# S4S GUARDIAN® *PLUS* Addressable

## *1-64 Channel Gas Alarm System*

Addressable Gas Monitoring System

## System Features:

- 1 to 64 addressable sensors
- Network up to 16 controllers enabling up to 1024 addressable sensors
- Single 4 core sensor network (addressable)
- Parameter set up via pc or front panel
- 3 alarm levels with time to alarm option
- Automatic safety check diagnostics/system surveillance

S4S Guardian® *Plus Addressable* has been designed to operate in the full range of environments from commercial premises through to heavy industrial applications which may require hazardous area sensing. Typical monitor locations are - public buildings, car parks, tunnels, breweries, boiler plant rooms, water treatment works, H&V control, manufacturing, process plants, horticulture, hotels, offices.

### Operation

Each gas sensor continuously monitors the atmosphere reporting any hazardous conditions to the control unit for display by the alpha numeric screen indicating the reporting sensor, gas type, concentration and alarm status. Alarm levels that are exceeded will automatically activate a variety of signal outputs including analogue/digital data and user selectable relays.

S4S Guardian® *Plus Addressable* system operates on a 4-core (addressable) cable network and has the capacity to monitor up to 64 addressable sensors. Larger systems offering up to 1024 sensors can be achieved using multiple S4S Guardian® *Plus* units housed in a 19" rack based system or a network controller supervising up to 16 S4S Guardian® *Plus* units.

S4S Guardian® *Plus Addressable* is supplied ready to use with pre-calibrated gas sensors and provides for additional sensors that can be easily added to any point of the network.

### Sensor points

1-64 addressable – CANbus

### Measurements

Combustible Gas - L.E.L., % vol
Toxic Gas - ppm, % vol
Oxygen - % vol - Depletion/Enrichment
Refrigerant - ppm
Any 4~20mA transmitter

### Indicators - control unit concentration

Dot matrix LCD 4 line 40 character - indicating sensor location, gas type, (rising or falling alarms), alarm status, system fault, sensor line fault, sensor fault, inhibit, real time clock, event memory. Red LED - global alarm, Amber LED - global fault, Amber LED-inhibit

### Outputs

8 user selectable zone/voting – with NE/ND option and delay to de-energise
Relay contacts - 2 D.P.CO / 6 S.P.CO. rated @ 5A-230v AC
Factory set 1 common low alarm D.P.C.O or group 1

        1 common high alarm D.P.C.O or group 2
        1 common overange S.P.C.O or group 3
        1 common fault alarm S.P.C.O or group 4
        4 user selectable S.P.C.O groups 5 to 8

General alarm relay - resetable S.P.C.O. for sounders etc.
RS232 data log - event log
Modbus - RS485 x2
Individual sensor logging - intervals 1-60 mins storage readings 2880

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NOTE: This datasheet is non-contractual

## Audible alarm
Alarm/Fault - permanent mute option
68dBs @ 1m

## Power
230/115v AC or 24v DC ±15%
Control unit 7.5w quiescent 17w full alarm
Sensor - 1.25w
Internal power supply: 35 sensors max. 36+
sensors - 11A/24vDC Auxiliary Power Pack
required C1541/C1293

## Sensor Cable - Addressable
Main network - 4 core (2 power - 2 comms)
- Addressable (1.5mm screened max length
1km)
Optional signal booster per additional 1km

## Miscellaneous
Enclosure cable entry - bottom, rear, top
Remote reset/mute

## Options
Canbus repeater panel with selectable channel
readout - (S4S Guardian® - *Lite*)
Status Indicator Panel
Sonos Sounder / Beacon
Sensor signal booster 1K+
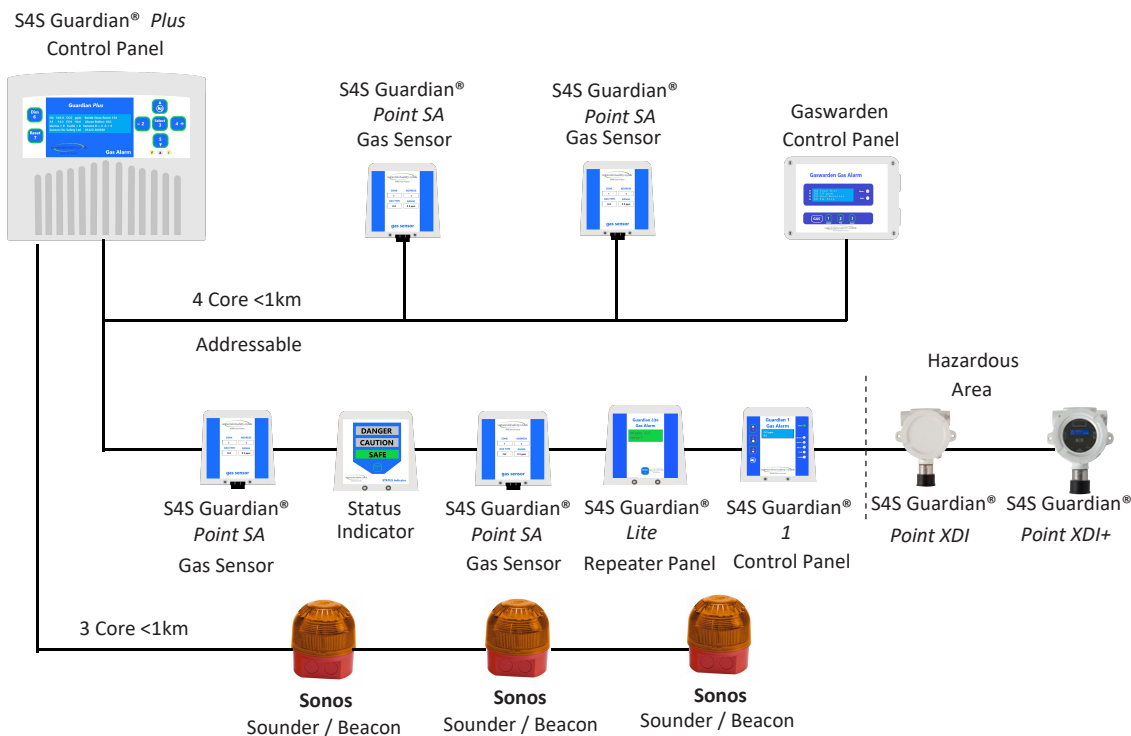Password protection - user mode/engineers
mode LCD and LED dimming

## Environmental
Control unit - IP52 - wall mount Optional
overhousing - IP65
Operating temperature: -10 to +50℃

## Dimensions
315W x 265H x 95D - S4S Guardian® *Plus* panel
315W x 265H x 95D - Auxiliary power pack

S4S Guardian® *Plus*
Control Panel

S4S Guardian®
*Point SA*
Gas Sensor

S4S Guardian®
*Point SA*
Gas Sensor

Gaswarden
Control Panel

4 Core <1km

Addressable

Hazardous
Area

S4S Guardian®
*Point SA*
Gas Sensor

Status
Indicator

S4S Guardian®
*Point SA*
Gas Sensor

S4S Guardian®
*Lite*
Repeater Panel

S4S Guardian®
*1*
Control Panel

S4S Guardian®
*Point XDI*

S4S Guardian®
*Point XDI+*

3 Core <1km

**Sonos**
Sounder / Beacon

**Sonos**
Sounder / Beacon

**Sonos**
Sounder / Beacon

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www.sensorsforsafety.co.uk
E: 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