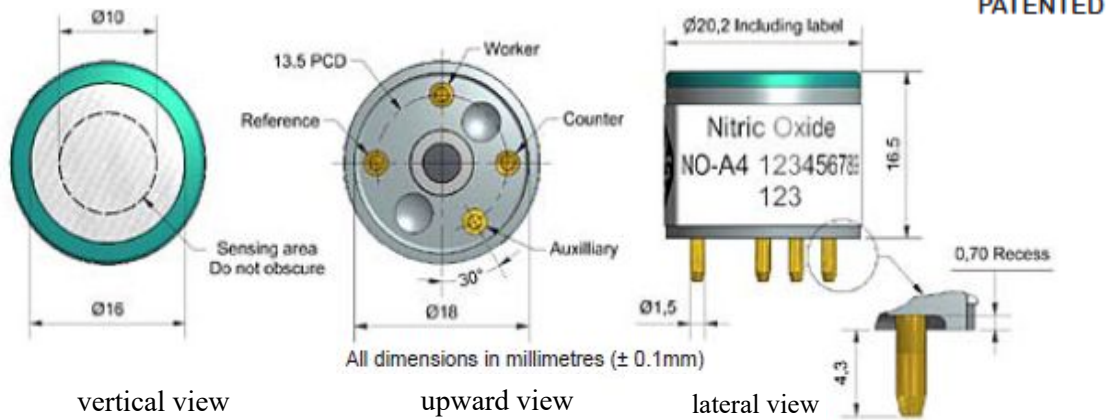


NO-A4 Nitric Oxide Sensor Four Electrodes



Figure 1 NO-A4 Schematic Diagram



function	sensitivity	Sensitivity in 2ppmNO (nA/ppm)	350~550
	reaction time	Time from zero to 2ppmNO (s)	< 25
	zero current	Output at 20°C in zero grade air (nA)	10~150
	noise *	Standard deviation ± 2 (equivalent ppb)	80
	range	Measuring limits (ppm) that guarantee product performance	20
	degree of linearity	The ppm value of the full scale error is linear between 0 and 5ppm	< ±1
	overload	Maximum ppm value of gas pulse stabilized reaction	50
	* The test uses Alphasense AFE low noise circuit board		
life span	zero drift	Equivalent ppb values that change with the year in the laboratory air	0~50
	sensitivity drift	Percentage change in laboratory air over the year, measured monthly	0~-20
	working life	Number of months to which the output is reduced to 50% of the original signal (24 months guaranteed)	> 24
environment	-20°C sensitivity	2ppmNO when, (output at -20°C/20°C output)%	35~60
	Sensitivity at 50°C	2ppmNO when, (50°C output/20°C output)%	120~135
	-20°C when zero point	Change in nA with reference to 0°C 20	-10~-50
	50°C at zero point	Change in nA with reference to 0°C 20	200~350
cross sensitivity	H ₂ S	Gas sensitivity percentage at 5ppmH ₂ S(3 minutes)	< 20
	NO ₂	Gas sensitivity percentage ₂ at 5ppmNO(after 3 minutes)	< 7
	Cl ₂	Gas sensitivity percentage measured ₂ at 5ppmCl	< 4
	SO ₂	Gas sensitivity percentage ₂ at 5ppmSO	< 4
	H ₂	Gas sensitivity percentage measured at 100ppmH ₂	< 0.1
	CO	Gas sensitivity percentage measured at 5ppmCO	< 0.3
	NH ₃	Gas sensitivity percentage ₃ measured at 5ppmNH	< 0.1
	CO ₂	5%Vol CO ₂ gas sensitivity percentage measured	< 0.1
halothane	Gas sensitivity percentage measured at 100ppm fluorine	< 0.1	
key parameter	bias voltage	mV (working electrode potential greater than reference electrode potential)	+200
	temperature range	°C	-30~50
	pressure limit	kPa	80~120
	Humidity range	Percentage of continuous relative humidity	15~85
	Storage period	Number of months for preservation from 3 to 20°C (to be kept in a sealed tank)	6
	load resistance	Ω (Recommended use of AFE circuit board)	33~100
	weight	g	< 6

