

# DUCT REF SENSOR (DFGS-REF) BACNET, 0-10V, VFC (24V AC/DC)



## | OVERVIEW |

The New Flamefast Duct Refrigerant Sensor allows for accurate monitoring of a wide range of refrigerant gases from a single unit. Using highly stable infra-red technology and full temperature compensation on all gases, it can be used for detection, rather than just for alarm conditions like semi-conductor sensors.

To calibrate, only 1,000ppm R1234ze is required, thne simply select your target gas from the calibration menu. The full list of gases monitored is:

- |         |           |           |
|---------|-----------|-----------|
| - R404a | - R407f   | - R227    |
| - R134a | - R1234yf | - R22     |
| - R125  | - R449a   | - R513a   |
| - R407a | - R507    | - R422d   |
| - R417a | - R123    | - R1233zd |
| - R448a | - R410a   | - R407c   |
| - R32   | - R452b   |           |

With a BACnet MS/TP interface, a 0-10V and relay output, the refrigerant sensor in one of the most versatile units available, all housed in a robust duct enclosure for monitoring supply or return air systems.

## | KEY FEATURES |

- 24V AC/DC Power Supply
- Universal Refrigerant sensor
- Pre-calibrated for all gases
- Fully temperature compensated
- Traffic Light LCD readout
- BACnet MS/TP over RS485
- Latching function with Reset input
- Volt Free Contact output
- Analogue output
- Calibration and 'End of Life' reminders
- Mounts onto any standard single gang junction box or conduit box
- 200mm Duct Probe
- UK MANUFACTURED

## Dimensions

Height	152mm
Width	110mm
Depth	50mm

## 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>
Audible	60dB @ 30cm
Operating Conditions	Temp 5-40°C
	Humidity 0-95% (NC) Analogue
Sampling Method	Diffusion
Warm-up Time	60 Seconds (24 Hours for full stability)
Response Time (T90)	< 60 Seconds (Adjustable)
IP Rating	IP66 (external to duct)
Housing Material	PC/ABS
Colour	Black/Clear
Approval	CE, UKCA

## Installer Selectable Options

Gas Type	Enable/Disable
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	

## Part Numbers & Options/Accessories

Part No	Description	Range	Life (yr)
DFGD-REF	Duct Universal Refrigerant Sensor	2,000ppm	5