

# Product Data Sheet

P/N : GS+4H2-5%

# GS+4H2 5% Hydrogen Sensor (H2)

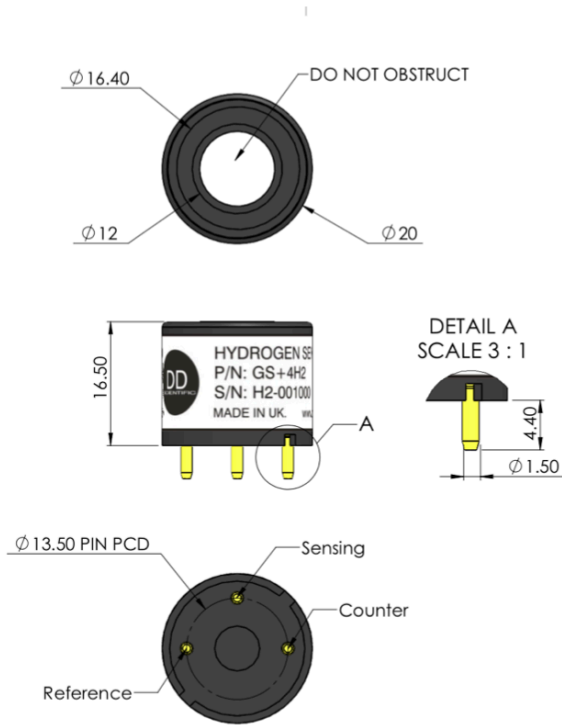
**Introduction** The GS+4H2-5% is a high quality high range H2 sensor provided in a miniature 4-series housing suitable for high concentration measurements

**Key Features:** Fast response, high range, high stability

Performance Characteristics	
Output signal	0.5±0.25nA / ppm
Typical Baseline Range (pure air)	±100ppm
T90 Response Time	< 40 seconds (Typically < 20s )
T50 Response Time	Typically < 10s
T20 Response Time	Typically < 5s
Measurement Range	0 - 50000 ppm
Maximum Overload	10% Vol
Linearity (0-50000ppm)	±3%
Repeatability	< ±2%
Recommended Load Resistor	10 ohms
Resolution (Electronics dependent)	<5ppm

Environmental Details	
Temperature Range Continuous	-30°C to +50°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	15% to 90% RH

**Important Note:**  
All performance data is based on conditions at 20°C, 50%RH and 1 atm, using DD Scientific recommended circuitry.  
Sensor performance is temperature dependent, and please contact DD Scientific for temperature performance other than 20°C.



**Product Dimensions**  
All dimensions in mm  
All tolerances ±0.15 mm

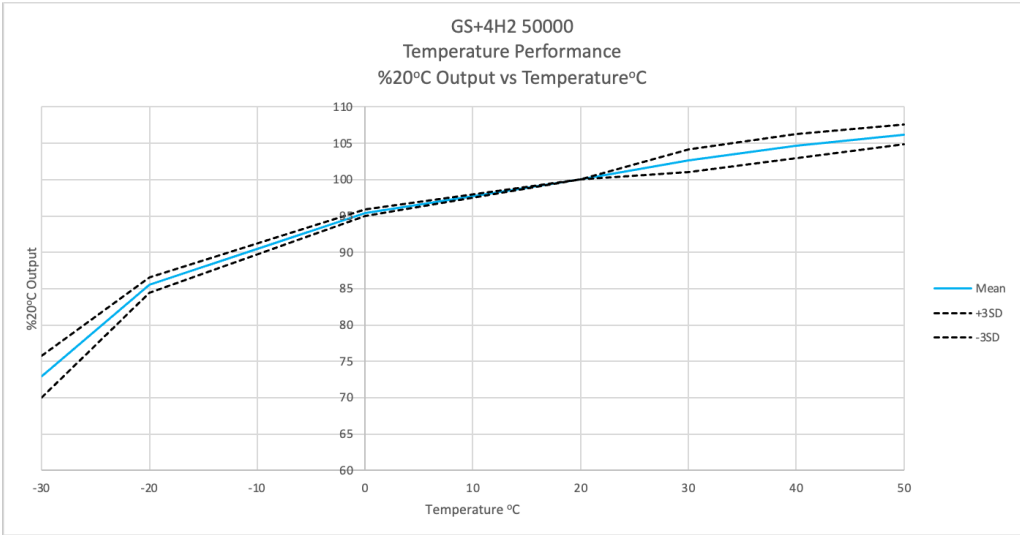
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GS+4H2 5%  
Hydrogen Sensor (H2)

Lifetime Details	
Long Term Output Drift	< 2% per month
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	> 24 months in air
Standard Warranty	12 months from date of dispatch

Cross - Sensitivity Data		
GAS	CONC.	ppm H2
Hydrogen Sulphide	25 ppm	<2ppm
Sulphur dioxide	20 ppm	0ppm
Carbon Monoxide	1000ppm	<300ppm
Nitric Oxide	50 ppm	<30ppm
Nitrogen Dioxide	20 ppm	0ppm
Chlorine	50 ppm	0ppm



Poisoning:

DD Scientific sensors are designed to operate in a wide range of harsh environments and conditions. However, it is important that exposure to high concentrations of solvent vapours is avoided, both during storage, fitting into instrument and operation.  
When using sensors on printed circuit boards (PCB's), degreasing agents should be used prior to the sensor being fitted.

Please note gluing or soldering direct to the pins of DD Scientific Ltd gas sensors will void warranty, please use PCB sockets when

Intrinsic Safety Data	
Maximum at 2000 ppm	0.3 mA
Maximum o/c Voltage	1.3 V
Maximum s/c Current	<1.0 A

**WARNING:** By the nature of the technology used, any electrochemical gas sensor offered by DD Scientific can potentially fail to meet specification without warning. Although DD Scientific Ltd makes every effort to ensure the reliability of our products of this type, where life safety is a performance requirement of the product, we recommend that all sensors and instruments using these sensors are checked for response to gas before use.

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