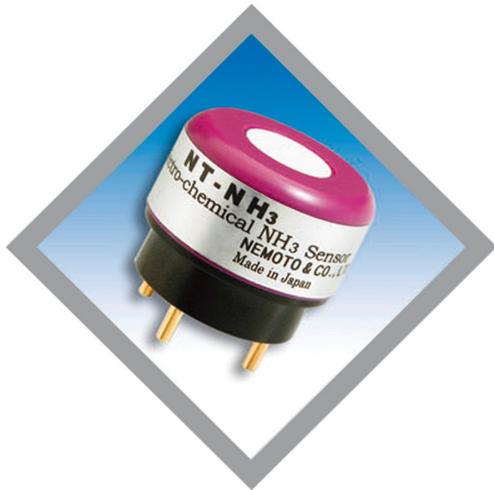




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TECHNICAL INFORMATION SHEET: NT-NH3-1000 Electrochemical Ammonia Sensor



General Description

The NT-NH3-1000 is a new electrochemical gas sensor with 3 electrodes for the detection of Ammonia (NH₃) in a variety of gas detection applications. Exhibiting high performance with long-term stability, this compact (20.4mm dia) sensor is suitable for Fixed Gas Detection heads.

Nemoto's porous electrode technology enables accurate gas detection with high sensitivity. The mechanical design of the sensor gives optimum gas diffusion characteristics, and the hermetically sealed enclosure prevents costly electrolyte leakage.

Specifications NT-NH3-1000

Detectable gas:	Ammonia
Detection range:	0 – 1000 ppm
Output current:	8 +/- 4 nA/ppm
Reproducibility:	+/- 10%
Zero in clean air:	< +/-50 ppm equivalent
Output drift in air:	< 2%/month
Response time (T _{90%}):	<120 sec calculated from 5 min exposure time
Temperature drift (zero)	<75ppm (-30to +50°C)
Expected lifetime:	2 years

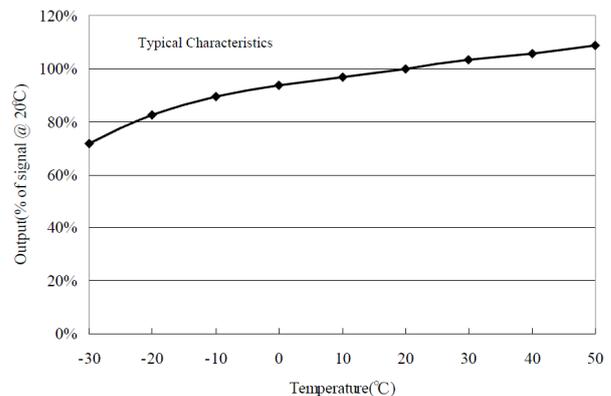
Operating conditions:

Operating temperature:	-30°C to + 50°C
Humidity range (constant)	15-90% RH
Pressure:	1 atm +/- 10%
Recommended resistor:	10 ohms
Bias voltage:	Not required
Position Sensitivity	None
Recommended Storage temp	0-20°C
Storage time (without compromising lifetime)	<6 months

Physical Characteristics

Case material	PPO
Cap Color	Purple
Weight	5g (approx.)

Typical Temperature Dependence



Further performance data and information on operating characteristics will be available in the Characterisation Document CD-NT-NH3-1000

Nemoto has a policy of continuous development and improvement of its products. As such the specification for the device outlined in the data sheet may be changed without notice

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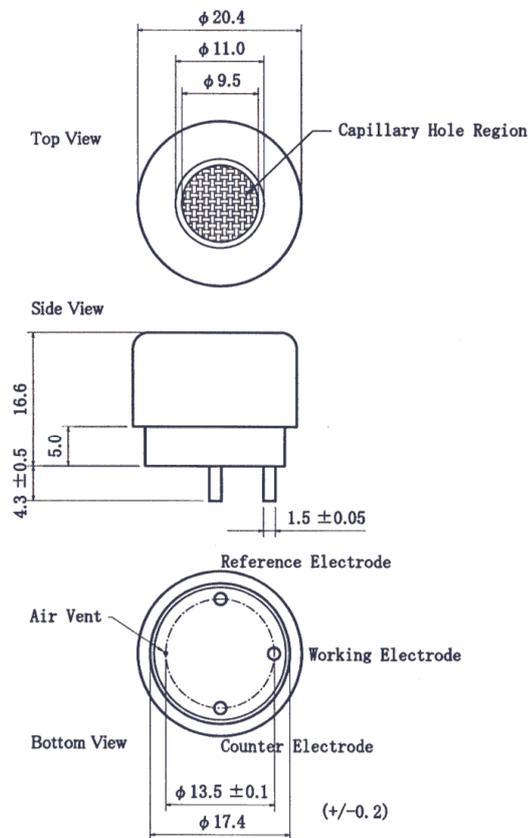


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Typical Cross-Sensitivities:

Gas	Test Gas Used (ppm)	NH ₃ Concentration Equivalent (ppm)	% Cross Sensitivity
Ammonia	1000	1000	100
Carbon Monoxide	1000	-50	-5
Carbon dioxide	5000	0	0
Hydrogen	1000	<-150	<-15
Hydrogen sulphide	100	<150	<150
Sulphur dioxide	100	<150	<150
Ethylene	1000	0	0
Methane	5000	0	0
Nitric oxide	100	0	0
Nitrogen dioxide	100	0	0
Ethanol	200	0	0
Chlorine	10	0	0

Dimensions:



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