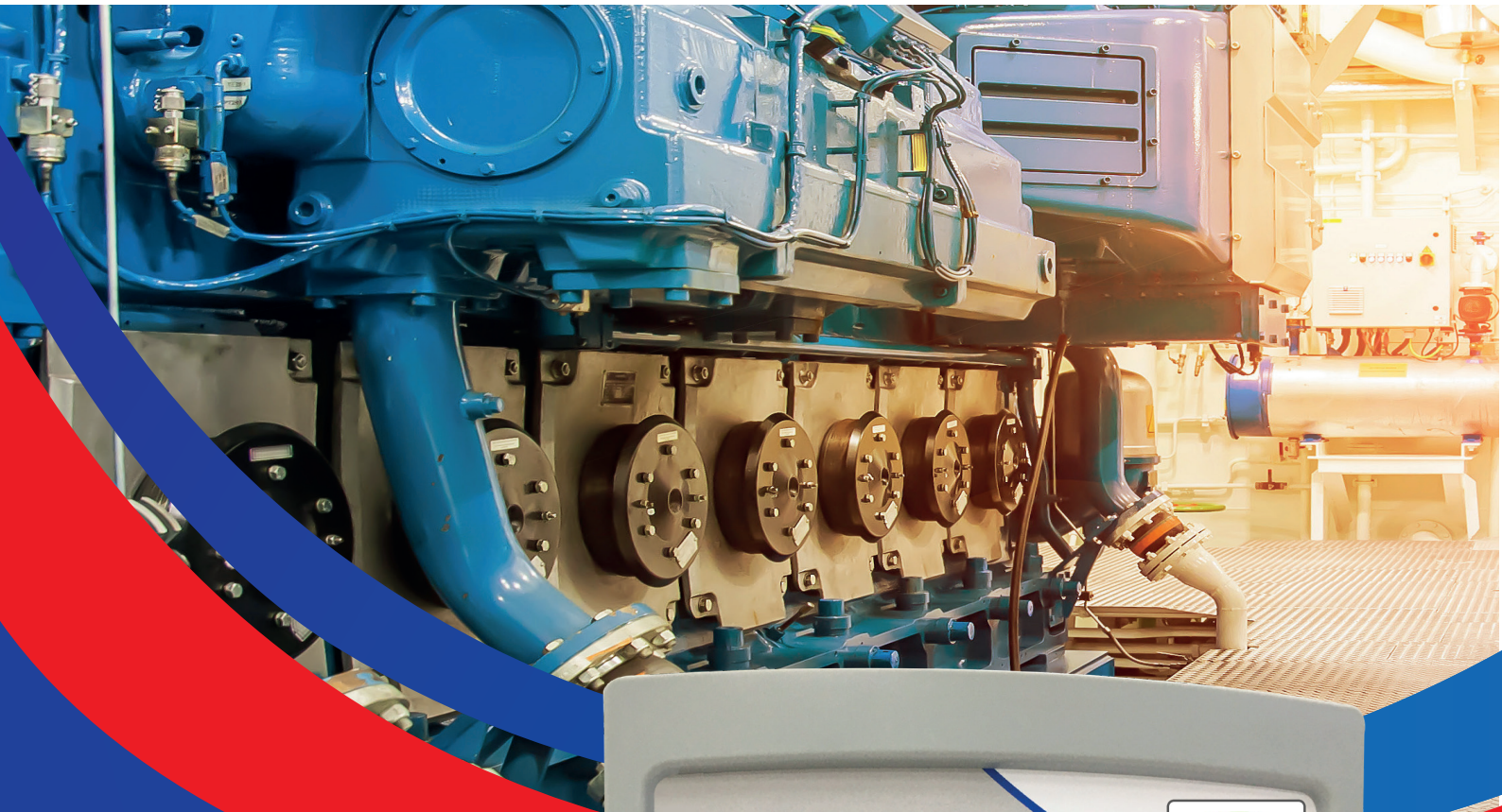


# S4S Guardian® 4 Plus

1-4 Channel Gas Detection System

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World Class Products



## S4S Guardian® 4 Plus

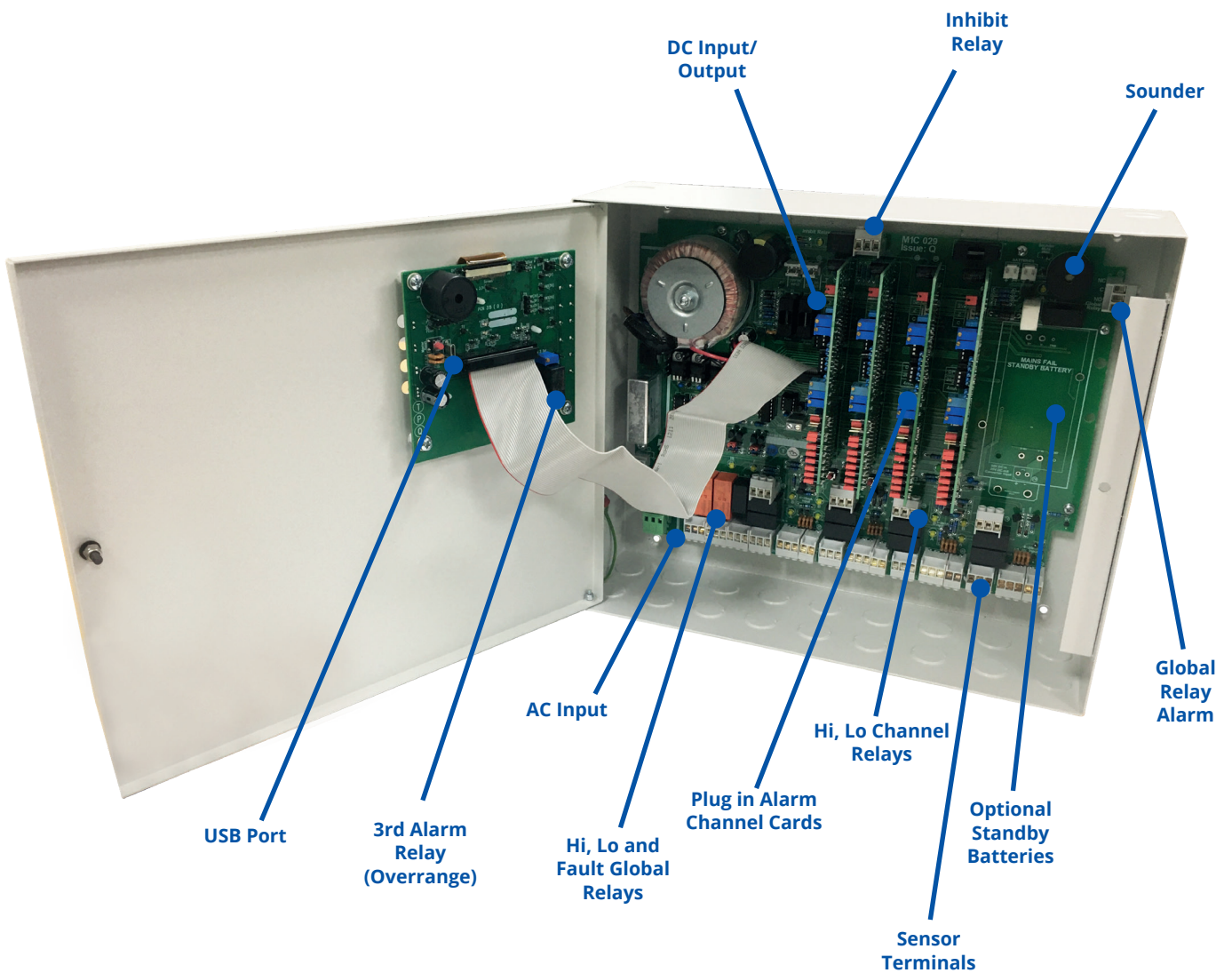
GAS DETECTION SYSTEM

### PRODUCT DESCRIPTION:

S4S Guardian® 4 Plus is an easily configurable, wall mounted control system that supports up to four channels of gas detection. The versatile configuration approach enables you to take control of your safety system and configure it to meet your needs for a wide range of applications



