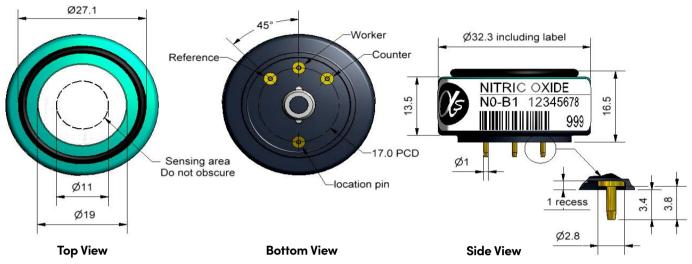
www.dorgean.com

Technical specifications Version 1.0

NO-B1 Nitric Oxide Sensor



Dimensions are in millimetres (± 0.1 mm).

Performance	Sensitivity Response time Zero current Resolution Range Linearity Overgas limit	nA/ppm in 50ppm NO t90 (s) from zero to 50ppm NO ppm equivalent in zero air RMS noise (ppm equivalent) ppm NO limit of performance warranty ppm error at full scale, linear at zero and 50ppm N maximum ppm for stable response to gas pulse	400 to 620 < 30 0 to +4 < 0.15 250 O -20 to -25 1,200
Lifetime	Zero drift Sensitivity drift Operating life	ppm equivalent change/year in lab air % change/year in lab air, monthly test months until 80% original signal (24-month warran	< 0.3 < 5 ted) > 24
Environmental	Sensitivity @ -20°C Sensitivity @ 50°C Zero @ -20°C Zero @ 50°C	% (output @ -20°C/output @ 20°C) @ 50ppm NO % (output @ 50°C/output @ 20°C) @ 50ppm NO ppm equivalent change from 20°C ppm equivalent change from 20°C	89 to 98 97 to 104 < 0 to -2 < 6 to 20
Cross Sensitivity	H ₂ S sensitivity NO ₂ sensitivity CI ₂ sensitivity SO ₂ sensitivity H ₂ sensitivity CO sensitivity NH ₃ sensitivity CO ₂ sensitivity	% measured gas @ 20ppm H₂S % measured gas @ 10ppm NO₂ % measured gas @ 10ppm Cl₂ % measured gas @ 20ppm SO₂ % measured gas @ 400ppm H₂ % measured gas @ 400ppm CO % measured gas @ 20ppm NH₃ % measured gas @ 5% volume CO₂	< 60 < 5 < 5 < 4 < 0.1 < 0.1 < 0.1 < 0.1
Key Specifications	Bias voltage Temperature range Pressure range Humidity range Storage period Load resistor Weight	mV (working electrode potential is above ground) $^{\circ}\text{C}$ kPa $^{\circ}\text{C}$ rh continuous months @ 3 to 20 $^{\circ}\text{C}$ (stored in sealed pot) $^{\circ}$ (recommended) $^{\circ}\text{G}$	+300 -30 to 50 80 to 120 15 to 90 6 10 to 47 < 13

Figure 1 Sensitivity Temperature Dependence

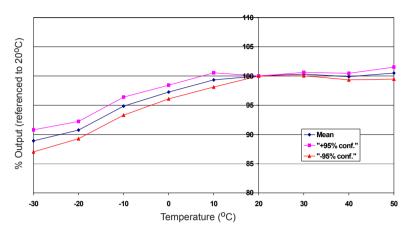


Figure 1 shows the variation in sensitivity caused by changes in temperature.

This data is taken from a typical batch of sensors.

The mean and ±95% confidence intervals are shown.

Figure 2 Zero Temperature Dependence

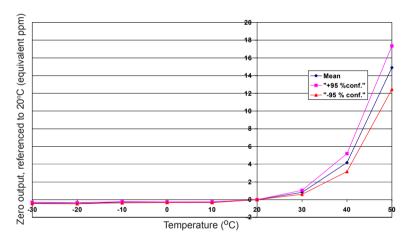
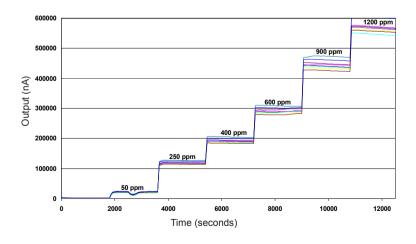


Figure 2 shows the variation in zero output caused by changes in temperature, expressed as ppm gas equivalent, referenced to zero at 20°C.

This data is taken from a typical batch of sensors. The mean and ±95% confidence intervals are shown.

Figure 3 NO-B1 Response to 1,200ppm NO



The NO-B1 responds rapidly to gas concentrations up to 1,200ppm NO.

This data is taken from a typical batch of sensors.

At the end of the product's life, do not dispose of any electronic sensor, component or instrument in the domestic waste, but contact the instrument manufacturer, Alphasense or its distributor for disposal instructions. NOTE: all sensors are tested at ambient environmental conditions unless otherwise stated. As applications of use are outside our control, the information provided is given without legal responsibility. Customers should test under their own conditions, to ensure that the sensors are suitable for their own requirements.

In the interest of continued product improvement, we reserve the right to change design features and specifications without prior notification. The data contained in this document is for guidance only. Alphasense Ltd accepts no liability for any consequential losses, injury or damage resulting from the use of this document or the information contained within.(©ALPHASENSE LTD) Doc. Ref. NO-B1/JUN22