

**SPECIFICATION SHEET for AMMONIA SENSOR with FAST RESPONSE  
TYPE NH3/CR-5000****PERFORMANCE CHARACTERISTICS**

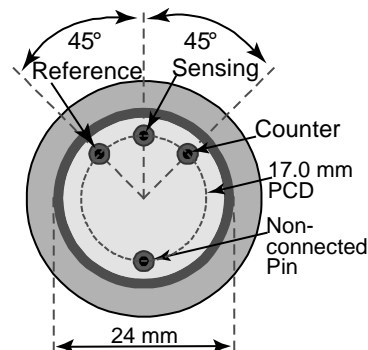
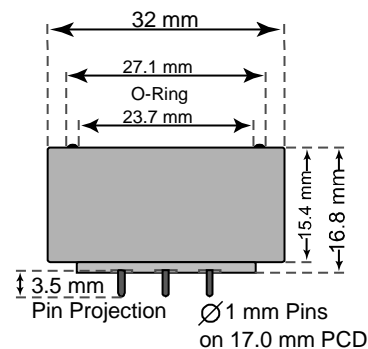
Nominal Range	0 – 5'000 ppm
Maximum Overload	7'000 ppm
Expected Operation Life	2 years in air
Output Signal	7 ± 2 nA/ppm
Resolution	15 ppm
Temperature Range	- 10 °C to 40 °C
Pressure Range	Atmospheric <sup>1)</sup>
Pressure Coefficient	No data
T <sub>90</sub> Response Time	< 50 sec
Relative Humidity Range	15 % to 90 % R.H. non-condensing
Baseline	0 ppm ± 60 ppm
Maximum Zero Shift (+20°C to +40°C)	-120 ppm
Typical Long Term Output Drift	< 5% per 6 months
Recommended Load Resistor	10 Ohm
Bias Voltage	Not allowed
Repeatability	< 3 % of signal
Output Linearity	< 5 % full scale
Humidity Effect <sup>2)</sup>	< 60 ppm

<sup>1)</sup> no data for deviations<sup>2)</sup> abrupt changes in rel. humidity causes a short term transient signal**CROSS-SENSITIVITY DATA**

Interfering Gas	Concentration	Reading
CO	300 ppm	0 ppm
H <sub>2</sub>	200 ppm	0 ppm
SO <sub>2</sub> <sup>3)</sup>	20 ppm	-2 ppm
H <sub>2</sub> S <sup>3)</sup>	20 ppm	2 ppm
NO <sup>3)</sup>	20 ppm	~0 ppm
NO <sub>2</sub> <sup>3)</sup>	20 ppm	-6 ppm
Cl <sub>2</sub>	20 ppm	-15 ppm
CO <sub>2</sub>	2 %	0 ppm

<sup>3)</sup> Long term exposures and high concentrations may affect the performance characteristicsPerformance data conditions:  
20 °C, 50% RH and 1013 mbar**PHYSICAL CHARACTERISTICS**

Weight	~ 13 g
Position Sensitivity	None
Storage Life	Six months in container
Recommended Storage Temperature	5 °C – 20 °C
Warranty Period	12 months from date of dispatch

**Compact-Size Outline Dimensions****BOTTOM VIEW****SIDE VIEW****APPLICATIONS**Leak Detection  
Safety and Environmental Control

REV.: 4/2006

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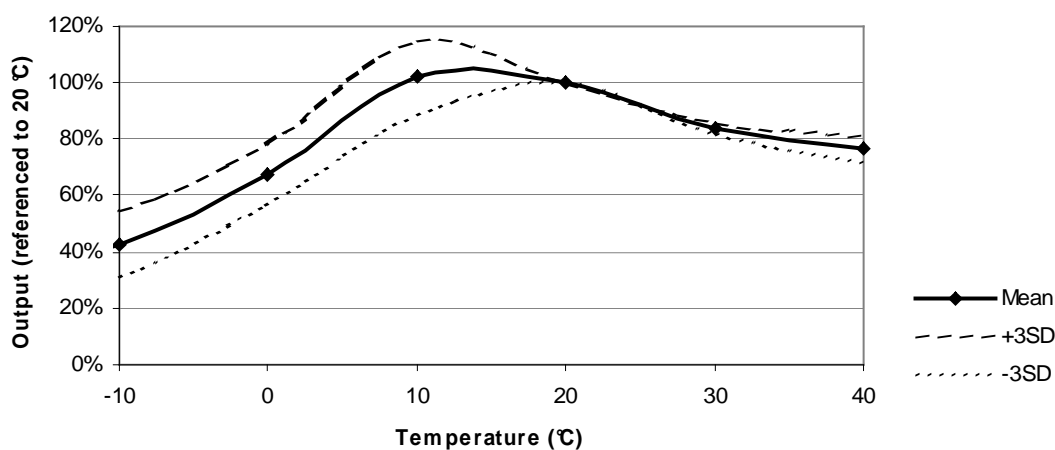
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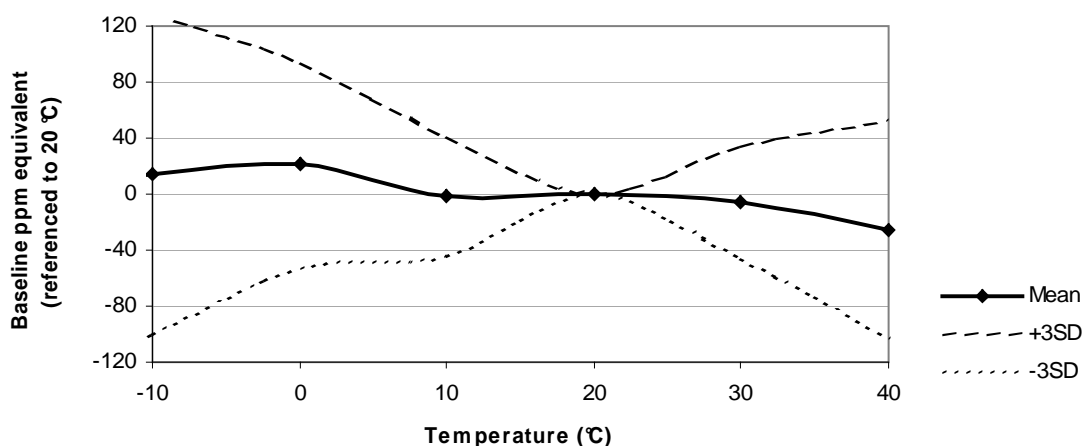
### TEMPERATURE DEPENDENCE

The output of an electrochemical sensor varies with temperature. The graphs below show the variation in output with temperature for this type of sensor. The results are shown in the graphs as a mean for a batch of sensors, along with confidence intervals corresponding to  $\pm 3$  times the standard deviation. The sensitivity dependence is expressed as a percentage of the signal at 20 °C. The shift in baseline is shown in ppm referenced to 20 °C.

#### Sensitivity Temperature Dependence



#### Baseline Temperature Dependence



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