## **Product** Data Sheet

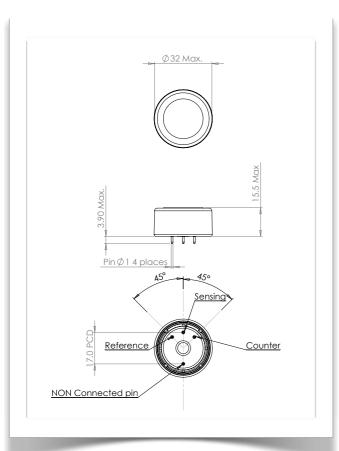


## P/N: GS+7H2S Compact H2S Sensor Ideal for Fixed systems

Ideal for Fixed systems Robust Sensor Proven Reliability

# Product Dimensions

All dimensions in mm All tolerances ±0.15 mm



Performance Characteristics		
Output signal	1700 ± 300 nA / ppm	
Typical Baseline Range (pure air)	< ±2 ppm equivalent	
Zero shift (-20°C to +40°C)	< ±2 ppm equivalent	
T90 Response Time	< 30 seconds	
Measurement Range	0 - 50 ppm	
Maximum Overload	500 ppm	
Linearity	Linear	
Repeatability	< ±2% of signal	
Recommended Load Resistor	10 ohms	
Environmental		
Temperature Range Continuous	-40°C to +50°C	
Pressure Range	Atmospheric ± 10%	
Operating Humidity Range	15% to 90% RH non- condensing	
Lifetime		
Long Term Output Drift	< 3% per annum	
Recommended Storage Temp	0°C to 20°C	
Expected Operating Life	12 months in air	
Storage Life	6 months in original packaging	
Standard Warranty	12 months from date of dispatch	
Intrinsic Safety Data		
Maximum at 2000 ppm	0.6 mA	
Maximum o/c Voltage	0.8 V	
Maximum s/c Current	<1.0 A	

#### Important Note:

All performance data is based on conditions at 20°C, 50%RH and 1 tam, using DD Scientific recommended circuitry.

Sensor performance is temperature dependant, and please contact DD Scientific for temperature performance other than 20  $^{\circ}\text{C}.$ 



### **Cross Sensitivity Data:**

DD Scientific sensors are designed to be highly specific to the target gas designed to detect, they will still respond to some degree to various gases. The Table below is not exclusive and other gases not included in the table may still cause the sensor to react.

Cross -Sensitivity Data		
GAS	CONC.	GS+7H2S
Carbon Monoxide	300 ppm	<3 ppm
Sulphur dioxide	5 ppm	<1 ppm
Hydrogen	100 ppm	<5 ppm
Nitric Oxide	35 ppm	<2 ppm
Ethylene	100 ppm	0 ppm

**Important Note:** The values above are typical values and should not be used as a basis for cross calibration. Cross sensitivities may not be linear and should not be scaled either. Above data based on gasing for 5 minutes using DD Scientific test equipment. Should be noted some cross interference break through will occur if gas is applied for a longer period of time.

### 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 vapors 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 connecting DD Scientific sensors.

**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.

Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with the company's policy of continued product improvement

DD SCIENTIFIC Limited reserves the right to make product changes without notice. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale. The products are always subject to a program of improvement and testing which may result in some changes in the characteristics quoted. As the products may be used by the client in circumstances beyond the knowledge and control of DD SCIENTIFIC Limited, we cannot give any warranty as to the relevance of these particulars to an application. It is the clients' responsibility to carry out the necessary tests to determine the usefulness of the products and to ensure their safety of operation in a particular application. Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time.