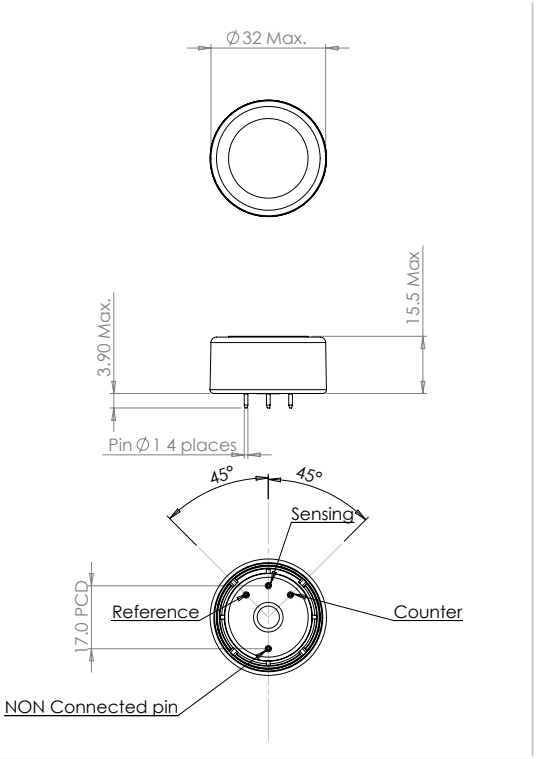
Product Data Sheet

P/N: GS+7NH3 Compact Ammonia Sensor

Ideal for Fixed systems
Robust Sensor

Product Dimensions

All dimensions in mm
All tolerances ±0.15 mm



Performance Characteristics	
Output signal	120 ± 50 nA / ppm
Typical Baseline Range (pure air)	< ±8 ppm equivalent
Zero shift (-20°C to +40°C)	< ±3 ppm equivalent
T90 Response Time	< 90 seconds
Measurement Range	0 - 50 ppm
Maximum Overload	500 ppm
Linearity	Within ±2%
Repeatability	< ±10% of signal
Recommended Load Resistor	10 ohms
Bias voltage	+300 mV
Environmental	
Temperature Range Continuous	-20°C to +50°C
Temperature Range Intermittent	-40°C to +55°C
Pressure Range	Atmospheric ± 10%
Operating Humidity Range	15% to 90% RH non-condensing
Lifetime	
Long Term Output Drift	< 5% per annum
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	1 years in air
Storage Life	6 months in original packaging
Standard Warranty	12 months from date of dispatch
Intrinsic Safety Data	
Maximum at 2000 ppm	0.3 mA
Maximum o/c Voltage	1.3 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°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+7NH3
Hydrogen Sulphide	15 ppm	<30 ppm
Sulphur dioxide	5 ppm	<1 ppm
Hydrogen	100 ppm	<5 ppm
Nitric Oxide	35 ppm	<7 ppm
Carbon Monoxide	300 ppm	<9 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.