**PERFORMANCE**

- **Sensitivity**: nA/ppm at 2ppm NO
- **Response time**: t<sub>90</sub> (s) from zero to 2ppm NO < 45
- **Zero current**: nA in zero air at 20°C 30 to 140
- **Noise**: ±2 standard deviations (ppb equivalent) 15
- **Range**: ppm NO limit of performance warranty 20
- **Linearity**: ppb error at full scale, linear at zero and 5ppm NO < ±1
- **Overgas limit**: maximum ppm for stable response to gas pulse 50

*Tested with Alphasense ISB low noise circuit*

**LIFETIME**

- **Zero drift**: ppb equivalent change/year in lab air 0 to 50
- **Sensitivity drift**: % change/year in lab air, monthly test 0 to -20
- **Operating life**: months until 50% original signal (24 month warranted) > 24

**ENVIRONMENTAL**

- **Sensitivity @ -20°C**: (% output @ -20°C/output @ 20°C) @ 2ppm NO 60 to 90
- **Sensitivity @ 40°C**: (% output @ 50°C/output @ 20°C) @ 2ppm NO 97 to 110
- **Zero @ -20°C**: nA 0 to 30
- **Zero @ 40°C**: nA 100 to 200

**CROSS SENSITIVITY**

- **H<sub>2</sub>S sensitivity**: % measured gas @ 5ppm H<sub>2</sub>S (after 3 minutes) < 10
- **NO<sub>2</sub> sensitivity**: % measured gas @ 5ppm NO<sub>2</sub> (after 3 minutes) < 4
- **Cl<sub>2</sub> sensitivity**: % measured gas @ 5ppm Cl<sub>2</sub> < 3
- **SO<sub>2</sub> sensitivity**: % measured gas @ 5ppm SO<sub>2</sub> < 5
- **H<sub>2</sub> sensitivity**: % measured gas @ 100ppm H<sub>2</sub> < 0.1
- **CO sensitivity**: % measured gas @ 5ppm CO < 0.3
- **NH<sub>3</sub> sensitivity**: % measured gas @ 5ppm NH<sub>3</sub> < 0.1
- **CO<sub>2</sub> sensitivity**: % measured gas @ 5% Vol CO<sub>2</sub> < 0.1
- **O<sub>3</sub> sensitivity**: % measured gas @ 100ppb O<sub>3</sub> < 0.1
- **Halothane sensitivity**: % measured gas @ 100ppm Halothane < 0.1

**KEY SPECIFICATIONS**

- **Bias voltage**: mV (working electrode potential is above reference electrode) +200
- **Temperature range**: °C -30 to 40
- **Pressure range**: kPa 80 to 120
- **Humidity range**: % rh continuous 15 to 85
- **Storage period**: months @ 3 to 20°C (stored in sealed pot) 6
- **Load resistor**: Ω (ISB circuit is recommended) 33 to 100
- **Weight**: g < 13

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**NOTE:** All sensors are tested at ambient environmental conditions, with 10 ohm load resistor, 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.

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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.
Figure 2 shows the temperature dependence of sensitivity at 2ppm NO. This data is taken from a typical batch of sensors.

Figure 3 shows the variation in zero output of the working electrode caused by changes in temperature, expressed as nA. This data is taken from a typical batch of sensors. Contact Alphasense for further information on zero current correction.

Figure 4 shows response to 200ppb NO. Use of Alphasense ISB circuit reduces noise to 15ppb with the opportunity of digital smoothing to reduce noise even further.