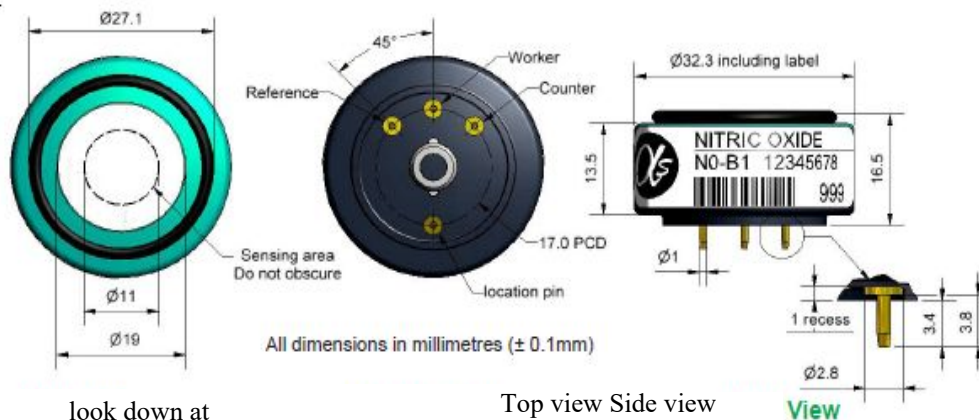


NO-B1 Nitric Oxide Sensor



Figure 1 NO-B1 Schematic Diagram



Performance		Sensitivity in 50ppmNO (nA/ppm)	400~620
reaction time	Time from zero to 50ppmNO (s)		< 30
zero current	Equivalent ppm value in zero air		0~+4
resolution ratio	RMS noise (equivalent ppm value)		< 0.15
range	Measuring limits (ppm) that guarantee product performance		250
degree of linearity	The ppm value of the full scale error is linear from 0 to 50ppm		-20~-25
overload	Maximum ppm value of gas pulse stabilized reaction		1200
life span	zero drift	Equivalent ppm values that change in the laboratory air from year to year	< 0.3
	sensitivity drift	Percentage change in laboratory air over the year, measured monthly	< 5
	working life	Number of months to which the output is reduced to 80% of the original signal (24 months guaranteed)	> 24
environment	-20°C sensitivity	50ppmNO when, (-20°C output/20°C output)%	89~98
	Sensitivity at 50°C	50ppmNO when, (50°C output/20°C output)%	97~104
	-20°C when zero point	Change in equivalent ppm values with reference to 0°C 20	< 0~-2
	50°C at zero point	Change in equivalent ppm values with reference to 20°C zero	< 6~20
cross sensitivity	H ₂ S	Gas sensitivity percentage at 20ppmH ₂ S	< 60
	NO ₂	Gas sensitivity percentage ₂ measured at 10ppmNO	< 5
	Cl ₂	Sensitivity percentage of gas measured ₂ at 10ppmCl	< 5
	SO ₂	Gas sensitivity percentage ₂ at 20ppmSO	< 4
	H ₂	Gas sensitivity percentage measured at 400ppmH ₂	< 0.1
	CO	Gas sensitivity percentage measured at 400ppmCO	< 0.1
	NH ₃	Percentage sensitivity of gas ₃ at 20ppmNH	< 0.1
	CO ₂	Sensitivity percentage of gas measured at 5%Vol CO ₂	< 0.1
key parameter	bias voltage	mV (working electrode potential greater than zero)	+300
	temperature range	°C	-30~50
	pressure limit	kPa	80~120
	Humidity range	Percentage of continuous relative humidity	15~90
	Storage period	Number of months for preservation from 3 to 20°C (to be kept in a sealed tank)	6
	load resistance	Ω (For optimized performance)	10~47
	weight	g	< 13