## S4S Guardian<sup>®</sup>4 Plus FEATURES



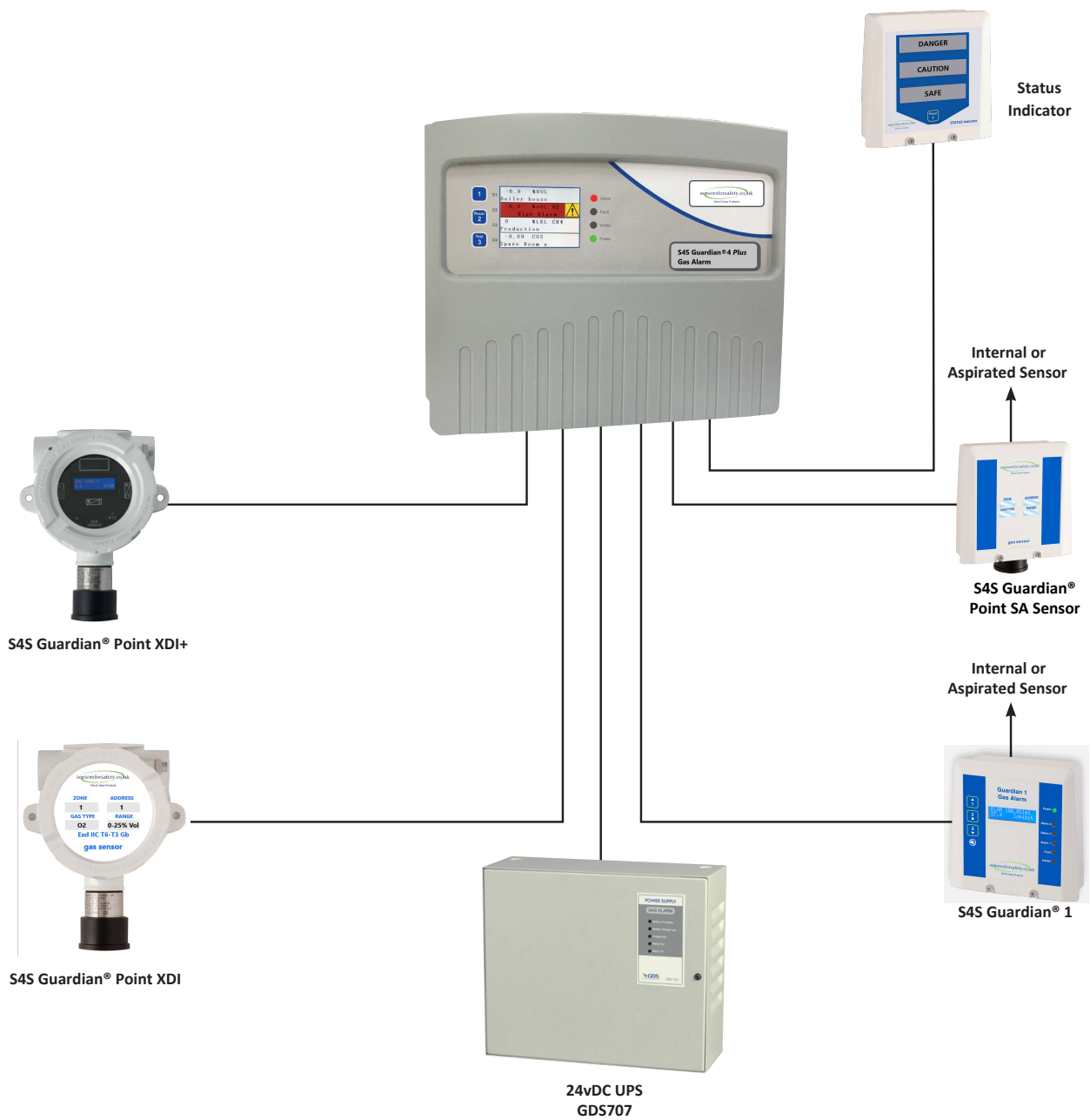
[www.sensorsforsafety.co.uk](http://www.sensorsforsafety.co.uk)

