

# HYDROGEN H<sub>2</sub> SS SENSOR + 5V TRANSMITTER

## SPECIFICATIONS

<b>Operating Principle:</b>	Amperometric, 3-electrode cell with integrated 5-pin connector (spacing 2.54mm)
<b>Gas Detected:</b>	Hydrogen H <sub>2</sub>
<b>Measurement Range:</b>	0 – 20,000 ppm (0-2% Volume)
<b>Lower Detectable Limit (LDL):</b>	100 ppm
<b>Maximum Range:</b>	40,000 ppm
<b>LEL:</b>	40,000 ppm
<b>Sensor Expected Operating Life:</b>	5 years
<b>Temperature Range:</b>	-20°C to +60°C
<b>Temperature Compensation:</b>	Unavailable
<b>Humidity Range (non-condensing):</b>	15 - 90% RH
<b>Response Time (T50):</b>	< 10 seconds
<b>Response Time (T90):</b>	< 30 seconds
<b>Long Term Sensitivity Drift:</b>	< 20% per year
<b>Deviation From Linearity at Standard Range:</b>	< 20% FS
<b>Sensor Warm-Up Time (typical):</b>	20 seconds
<b>Warranty Period:</b>	6 months from date of despatch
<b>Part Number:</b>	2112B013410

**5V transmitter**  
Part Number: 2112B013410



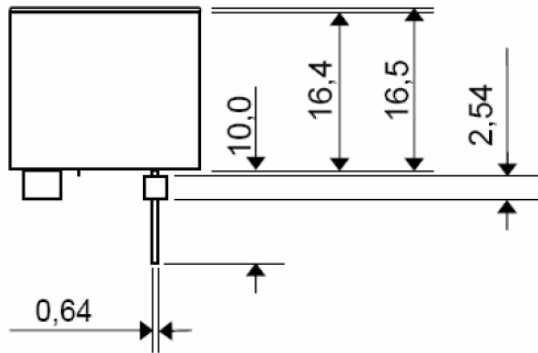
**Sensor Options:** Other H<sub>2</sub> detection ranges are available on request. The H<sub>2</sub> SS sensor is also available as a sensor only (without circuitry) and as PVC or aluminium housed gas measuring systems. Please ask Euro-Gas for details.

The data contained in this document is believed to be accurate and reliable. The data given is for guidance only. Euro-Gas Management Services Ltd accepts no liability for any consequential losses, injury or damage resulting from the use of this datasheet or the information contained in it. Customers should test the sensors under their own conditions to ensure that the sensors are suitable for their own requirements and in accordance with the plans and circumstances of the specific project and any standards/regulations pertaining to the country in which the sensors will be utilised. This datasheet is not intended to form the basis of a contract and in the interest of product improvement, Euro-Gas reserves the right to alter design features and specifications without notice. 11/11

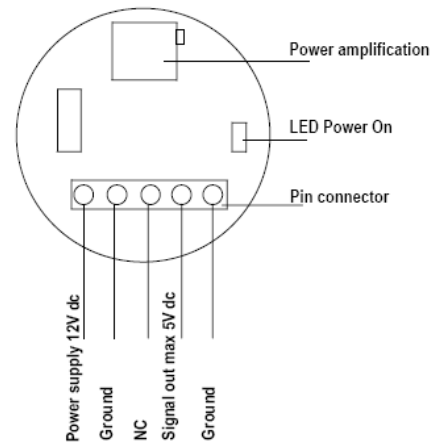


# HYDROGEN H2 SS SENSOR + 5V TRANSMITTER

## DIMENSIONS



view side Connector



<b>Sensor dimensions:</b>	Ø 20.3mm; Height 26.5mm (+/- 0.15mm)
<b>Supply Voltage:</b>	6V to 24V DC (3mA @ 12 VDC)
<b>Analogue output range:</b>	1V to 5V DC
<b>Zero Line:</b>	@ 1 VDC
<b>Sensitivity:</b>	0.12 mV to 0.24 mV/ppm
<b>Amplification:</b>	With trim potentiometer
<b>Power On:</b>	LED signal - GREEN

## CROSS SENSITIVITY DATA

Note: Test conditions at 20°C / 1013 hPa, flow rate > 500 qcm/min.  
Cross-sensitivity gases are not target gases. Relationship can change over time.

GAS	CONCENTRATION	READING IN PPM
Ammonia NH <sub>3</sub>	25 ppm	0
Carbon Dioxide CO <sub>2</sub>	5000 ppm	0
Carbon Monoxide CO	50 ppm	37
Chlorine Cl <sub>2</sub>	1.0 ppm	0
Hydrocarbons unsaturated	1%	0
Hydrogen H <sub>2</sub>	1000 ppm	1000
Hydrogen Sulphide H <sub>2</sub> S	10 ppm	0
Isopropanol C <sub>3</sub> H <sub>7</sub> OH	1000 ppm	0
Nitric Oxide NO	20 ppm	To be confirmed
Nitrogen Dioxide NO <sub>2</sub>	10 ppm	To be confirmed
Ozone O <sub>3</sub>	0.5 ppm	0
Sulphur Dioxide SO <sub>2</sub>	20 ppm	To be confirmed

