AX-GSE2-H2

Hydrogen H_2 Detector (Analogue, Modbus, LCD & Relay Outputs)

Product Overview

The AX-GSE2-H2 is a high-performance Hydrogen Gas Detector designed to provide accurate and reliable monitoring of Hydrogen gas concentrations. Each unit is supplied pre-calibrated and ready for immediate installation. The device offers jumper-selectable 0–10V and 4–20mA analogue outputs along with Modbus for flexible integration with various control systems with optional LCD and Relay Outputs.

The catalytic pellistor sensor provides a cost-effective solution for detecting Hydrogen gas. It is factory-calibrated for Hydrogen 0-100% LEL detection available for both Wall and Duct Mount applications.

Products Features

- ABS Plastic Enclosure, IP65
- 24V DC Powered Model (24V AC & 230V AC Options)
- 0-100% LEL Detection Range
- Display & Non Display Versions
- Available with Analogue, Modbus & Relay Outputs
- Available in Wall and Duct Mount Versions

Product Specifications

Power Supply:	12-36V DC / (24V AC or 230V AC Optional)
Sensor Type:	Pellistor (Catalytic Bead)
Sampling Method:	Diffusion
Detection Range:	0-100% LEL
Resolution:	1% LEL
Warm-up Time:	≤ 1 Min
Response Time (T90):	≤ 10 s
Maintenance Interval:	6 Months
Typical Coverage Area:	75 SQM (5Meter Radius)
Output:	4-20mA / 0-10V (User Selectable), 2× SPST Relay Output 250V AC / 30V DC, 5Amp Max (Optional)
Digital Interface:	RS485 Modbus RTU (See User Manual For Modbus Configuration)
Power Consumption:	< 2 VA
Sensor Lifetime:	> 3Years (In an Appropriate Residential or Light Commercial Applications)
Output Scale Width:	Recommended: 20-100% of the range > 10 × resolution in any case
Enclosure Type & Rating:	ABS Plastic (Grey Colour), IP65
Dimensions:	H90 × W145 × D50 mm (Housing) H140 (with cable glands)
Operating Temp:	-10 to 50°C
Operating Humidity:	0-95 %RH (Non-Condensing)
Environmental Requirements: Air Pressure:	900 -1100 mBar
Safety:	Explosion Safe Indoor Environment
Exposure Safety:	Avoid Exposure to Corrosive Gases/Silicon Containing Products
EMC Compliance:	EN 61000-6-3, EN 61326-1 (EMC Emissions)
	EN 61000-6-1, EN 61000-6-2 (EMC Immunity)
Country Of Original:	UK

Product Order Codes

AX-GSE2-H2	Hydrogen Gas Detector, Wall Mount, Analogue Output + Modbus
AX-GSE2-H2-L	Hydrogen Gas Detector, Wall Mount, Analogue Output + Modbus, LCD
AX-GSE2-H2-Dx	Hydrogen Gas Detector, Duct Mount, Analogue Output + Modbus
AX-GSE2-H2-R	Hydrogen Gas Detector, Wall Mount, Analogue Output + Modbus + 2 Relays
**** Add "3" or "10" with duct mount versions for remote probe cable length (i.e. AX-GSE2-H2-D3)**	
**** Add "-24" for 24VAC power supply OR "-230" for 230VAC power supply at the end of part number (i.e. AX-GSE2-H2-230)**	