E: [sales@sensorsforsafety.co.uk](mailto:sales@sensorsforsafety.co.uk) T: 01423 206360 F: 01423 206370

Sensors for Safety Ltd | Knaresborough Tech Park | Manse Lane | Knaresborough | N.Yorks | HG5 8LF | UK



# S4S Guardian® 4 Plus CONTROLLER CONFIGURATION





## GASES AND RANGES

Gas	Relative Density Air =1	Sensor Type	Units	Standard Range	Alarm Level 1	Alarm Level 2
Carbon Monoxide (CO)	0.96	Electrochemical	ppm	0~200 ppm	20 ppm	100 ppm
Sulphur Dioxide (SO <sub>2</sub> )	2.26	Electrochemical	ppm	0~5 ppm	0.5 ppm	1 ppm
Nitric Oxide (NO)	1.03	Electrochemical	ppm	0~10 ppm	2 ppm	3 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	2.62	Electrochemical	ppm	0~5 ppm	0.5 ppm	1 ppm
Chlorine (Cl)	2.41	Electrochemical	ppm	0~5 ppm	0.3 ppm	0.5 ppm
Chlorine Dioxide (ClO <sub>2</sub> )	2.33	Electrochemical	ppm	0~1 ppm	0.1 ppm	0.3 ppm
Hydrogen (H <sub>2</sub> )	0.06	Electrochemical	ppm	0~2000 ppm	250 ppm	500 ppm
Hydrogen Cyanide (HCN)	0.93	Electrochemical	ppm	0~10 ppm	0.9 ppm	4.5 ppm
Hydrogen Sulphide (H <sub>2</sub> S)	1.18	Electrochemical	ppm	0~50 ppm	5 ppm	10 ppm
Hydrogen Chloride (HCl)	1.26	Electrochemical	ppm	0~10 ppm	1 ppm	5 ppm
Ammonia (NH <sub>3</sub> )	0.58	Electrochemical	ppm	0~100ppm	25 ppm	35 ppm
Ozone (O <sub>3</sub> )	1.66	Electrochemical	ppm	0~1 ppm	0.1 ppm	0.2 ppm
Oxygen O <sub>2</sub>	1.00	Electrochemical	% VOL	0~25% VOL	19% VOL	23% VOL
Hydrogen Fluoride (HF)	0.7	Electrochemical	ppm	0~10 ppm	1.8 ppm	3 ppm
Methane (CH <sub>4</sub> )	0.55	Pellistor	% LEL	0~100% LEL	20% LEL	40% LEL
Propane (C <sub>3</sub> H <sub>8</sub> )	1.55	Pellistor	% LEL	0~100% LEL	20% LEL	40% LEL
Butane (C <sub>4</sub> H <sub>10</sub> )	2.11	Pellistor	% LEL	0~100% LEL	20% LEL	40% LEL
Pentane (C <sub>5</sub> H <sub>12</sub> )	2.48	Pellistor	% LEL	0~100% LEL	20% LEL	40% LEL
Hydrogen (H <sub>2</sub> )	0.06	Pellistor	% LEL	0~100% LEL	20% LEL	40% LEL
Methane (CH <sub>4</sub> )	0.55	IR	% LEL	0~100% LEL	20% LEL	40% LEL
Propane (C <sub>3</sub> H <sub>8</sub> )	1.55	IR	% LEL	0~100% LEL	20% LEL	40% LEL
Butane (C <sub>4</sub> H <sub>10</sub> )	2.11	IR	% LEL	0~100% LEL	20% LEL	40% LEL
Pentane (C <sub>5</sub> H <sub>12</sub> )	2.48	IR	% LEL	0~100% LEL	20% LEL	40% LEL
Ethanol (C <sub>2</sub> H <sub>60</sub> )	1.51	IR	% LEL	0~100% LEL	20% LEL	40% LEL
Carbon Dioxide (CO <sub>2</sub> )	1.67	IR	% VOL	0~2% VOL	0.5% VOL	1.0% VOL
Isobutylene (C <sub>4</sub> H <sub>8</sub> )	1.94	PID	ppm	0~200 ppm	20 ppm	40 ppm

