



TECHNICAL INFORMATION SHEET

NE4-CO Electrochemical Carbon Monoxide (CO) Gas Sensor

Nemoto Sensor
Engineering Co., Ltd.
4-10-9, Takaido-higashi,
Suginami-ku, Tokyo,
JAPAN

General Description

The NE4-CO is a new electrochemical gas sensor with 3 electrodes for the detection of Carbon monoxide (CO) in a variety of gas detection applications. Exhibiting high performance with long-term stability, this compact (20.4mm dia) sensor is suitable for portable Gas Detection Instruments or 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:

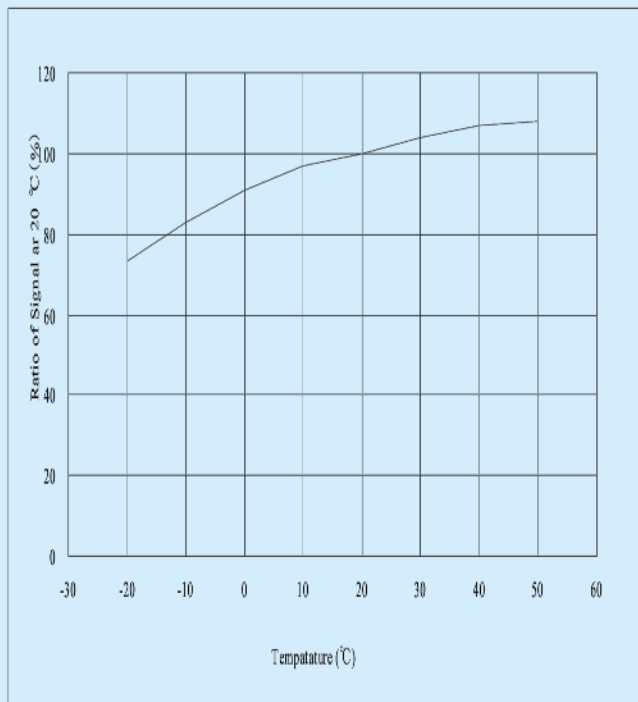
Detectable Gas	Carbon monoxide (CO)
Detection Range	0-1000ppm
Maximum overload	2000ppm
Output Current	70 +/- 15 nA/ppm
Reproducibility (same day)	+/- 2%
Zero in clean air	< +/- 5ppm equivalent

Long term drift:

Zero	< +/- 5 ppm / Year
Span	< 5% Signal / Year
Response time (T _{90%})	< 30 seconds
Temperature drift (zero)	< 10ppm (-20°C to +50°C)
Warranted lifetime	> 2 years
Temperature Range:	-20°C to +50°C
Humidity range (constant)	15-90% RH
Humidity range intermittent)	0-99% RH
Pressure	0.9 - 1.1 atm
Recommended load resistor	10 Ω
Storage time	6 months

(Without compromising lifetime)

Temperature response



Test data on drift, poisoning, temperature performance, linearity are available on the Characterisation Document.

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

ne4-co.ppp, issue 5, Jan 2016

Contact Information:

Europe & Africa Area

Asia Area

Americas Area

Website

www.nemoto.eu

www.nemoto.co.jp

www.nemoto.eu

email

eusensor@nemoto.co.jp

sensor2@nemoto.co.jp

nasensor@nemoto.co.jp

Telephone

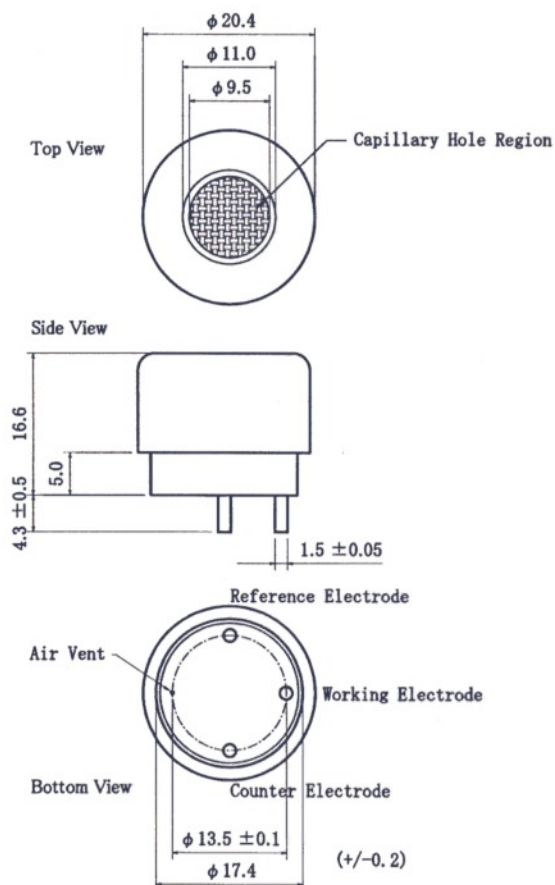
+44 (0)1799 543968

+81 3 3333 2760

+1 604 761 7363



Dimensions:



Typical Cross-Sensitivities:

Gas	Test Gas Used (ppm in Air)	Test result (ppm equivalent)	% Cross-sensitivity
Carbon Monoxide	100	100	100
Hydrogen sulphide	10	0	0
Hydrogen	500	200	40
Methane	5000	0	0
Carbon dioxide	5000	0	0
Sulphur dioxide	25	0	0
Nitric oxide	50	< 35	< 70
Nitrogen dioxide	30	< 2	< 7
Ammonia	200	0	0
Ethanol	2000	< 20	< 1
Ethylene	100	< 80	< 80
Chlorine	10	0	0

Test data on drift, temperature performance, linearity etc are available on the Characterisation Document.

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

ne4-co.ppp, issue 5 Jan 2016

Contact Information:

Europe & Africa Area

Asia Area

Americas Area

Website

www.nemoto.eu

www.nemoto.co.jp

www.nemoto.eu

email

eusensor@nemoto.co.jp

sensor2@nemoto.co.jp

nasensor@nemoto.co.jp

Telephone

+44 (0)1799 543968

+81 3 3333 2760

+1 604 761 7363