

## HGD100 Hydrogen Gas Detector



### Key Features:

- Replaceable sensor with a long life
- 230AC, 24V AC, 18–60VDC power supply
- 2\* Internal relays for fan/alarm activation
- 2\* Analogue outputs (4–20mA or 0–10V field selectable)
- Modbus RTU
- Output to external strobe
- 4-sec alarm delay to prevent false activation
- Supplied calibrated.
- Designed and manufactured in the UK
- In-built audible alarm
- Duct mount kit available (Refer to Duct Mount detector sheet)

### Product Overview:

Introducing the S&S HGD Series 100 Hydrogen Detector will monitor hydrogen gas buildup in storage rooms and facilities that house batteries. The detector provides terminal block connections for single-phase 230 AC, 24VAC or 18–60VDC power. Detected Hydrogen levels are displayed in % Vol and traffic light indication – Green (Normal) Yellow (Warning) Alarm (Red). The control relays are used to switch an extract fan and warning alarms, the detector also provides analogue outputs that can be connected directly to the fan speed controller to regulate the fan speed. If the concentration of hydrogen gas detected reaches 1% Vol the screen will display yellow, and the warning relay will close activating the ventilation fan. If the concentration reaches 2% the screen will display red, and the alarm relay and an 80 dB internal warning will sound.

### Technical Specification:

|                          |  |
|--------------------------|--|
| Target Gas:              | Hydrogen 1% Vol (warning) 2% Vol (Alarm)           |
| Size: (H x W x D):       | 5.95" x 4.37" x 1.97" (151mm x 111mm x 50mm)       |
| Housing Material:        | ABS PA765. Flame Retardant UL-94V-1                |
| Weight:                  | 7.5oz (0.21kg)                                     |
| Display:                 | 1.8" TFT   |
| Rated Voltage:           | 230VAC, 24VAC, 18~60VDC                            |
| Electrical Safety & EMC: | CE/UKCA, BS EN 61010-1:2010 +A1:2019 & BS EN 50270 |
| Sensor Agency Approvals: | UL Recognized Component for ANSI/UL-2034, UL-2075  |
| Life Span (End Of Life): | 10 Years   |
| Operating:               | -10–40°C (14 – 104 °F)                             |

### Applications:

|                              |                              |
|------------------------------|------------------------------|
| Utilities and power stations | Hydrogen refuelling stations |
| UPS power stations           | Fire and rescue service      |
| Fuel cell test stations      | Battery suppliers            |
| Nuclear waste management     | Battery charging rooms       |