# S4S GUARDIAN® PLUS Direct



1-16 Channel Gas Alarm System

Direct Analogue Sensor – Gas Monitoring System

Specification Sheet ref C1692

# System Features:

- 1-16 direct 4~20mA sensors 2/3 wire
- Network up to 16 controllers enabling up to 256 direct sensors
- 1 8 plug in direct catalytic cards
- · 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 Direct* 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 Direct* system operates on a 2/3 core (direct) cable network and has the capacity to monitor up to 16 direct sensors. Larger systems offering up to 256 sensors can be achieved using multiple S4S Guardian® *Plus Direct* units housed in a 19" rack based system or a network controller supervising up to 16 S4S Guardian® *Plus* units.

# **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.C.O / 6 S.P.C.O. 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

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

#### **Sensor Cable - Direct**

Main network - 2/3 core (1.5mm screened max length 1km)

Optional signal booster per additional 1km

#### Miscellaneous

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

# **Options**

S4S Guardian® - Lite Alarm Panel

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°C

#### **Dimensions**

315W x 265H x 95D - S4S Guardian® Plus panel

19" x 3U x 300mm Deep – rack panel





