#### **Product** Data Sheet

# P/N:GS+5NO



Introduction The GS+5NO is a premium high quality robust NO sensor, ideal for use in portable emissions gas detectors.

High stability, Screen Electrode to remove by products of NO oxidation, fast response and recovery, robust Key Features: environmental performance.

Net Sensor Performance Characteristics		Ø 28.50
Output signal	100 ± 20 nA / ppm	
Typical Baseline Range (pure air)	0 to 10 ppm NO equivalent	Mounting Lug
Filter	To remove the effect of SO2	
T90 Response Time	< 30 seconds	30.50
Measurement Range	0 - 1,000 ppm	
Maximum Overload	5,000 ppm	DETAIL A SCALE 3:1
Linearity	Linear up to 5,000 ppm	
Repeatability	< ±2% NO equivalent	φ1.50
Baseline Shift (20°C to 40°C)	30 ppm NO Equivalent	A
Recommended Load Resistor	10 ohms	Ø 17 PIN PCD Screen
Resolution (Electronics dependent)	< 1 ppm typical	
Bias Voltage	+300 mV	
Environmental Details		Counter - Reference - Working
Temperature Range Continuous	-20°C to +50°C	
Pressure Range	800 to 1200 mbar	
Operating Humidity Range	15% to 90% RH	Product Dimensions
Important Note: All performance data is based on conditions at 20°C, 50%RH and 1 atm, using DD Scientific recommended circuitry.		All dimensions in mm

Sensor performance is temperature dependent, and please contact DD Scientific for temperature performance other than 20°C.



All tolerances ±0.15 mm

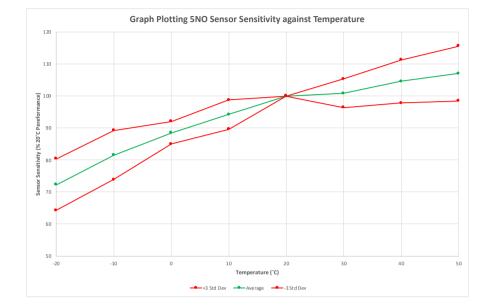
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# **GS+5NO** Nitric Oxide Sensor (NO)

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	24 months from date of dispatch	

Cross - Sensitivity Data		
GAS	CONC.	GS+5NO
Hydrogen Sulphide	25 ppm	0 ppm NO
Nitrogen Dioxide	200 ppm	< 30 ppm NO
Carbon Monoxide	1,000 ppm	< 5 ppm NO
Sulphur Dioxide	200 ppm	0 ppm NO
Hydrogen	100 ppm	0 ppm NO



#### 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.

Intrinsic Safety Data		GS+NO meets sensor requirements	
Maximum at 2000 ppm	0.3 mA	outlined in:	
Maximum o/c Voltage	1.3 V	EN50379	
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.

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 for 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 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. 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.