Figure 2 Sensitivity Temperature Characteristics

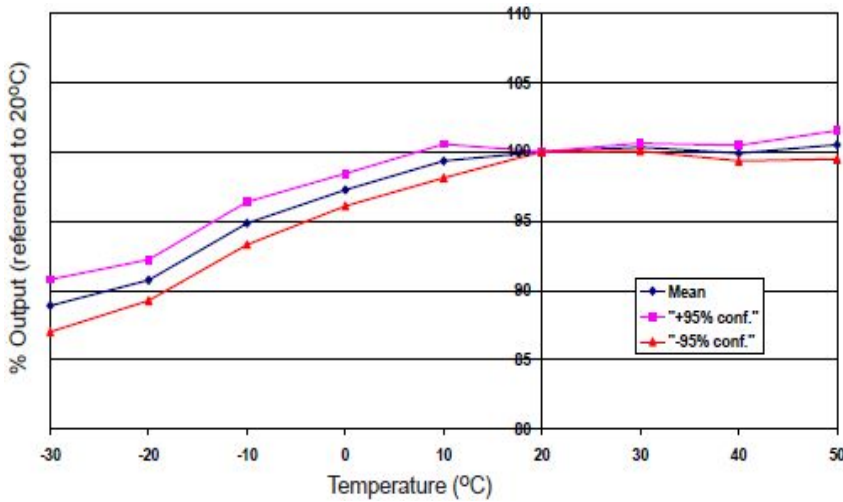


Figure 2 shows the change of sensor sensitivity caused by temperature changes.

The data were collected from typical batches of transducers. Figure 2 shows the average and $\pm 95\%$ confidence interval of the output percentage (reference 20°C).

Figure 3 Zero Temperature Characteristics

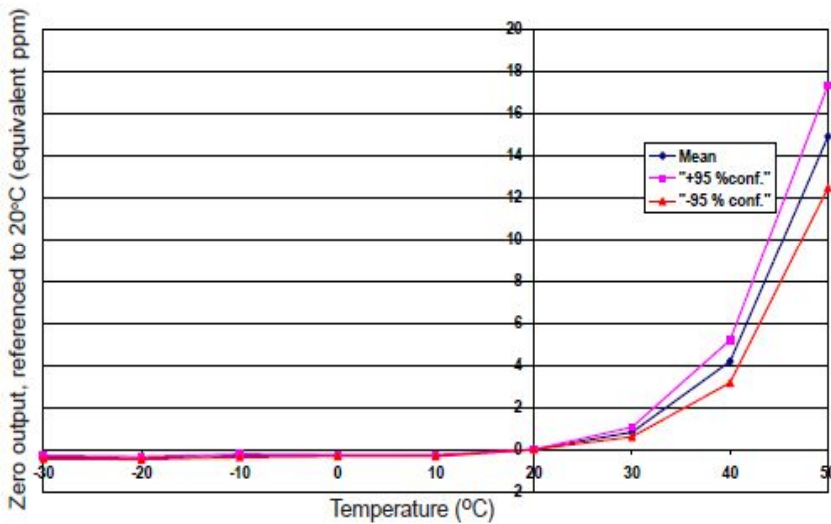
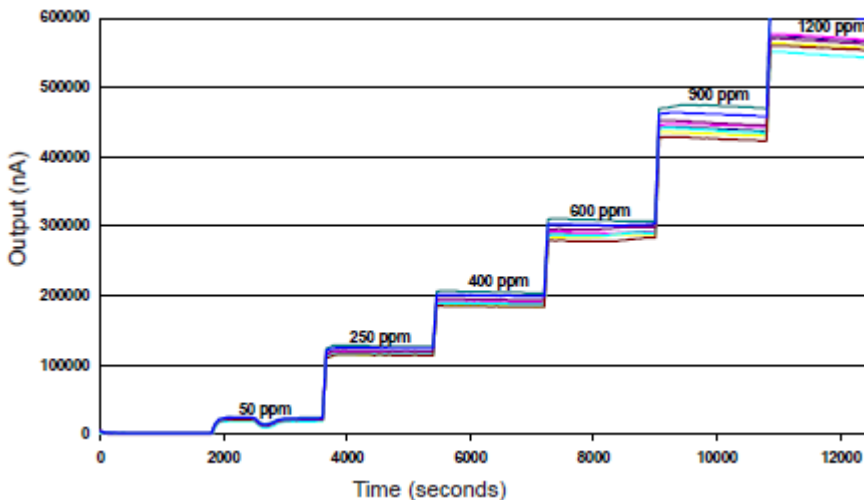


Figure 3 shows the change in zero point output caused by temperature changes, expressed as equivalent ppm values, with reference to the zero point at 20°C.

The data are taken from a typical batch of sensors. Figure 3 shows the mean and $\pm 95\%$ confidence interval of the zero output percentage (reference 20°C).

Figure 4 Reaction of NO-B1 to 0-1200ppm NO



The NO-B1 transducer reacts quickly to NO in the concentration range of 0-1200 ppm, as shown in Figure 4.

Data was taken from a typical batch of sensors.