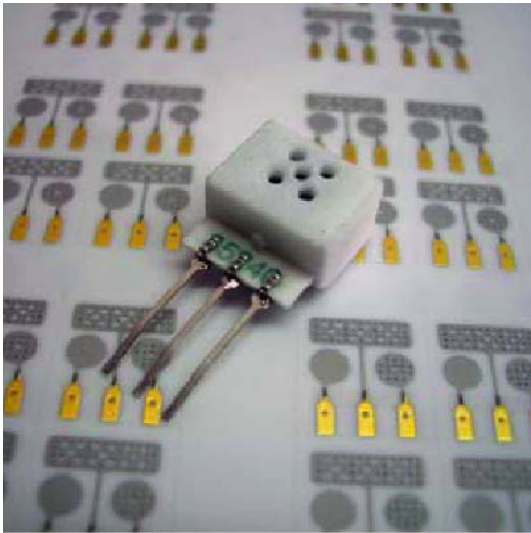


# H2 NANO HYDROGEN SENSOR



## SPECIFICATION

<b>Measuring Principle:</b>	Amperometric, 3-electrode sensor
<b>Detectable Gases:</b>	H <sub>2</sub> Hydrogen
<b>Standard Range:</b>	0 – 20,000 ppm
<b>Lower Detectable Limit (LDL):</b>	100 ppm
<b>Maximum Range:</b>	40,000 ppm
<b>LEL:</b>	40,000 ppm
<b>Long Term Sensitivity Drift:</b>	< 10% / year
<b>Expected Operating Life:</b>	5 years
<b>Temperature Range:</b>	-20°C – +80°C
<b>Humidity Range (non-condensing):</b>	15 – 90% RH
<b>Response Time (T<sub>50</sub>):</b>	<10 seconds
<b>Response Time (T<sub>90</sub>):</b>	<30 seconds
<b>Long Term Output Drift:</b>	<0.1% volume of signal per month
<b>Deviation from linearity at standard range:</b>	< 20% FS
<b>Zero Current at Normal Conditions:</b>	+/- 100nA
<b>Sensitivity:</b>	0.4 – 10.0 nA/ppm
<b>Sensor Warm-Up Time (typically):</b>	20 seconds
<b>Temperature Co-Efficient:</b>	< 0.5% per °C
<b>Sensor dimensions:</b>	5.5mm x 7.7mm (+2.8mm) x 9.8mm
<b>Part Number:</b>	2112B071101



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## CROSS SENSITIVITY DATA

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	?
Nitrogen Dioxide NO <sub>2</sub>	10 ppm	?
Ozone O <sub>3</sub>	0.5 ppm	0
Sulphur Dioxide SO <sub>2</sub>	20 ppm	?

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

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