

**Introduction** The MceL H2 1000 is a miniature high quality robust H2 sensor, ideal for use in portable and fixed detectors

**Key Features:** Low profile, small diameter, fast response, minimal CO cross sensitivity

Performance Characteristics	
Output signal	20 ± 10nA /ppm
Typical Baseline Range (pure air)	±10ppm
T90 Response Time	< 40 seconds (Typically <25secs)
Measurement Range	0 - 1000ppm
Maximum Overload	2000ppm
Linearity (measurement range)	<5%
Repeatability	< ±2%
Recommended Load Resistor	10 ohms
Resolution (Electronics dependent)	<1ppm

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

Product Dimensions in mm

**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.

Lifetime Details	
Long Term Output Drift	< 25% signal per annum
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	200 ppm	<3ppm
Chlorine	15 ppm	0ppm
Nitrogen Dioxide	20 ppm	0ppm
Nitric Oxide	50ppm	<30ppm

**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

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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