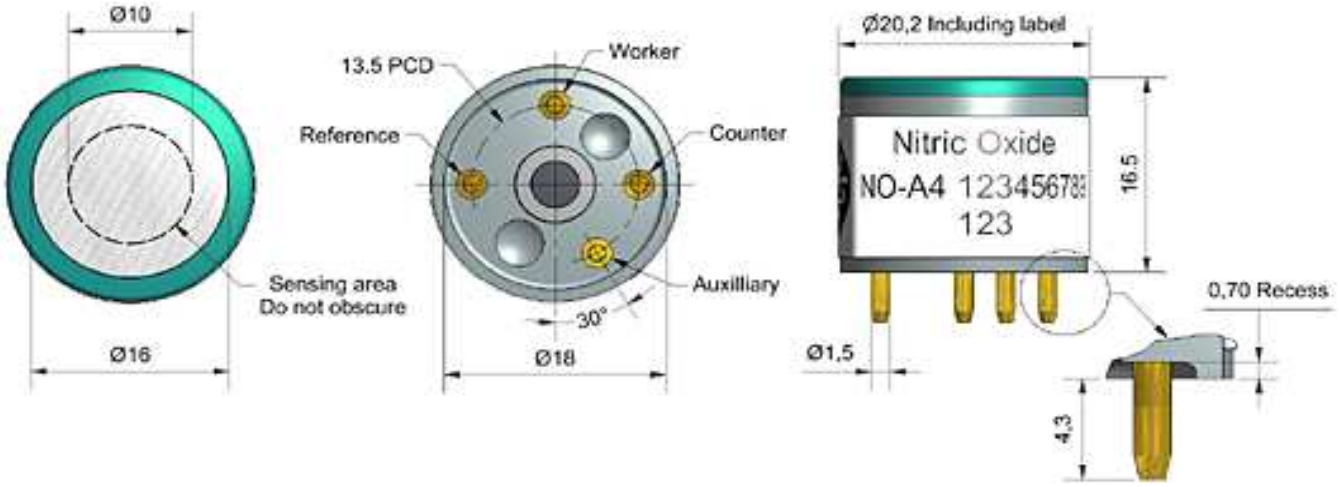
ЗАКАЗАТЬ: NO-A4 сенсор оксида азота 0-20 ppm

NO-A4 Nitric Oxide Sensor – 4-Electrode



Top View **Bottom View** **Side View**

Dimensions are in millimetres (± 0.1 mm).

Performance	Sensitivity	nA/ppm in 2ppm NO	350 to 550
	Response time	t90 (s) from zero to 2ppm NO	< 25
	Zero current	nA in zero air at 20°C	10 to 150
	Noise*	± 2 standard deviations (ppb equivalent)	80
	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 AFE 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	35 to 60
	Sensitivity @ 50°C	% (output @ 50°C/output @ 20°C) @ 2ppm NO	120 to 135
	Zero @ -20°C	nA change from 20°C	-10 to -50
	Zero @ 50°C	nA change from 20°C	200 to 350

Cross Sensitivity	H_2S	sensitivity	% measured gas @ 5ppm	H_2S (after 3 mins)	< 20
	NO_2	sensitivity	% measured gas @ 5ppm	NO_2 (after 3 mins)	< 7
	Cl_2	sensitivity	% measured gas @ 5ppm	Cl_2	< 4
	SO_2	sensitivity	% measured gas @ 5ppm	SO_2	< 4
	H_2	sensitivity	% measured gas @ 100ppm	H_2	< 0.1
	CO	sensitivity	% measured gas @ 5ppm	CO	< 0.3
	NH_3	sensitivity	% measured gas @ 5ppm	NH_3	< 0.1
	CO_2	sensitivity	% measured gas @ 5% volume	CO_2	< 0.1
	Halothane	sensitivity	@ 100ppm	Halothane	< 0.1

