## Product Data Sheet

# AQ+7NO2 Nitric Oxide Sensor (NO2)

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**Introduction** The AQ+7NO2 is a 4 Electrode NO<sub>2</sub> sensor designed for use in environmental air quality applications

Key Features: 4th electrode for improved baseline v temperature performance Internal filter for the removal of  $H_2S$  and  $O_3$ 

Net Sensor Performance Characteristics		Ø31.50 DO NOT OBSTRUCT
Output signal	400 ± 100 nA / ppm	
Typical Baseline Range (pure air)	+/- 100 nA (Net S-A Baseline)	
T90 Response Time	< 60 seconds	
Measurement Range	0 - 20 ppm	DETAIL A
Maximum Overload	200 ppm	SCALE 3 : 1
Linearity	Linear	
Repeatability	< ±2% NO <sub>2</sub> equivalent	
Recommended Load Resistor	20 ohms	45° - 250
Resolution (Electronics dependent)	< 10 ppb typical	Reference Working Counter

Environmental Details		Auxillary
Temperature Range Continuous	-30°C to +50°C	
Pressure Range	800 to 1200 mbar	Product Dimensions All dimensions in mm
Operating Humidity Range	15% to 90% RH	All tolerances ±0.15 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.



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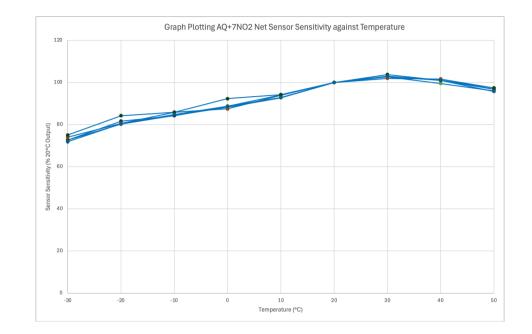
Ø 17 PIN PCD

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1	PPB

Lifetime Details		
Long Term Output Drift	< 5% 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 (Net Sensor Perfromance)				
GAS	Concentration (ppm)	AQ+7NO2 Output Equivalent		
Hydrogen Sulphide	2.5 ppm	< 5 ppb		
Carbon Monoxide	1 ppm	< 30 ppb		
Sulphur Dioxide	1 ppm	< 5 ppb		
Nitric Oxide	0.5 ppm	< 30 ppb		
Ozone	1 ppm	< 50 ppb		



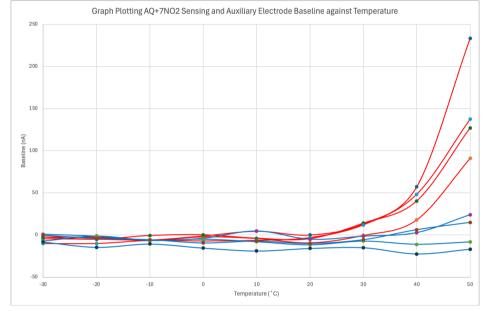
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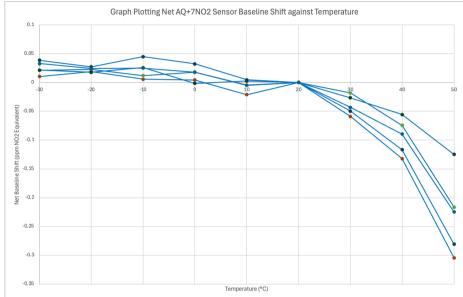


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#### Poisoning:

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 limit.

