

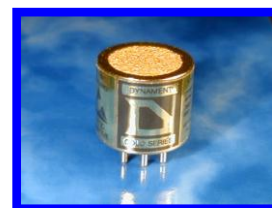
## PROGRAMMABLE

### INTRINSICALLY SAFE Infrared Flammable Gas Detector Head



#### Features

- Totally poison resistant alternative to pellistors
- Inbuilt sensor diagnostics
- 12-month calibration interval
- Minimum 5-year sensor life
- LCD readout
- 4 to 20 milliamp output
- External pushbuttons enabling non-intrusive calibration to take place in hazardous environments
- Unique green flashing 'confidence' LED
- Plug-in sensor
- Certified intrinsically safe to ATEX standards
- Water and dust proof to IP65
- Optional intrinsically safe power supply allows operation directly from 24v supply

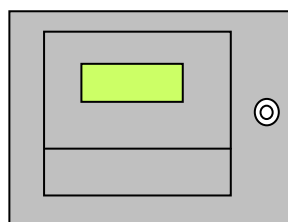


Miniature plug-in sensor with inbuilt temperature monitor

#### TYPICAL GASES DETECTED

**METHANE**  
**PROPANE**  
**BUTANE**  
**ETHANE**  
**PENTANE**  
**HEXANE**  
**OCTANE**  
**ETHANOL**  
**IPA**  
**SOLVENTS**

#### TYPICAL INSTALLATION USING STATUS SCIENTIFIC CONTROLS MCU CONTROL UNIT



MCU Control unit fitted with i.s. Output Module Type FGDI0

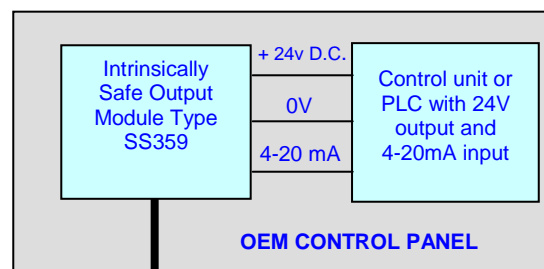
Safe area

Hazardous area



FGD3 Infrared Gas Detector

#### TYPICAL INSTALLATION USING AN OEM CONTROL PANEL



Safe area

Hazardous area



FGD3 Infrared Gas Detector

## Specification

<b>Size</b>	:122 x 142 x 75mm nominal		
<b>Weight</b>	:0.9Kg		
<b>Gas Types</b>	:Hydrocarbons including Methane (Note: Infrared sensors have no response to Hydrogen)		
<b>Operating Voltage</b>	:8 to 28V dc (for 4 to 20 mA signal) 5.8 to 7.5V dc (for sensor supply)		
<b>Cable</b>	:3 core (plus screen)		
<b>Output Signal</b>	:0mA - open circuit	2mA – fault	4mA - zero gas
	20mA - full scale gas	22mA - over-range	
<b>Max. Cable Loop Resistance</b>	:Signal - 640 ohms at 24vdc Sensor - 15 ohms at 7.5vdc		
<b>Sensor Type</b>	: NDIR Infrared		
<b>Measurement range</b>	:0-100% LEL (5% vol CH <sub>4</sub> ) or 0-100% vol. CH <sub>4</sub>		
<b>Response Time</b>	:T <sub>90</sub> < 30 sec (Methane)		
<b>Measurement Resolution</b>	:1% LEL or 1% vol		
<b>Operating Temperature</b>	: - 20 to +50 deg.C		
<b>Humidity Range</b>	:0 to 95% RH non-condensing		
<b>Operating Pressure</b>	:Ambient + or - 10%		

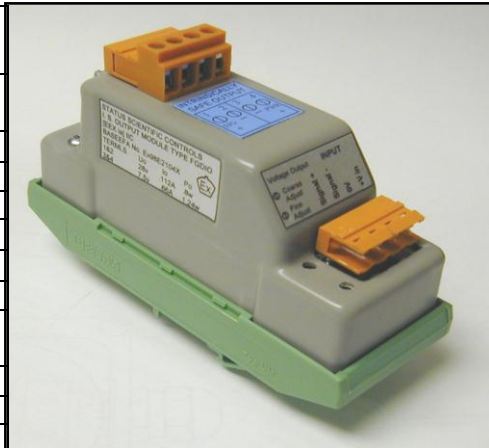
N.B. Please discuss with your technical sales advisor target gas and measurement range

## United Kingdom Hazardous Area Certification

<b>Standards</b>	: EN50014: 1997 + Amds 1 & 2, EN50018:2000, EN50020:1994
<b>BASEEFA Code</b>	: II 2 G EEx iad IIC T4 (-20°C<Ta<+60°C)
<b>BASEEFA Certificate number</b>	: BAS01ATEX2300
<b>Zones</b>	1 & 2

## Intrinsically Safe Output Module Type SS359 Specification

<b>Inputs</b>	14-28vDC 12-24V	Current Loop Sensor Supply		
<b>Temperature</b>	-20 - +40°C			
<b>Humidity range</b>	0-95% RH non-condensing			
<b>Operating pressure</b>	Ambient + or – 10%			
<b>Internal Resistance</b>	Current Loop	: 270R ±5%		
<b>Source Resistance</b>	Sensor Supply	: 12.0R ±5%		
<b>Intrinsically Safe Outputs</b>	Terminals	Uo	Io	Po
	1 & 2	28V	.112A	.8W
	3 & 4	7.5V	.66A	1.24W
<b>Certificate No.</b>	Baseefa 03ATEX0590X			
<b>Code</b>	II (1) G [EEx ia] IIC			
<b>Zones</b>	1 or 2			



DIN rail mounting

The Intrinsically Safe Output Module shown above provides the necessary interface between a non-intrinsically safe, mains powered system and an FGD3 Infrared Gas Detector. Note that an intrinsically safe earth must be connected to the module to ensure safety.

Designed and Manufactured in the UK

For more information or a quotation [contact us](#)