

- 3 core sensor cable network
- Sensors pre-set and tested
- Toxic/Flammable/Oxygen/Refrigerant sensor combination
- 1-16 sensors – 4 zones  
up to 64 sensors (16 per zone)  
with additional power pack
- User definable screen text
- Three alarm levels (timed ON/OFF option)
- Individual Sensors with audible visual alarms  
+ relay – optional stand alone
- Connect directly to the GDS Combi  
CANbus system
- Designed for ease of installation
- System easily extended
- Off the shelf system
- Interface sensor for any 4~20mA/switch device – option



The GDS Defender gas leak detection system features remote sensors connected to the main control unit via a 3 core cable network. The control unit is an advanced design using the latest technology and provides a high integrity system whilst offering a significant cost saving over conventional gas alarm systems.

Standard sensors for use in commercial and light industrial applications, such as laboratories, workshops, boiler plant rooms, etc, are available for monitoring toxic, flammable, oxygen or refrigerant gases. Each gas sensor continuously monitors the atmosphere for any hazardous conditions. On detection of gas the sensor will indicate the gas level status A1, A2, A3 by LED indication and sounder. Information received by the control panel from the sensor is then displayed, indicating the zone, gas type and alarm status. Alarm levels that are exceeded are then able to activate user selectable relays and appropriate control actions.

Sensors may be used as stand alone devices when powered from a single sensor 24v DC supply (plug in jack).

## Control Unit

Power Supply	115/230vAC or/and 24vDC ± 15%
Frequency	50/60 Hz
Consumption	3 watts
Detector Head	1 to 16 standard - 1 to 64 (4 zones, 16 per zone) with additional power supply
Indicators	Alarm Red LED / sounder Display text A1, A2, A3  Fault Amber LED / sounder Display text Flt (Fault)  Display As above + 4 line user text
Sounder	85dB @ 30cm
Sensor Cable	3 core 1 mm <sup>2</sup> Cable length - 200m max x4
Alarm Relays	Four selectable relays S.P.C.O 3A @ 230vAC N/E - N/D latched/unlatched Each zone A1/A2/A3 or A2/A3 only or Global (all zones) Relay 1 - A1 Relay 2 - A2 Relay 3 - A3 Relay 4 - Fault Additional relay options
Relay Inhibit:	Front panel access
Ambient Temp:	Operation: -5 to +50°C Storage: +5 to +55°C
Protection	IP65
Weight	920 gms
Dimensions	L 200mm x H 150mm x D 80mm

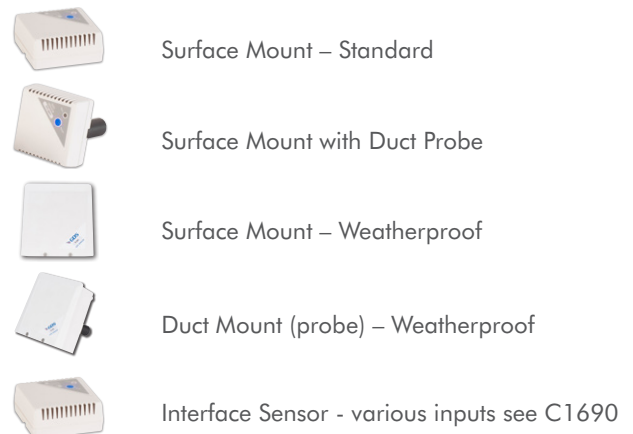
## Defender Environments



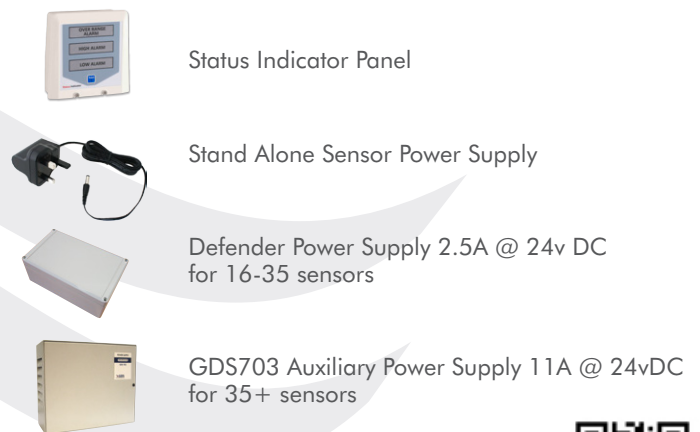
## Sensor

Not for use in potentially explosive atmospheres (zoned areas)	
Sensor Type	FLAMMABLE - catalytic, Toxic, Oxygen - electrochemical REFRIGERANT - semiconductor, CO <sub>2</sub> - infrared
Power Supply	18 to 30v DC
Consumption	1.2 W
Alarm Relay	1 SPCO 3A @ 230vAC Global A1/A2/A3 A2/A3 only option latched/unlatched - selectable N/E - N/D
Indicators	Power (Green LED) Gas alarm - Green LED to Red A1 - slow flash A2 - rapid flash A3 - constant Fault - Amber
Sounder	85dB @ 10cm
Ambient Temp	Operation: -5 to +50°C Storage: +5 to +55°C
Protection	Standard Sensor - IP42 Weatherproof - IP65
Dimensions	Standard L 83mm x H 83mm x D 36mm Weatherproof L 145mm x H 145mm x D 60mm
Options	Duct sensor probe - L27mm x 28mm diameter

## Sensor Options



## Accessories for connection to Combi and features see C1046



This document is not contractual and the equipment specification may be modified at any time without prior notice.