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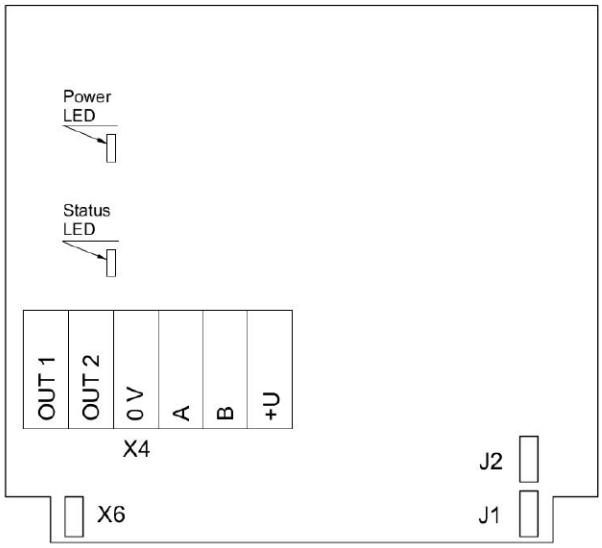
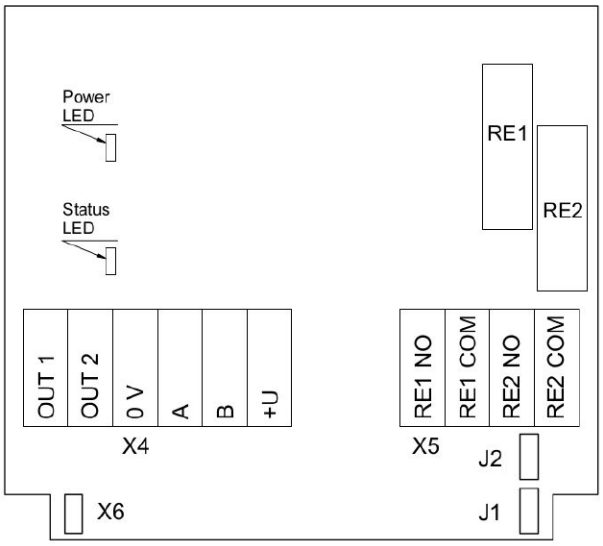
AX-GSE2-H2

Hydrogen H_2 Detector (Analogue, Modbus, LCD & Relay Outputs)

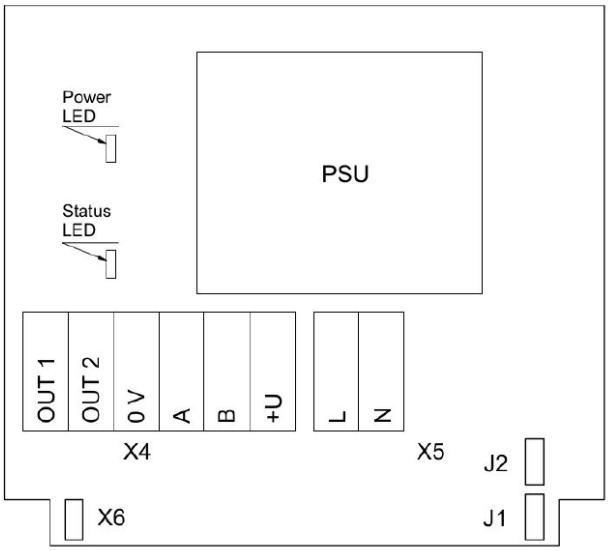
Connection Diagrams:



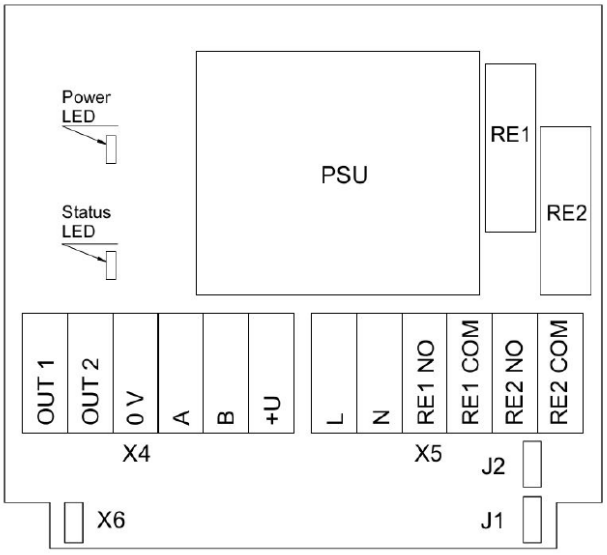
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays

