performance standards</b>	: EN 61779-1:2000, EN 61779-4:2000, EN 61779-5:2000

**N.B. Please discuss with your Technical Sales Advisor the target gas and measurement range.**

### European Hazardous Area 'ATEX' Certification

<b>Standards</b>	: EN50014: 1997 EN50018: 2000
<b>Certification code</b>	: II 2 G EEx d IIC T4 (-20°C<Ta<+60°C)
<b>Certificate number</b>	: KEMA 03ATEX2247U
<b>Zones</b>	: 1 & 2

#### Connections:-

- Red** V+
- Black** 0 volts
- Green** Signal, proportional to gas level
- Blue** Signal direction:
  - Falling**, connect to 0v (Black)
  - Rising**, connect to V+ (Red)
- Green / Yellow** - Earth

SENSING HEAD MOUNTED IN ASSOCIATED WEATHERGUARD - CONSTRUCTED IN GRADE 304 STAINLESS STEEL AND NYLON



### SENSOR AND WEATHERGUARD WITH GAS TESTING FACILITY

Mounted vertically to maximise resistance to water ingress

**OVERALL LENGTH WHEN MOUNTED IN WEATHERGUARD = 170mm (6 ¾")**

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

[www.status-scientific.com](http://www.status-scientific.com)

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