

**Introduction** The GS+4NH3 range of sensors are non-biased ammonia sensors great for fixed and portable detectors.

**Key Features:** Unbiased, fast response and recovery, robust environment performance, high stability.

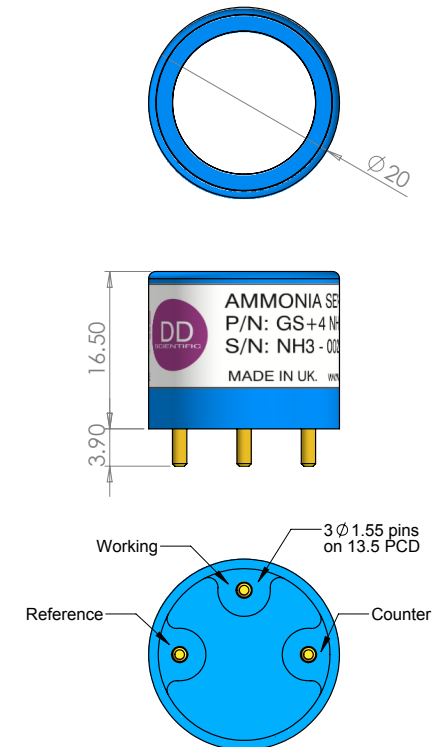
| Performance Characteristics        |                        |
|------------------------------------|------------------------|
| Output signal                      | 4 ± 2 nA / ppm         |
| Typical Baseline Range (pure air)  | ±30 ppm NH3 equivalent |
| T90 Response Time                  | < 120 seconds          |
| Measurement Range                  | 0 - 5000 ppm           |
| Maximum Overload                   | 10000 ppm              |
| Linearity                          | Linear                 |
| Repeatability                      | ± 5%                   |
| Recommended Load Resistor          | 10 Ohms                |
| Resolution (Electronics dependent) | 10ppm                  |

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

**Important Note:**

All performance data is based on conditions at 20°C, 50%RH and 1 atm, using DD Scientific recommended circuitry.

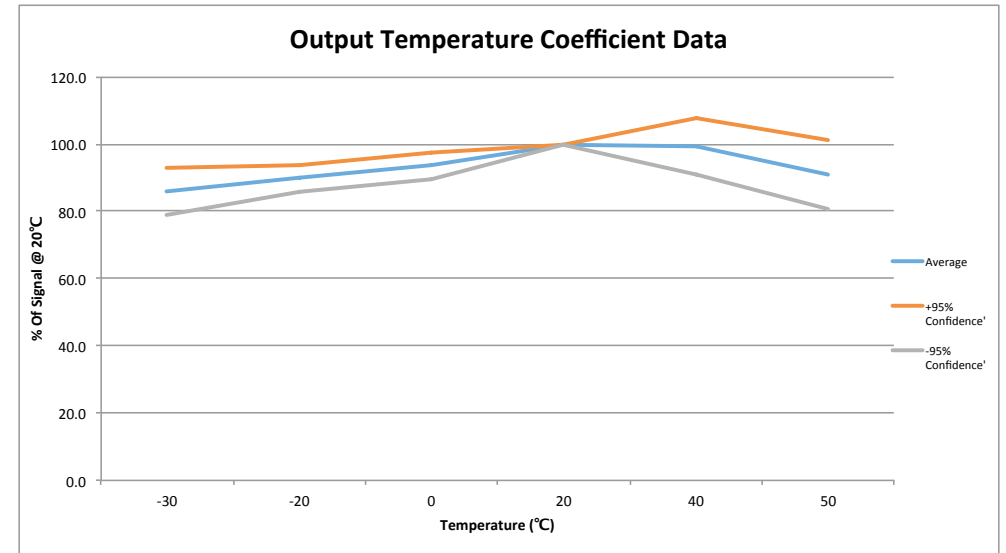
Sensor performance is temperature dependent, and please contact DD Scientific for temperature performance other than 20°C.



**Product Dimensions**  
All dimensions in mm  
All tolerances ±0.15 mm

| 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.    | GS+4NH3-10000 |
| Carbon Monoxide          | 500 ppm  | 0 ppm         |
| Hydrogen Sulphide        | 25 ppm   | 35 ppm        |
| Sulphur dioxide          | 20 ppm   | -6 ppm        |
| Nitrogen Dioxide         | 5 ppm    | -5 ppm        |
| Nitric Oxide             | 50 ppm   | 0 ppm         |
| Hydrogen                 | 100 ppm  | 0 ppm         |
| Ethanol                  | 100 ppm  | 0 ppm         |
| Carbon Dioxide           | 5000 ppm | 0 ppm         |



**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 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 |

**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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