Over 700 gas types are available – Contact our sales department with your requests - [sales@sensorsforsafety.co.uk](mailto:sales@sensorsforsafety.co.uk)

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# SPECIFICATION

S4S Guardian®4 Plus	
<b>Channels</b>	1-4
<b>Measurements</b>	Combustible Gas – LEL, % Vol. Toxic Gas – ppm Oxygen - % Vol. – Depletion / Enrichment Refrigerant – ppm Any 4~20mA Transmitter
<b>Sensor Inputs</b>	Bridge type 3 wire mv (Catalytic) 2 or 3 wire 4~20mA (Electrochemical) 3 wire 4~20mA (Infrared / Catalytic / PID / Semiconductor)
<b>Channel Outputs</b>	Analogue output 4-20mA into 200 ohms max load
<b>Relays</b>	<p><b>Common Relays</b></p> <ul style="list-style-type: none"> <li>• High Alarm RL2 – D.P.C.O normally energised or de-energised- default set ND</li> <li>• Latched or Unlatched – default set latched</li> <li>• Low Alarm RL1 – D.P.C.O. normally energised or de-energised- default set ND</li> <li>• Latched or Unlatched – default set latched</li> <li>• Fault Alarm RL3 – S.P.C.O. normally energised or de-energised- default set ND</li> <li>• Latched or Unlatched – default set latched</li> <li>• Over-range RL4 - S.P.C.O normally energised or de-energised- default set ND</li> <li>• Latched or Unlatched – default set latched</li> <li>• Global Alarm Relay RL5 - S.P.C.O. changes on all alarms and is resettable at all times</li> <li>• Inhibit Indicator - RL6 - S.P.C.O contacts 1A@24v DC</li> </ul> <p><b>Channel Relays</b></p> <ul style="list-style-type: none"> <li>• High and Low Alarm relays S.P.C.O. normally energised or de-energised- default set ND</li> <li>• Latched or Unlatched – default set latched</li> <li>• All contacts rated 3A/230v AC</li> </ul>
<b>Sensor Cable</b>	3 Core 1.5mm <sup>2</sup> screened 1.5km
<b>Power</b>	230/115v AC or 24v DC 12 Watts – Full Alarm
<b>Panel Indication</b>	Power – Green LED Mains Fail – Power Indicator change Green to Amber – when battery fitted Alarms - Red LED and display channel with alarm text Fault – Amber LED Display – Gas Readout, alarm status, gas type, location System Test – Alarm LED's Flashing/ Relay Changeover Alarm Relays Inhibit – LED
<b>Audible Alarm</b>	Lo, Hi, OR and Fault 68dB @ 1m Permanent Mute Option
<b>Operating Temperature</b>	-10 to + 50° C
<b>Humidity</b>	0-90% non condensing
<b>Ingress Protection</b>	IP52 *IP65 available with over housing*
<b>Dimensions</b>	H-265 W-315 D-95mm
<b>Weight</b>	3.6KG
<b>Enclosure</b>	Mild Steel Finish - Powder coat Ash Grey BSA01

Continued on next page.

# SPECIFICATION

S4S Guardian® 4+	
<b>Standards</b>	EMC BS EN 50270 Low Voltage Directive BS EN 61010-1
<b>Miscellaneous</b>	Remote Accept / Reset System Lamp Test Enclosure – 20mm Cable Entry – Base / Rear Optional Battery Backup - 1 hour Delay to Alarm Option 10s, 30s, 10m

S4S Guardian® 4 Plus is produced under an integrated quality, health and safety and environmental management system certified to ISO 9001, ISO 45001 and ISO 14001 by NQA Certification Ltd.

NOTE: This datasheet is non-contractual

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