## **Product** Data Sheet (DRAFT)

GS+4O3
Ozone Sensor (O<sub>3</sub>)

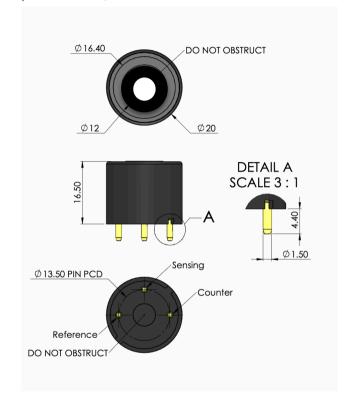
**Introduction** The GS+4O3 is a premium industrial ozone sensor, ideal for portable and fixed gas detectors.

Key Features: Fast response, low response to changes in RH conditions, high stability, robust environment performance, cost effective.

P/N: GS+403

Performance Characteristics		
Output signal	1600 ± 600 nA / ppm	
Typical Baseline Range (pure air)	±0.25 ppm O <sub>3</sub>	
T90 Response Time (Based on 3min exposure)	< 60 seconds	
Measurement Range	0 - 5 ppm	
Maximum Overload	20 ppm	
Linearity	Linear	
Repeatability	< ±2% O <sub>3</sub>	
Recommended Load Resistor	10 ohms	
Resolution (Electronics dependent)	<0.1 ppm	

Environmental Details		
Temperature Range Continuous	-20°C to +50°C	
Pressure Range	800 to 1200 mbar	
Operating Humidity Range	15% to 90% RH	



Product Dimensions
All dimensions in mm
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.



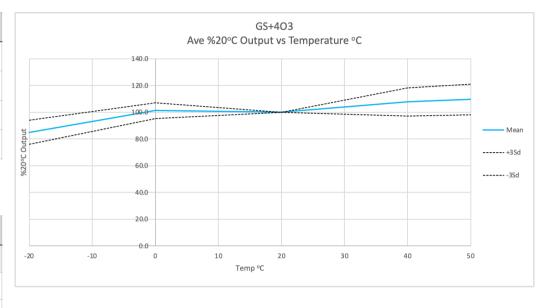
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Lifetime Details		
Long Term Output Drift	< 20% per annum	
Recommended Storage Temp	0°C to 20°C	
Expected Operating Life	> 24 months in air	
Standard Warranty	12 months from date of dispatch	

Cross - Sensitivity Data				
GAS	CONC.	ppmO3 equiv		
Carbon Monoxide	200 ppm	<0.5		
Sulphur dioxide	20 ppm	≈ -12		
Nitrogen dioxide	20 ppm	≈16		
Nitric Oxide	50 ppm	< -0.5		
Hydrogen Sulphide*	25 ppm	-35		
Carbon Dioxide	5000 ppm	0		



## Poisoning

P/N: GS+403

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	

Note \*
H2S will cause temporary loss in sensitivity to
Ozone

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 ŚCIENTIFIC 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 of newly supplied sensors. Output signal can drift below the lower limit over time.