Figure 2 Sensitivity Temperature Characteristics

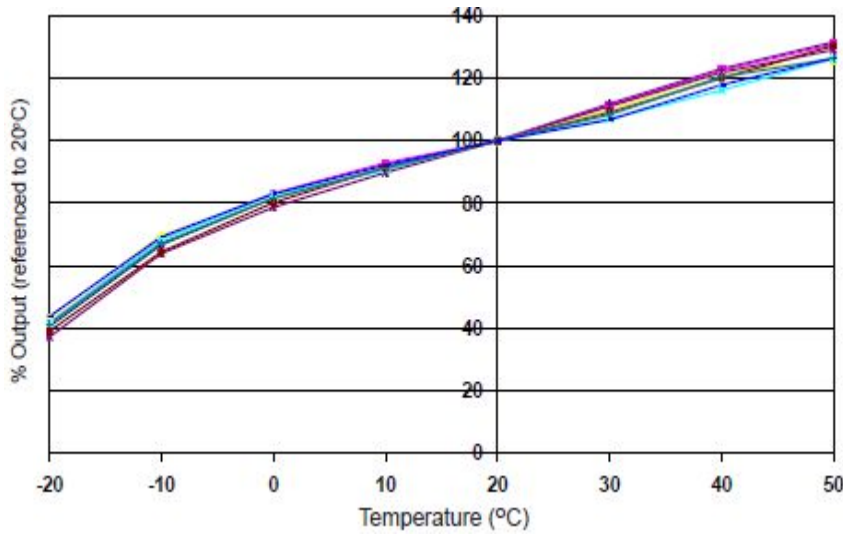


FIG. 2 shows the temperature characteristics of sensitivity at 2ppm NO.

Data was collected from typical batch sensors.

Figure 3 Zero Temperature Characteristics

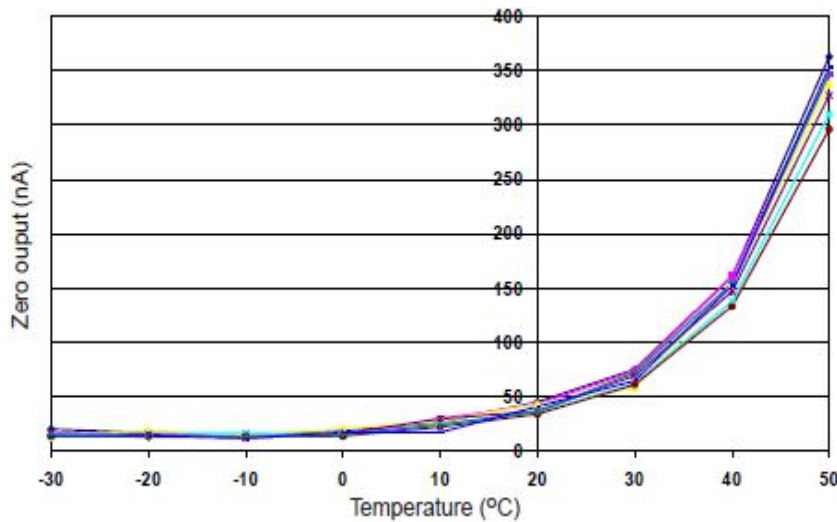


Figure 3 shows the zero point output change caused by temperature change, in units of nA.

Data was taken from a typical batch of sensors.

For more information about zero current correction, contact Alphasense.

Figure 4 Reaction of 200ppb NO

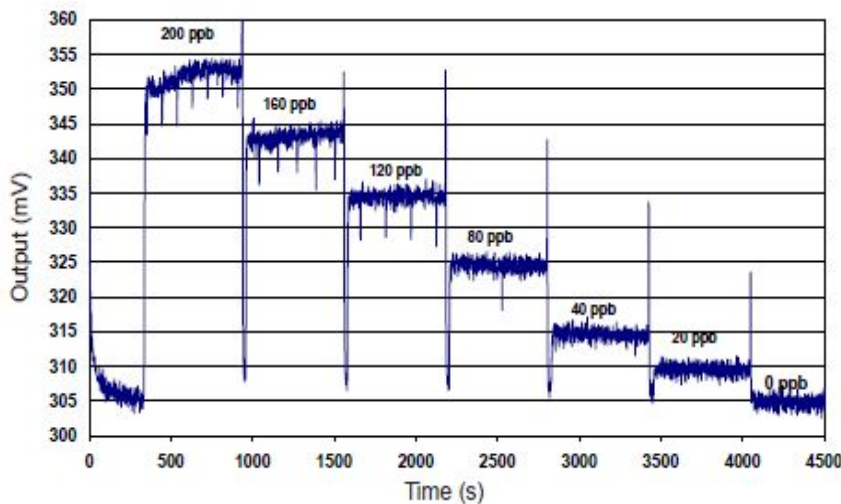


Figure 4 shows the response of the transducer to NO from 200~0ppb. The test was carried out using an AFE circuit board.

深圳市杰晟兴电子有限公司 JM Components Limited

地址: 深圳市福田区中航路7号鼎诚国际大厦南座2007室
 手机: 13662266995 马少良 电话: 0755-83951311
 官网: cn-sensor.com

邮编: 518031
 传真: 0755-83952401
 电邮: jackson@jmcomponents.com