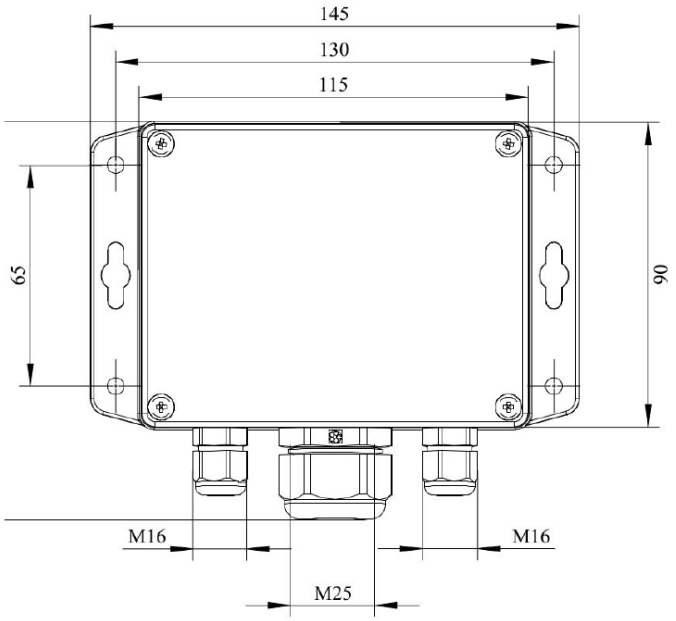


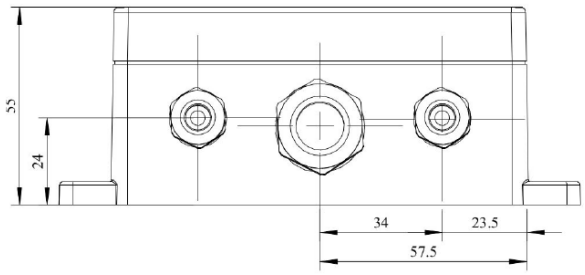
Version with PSU and relays

Jumpers	
J1	OUT1 type (open: 4-20mA; closed 0-10V)
J2	OUT2 type (open: 4-20mA; closed 0-10V)
X6	Reset Modbus network parameters to default
X4 Terminals	
OUT1	OUT1 4-20mA / 0-10V output
OUT2	OUT2 4-20mA / 0-10V output
0V	0V / 24V AC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24V DC / 24V AC Phase (optional)
X5 Terminals (optional)	
L90	90 to 265V AC Phase
N90	90 to 265V AC Neutral
RE1	NO Relay 1, normally open terminal
RE1	COM Relay 1, common terminal
RE2	NO Relay 2, normally open terminal
RE2	COM Relay 2, common terminal

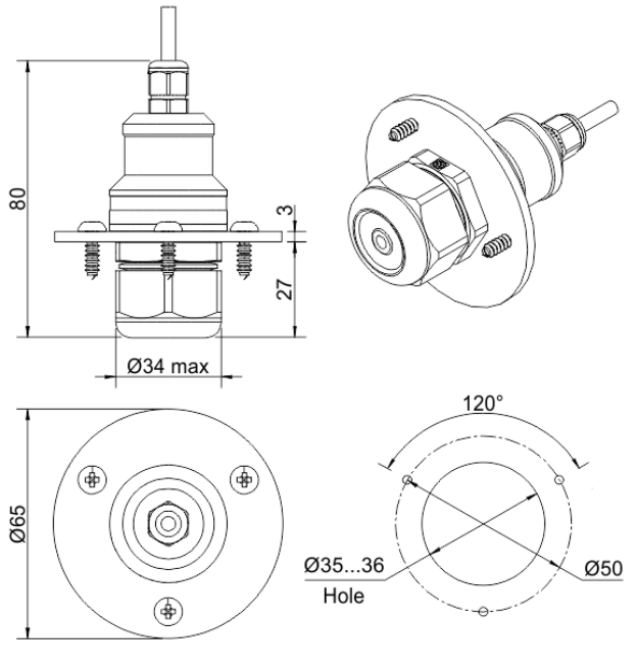
Relay Outputs	
Output Relays	2× SPST Relays (Closing Contact),
	250V AC / 30V DC, 5 Amp Max
Default Alarm	LOW: Set 20 , Release 16 %LEL
	HIGH: Set 50, Release 40 %LEL (for flammability range)
Alarm Signaling	
Visual	Red and green LEDs
Acoustic	Buzzer 85 dB

Dimensions:





Duct Version (Remote Sensor) with Probe & Accessories Dimension:



Datasheet Content:

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