Key Specifications	Bias voltage	mV (working electrode potential is above reference electrode)	+200
	Temperature range	°C	-30 to 50
	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 (AFE circuit is recommended)	33 to 100
	Weight	g	< 6

Figure 1 Sensitivity Temperature Dependence

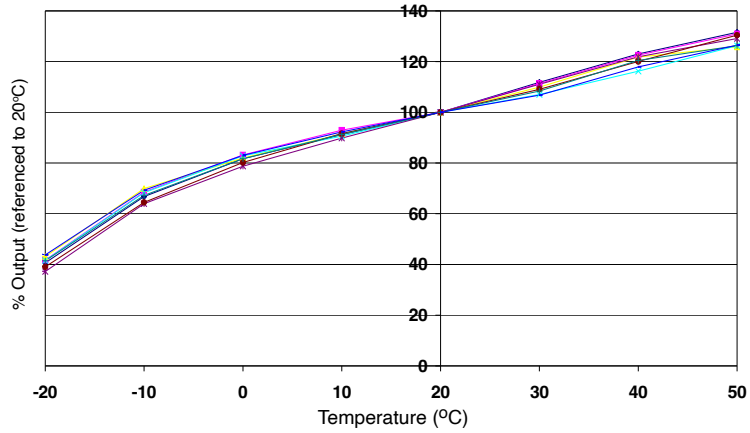


Figure 1 shows the temperature dependence of sensitivity at 2ppm NO.

This data is taken from a typical batch of sensors.

Figure 2 Zero Temperature Dependence

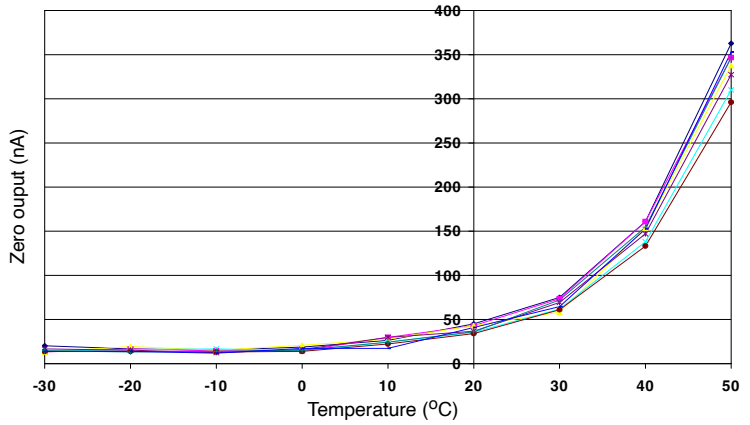


Figure 2 shows the variation in zero output of the working electrode caused by changes in temperature, expressed as nA.

This data is taken from a typical batch of sensors.

Contact Alphasense for futher information on zero current correction.

Figure 3 Response to 200ppb NO

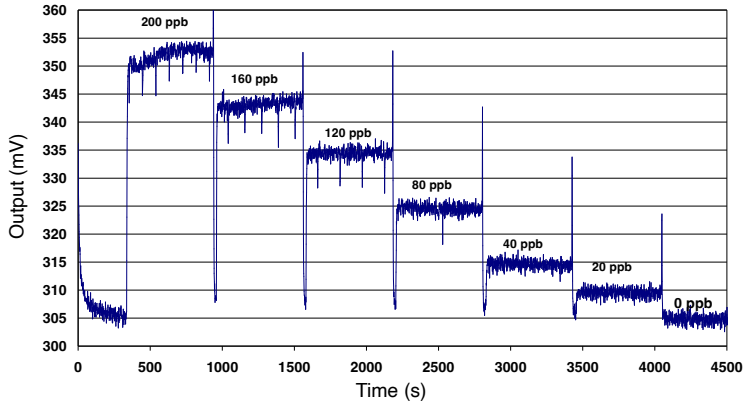


Figure 3 shows response to 200ppb NO. This was tested with the ISB circuit.

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.

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-A4/JUN22

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