



## | OVERVIEW |

The Flamefast Gas Sensor is one of the most versatile gas sensors available on the market. With an Analogue and Relay output, as well as a BACnet MS/TP interface, FGS can connect directly into most third-party controllers or can easily connect to any of the Flamefast range of gas safety systems.

In a large proportion of modern buildings, the plant room safety systems are BMS integrated, and the FGS has been designed with this in mind. It can be treated like any other field sensor, the latching facility allows direct integration with the primary safety circuit, then simply pulse the Digital Input, or reset over the BACnet network once the alarm has cleared. This negates the requirement for a controller, cutting down cost of the equipment and installation.

The broadband Pellistor and Infra-red Hydro-carbon sensors can be calibrated to suit most combustible gases with the option to factory calibrate and rename the sensor for the specific gas. Flamefast can also offer a full range of toxic gas sensors, including H<sub>2</sub>S, HCN and many more (please contact for details).

## | KEY FEATURES |

- 24 AC/DC Power Supply
- Pre-calibrated
- Traffic light LCD readout
- Volt free contact output
- BACnet MS/TP over RS485
- Latching function with Reset input
- Analogue output
- Simple configuration and calibration
- Calibration and 'End of Life' reminders
- Oxygen Sensors monitor Enrichment and Depletion as standard
- Mounts onto any standard single gang junction box or conduit box
- **UK MANUFACTURED**

# FLAMEFAST GAS SENSOR (FGS) BACNET, 0-10V, VFC (24V AC/DC)

## Dimensions

Height	125mm
Width	86mm
Depth	36mm

## Technical Specification

Power Supply	24V AC/DC $\pm$ 10%
Power Consumption	100mA
BACnet	MS/TP over RS485 Baud: 9k6, 19k2, 38k4 or 76k8 127 Address (1/10 <sup>th</sup> Load) <i>Full specification available on request</i>
Analogue Output	0/2-10V Full scale linear
VFC Output	SPDT - 1A @ 24V Max
Audible	60dB @ 30cm
Operating Conditions	Temp 5-40°C Humidity 0-95% (NC)
Sampling Method	Diffusion
Warm-up Time	60 Seconds (24 Hours for full stability)
Response Time (T90)	< 60 Seconds (Adjustable)
IP Rating	IP40
Housing Material	PC/ABS
Colour	Pure White (RAL9010)
Approval	CE, UKCA

## Installer Selectable Options

LCD backlight	Enable/Disable
Failsafe option	Energise/De-energise Relay 0-10V or 2-10V
Alarm Latching	Enable/Disable
Audible Alarm	Enable/Disable
Auto Zero Calibration	Enable/Disable
Alarm1, Alarm 2 & Relay Set-points	
Analogue Output Range	
Display Gas Concentration or Formula	

## Part Numbers & Options/Accessories

Part No	Gas	Range	Typ. Life (years)
FGS-NG	Natural Gas (Methane)	100% LEL	5
FGS-LPG	Propane	100% LEL	5
FGS-H <sub>2</sub>	Hydrogen (LEL)	100% LEL	5
FGS-HC	Hydro-carbon (Pellistor)	100% LEL	5
FGS-IRHC	Hydro-carbon (Infra-red)	100% LEL	5
FGS-SF <sub>6</sub>	Sulfur Hexafluoride	1,000ppm	5
FGS-CO <sub>2</sub>	Carbon Dioxide	5%	5
FGS-CO	Carbon Monoxide (Plant/Carpark)	200ppm	5
FGS-NO <sub>2</sub>	Nitrogen Dioxide	5ppm	3
FGS-NH <sub>3</sub>	Ammonia	100ppm	3
FGS-CL <sub>2</sub>	Chlorine	5ppm	3
FGS-H <sub>2</sub> e	Hydrogen (Electrochemical)	1000ppm	3
FGS-SO <sub>2</sub>	Sulphur Dioxide	5ppm	3
FGS-O <sub>2</sub>	Oxygen	25%	5

**OTHER GASES AVAILABLE ON REQUEST**