

# TECHNICAL INFORMATION SHEET **NE4-CO Electrochemical** Carbon Monoxide (CO) Gas Sensor

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### **General Description**

The NE4-CO is an electrochemical gas sensor with 3 electrodes for the detection of Carbon monoxide (CO) in a variety of gas detection applications. **Exhibiting** 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.



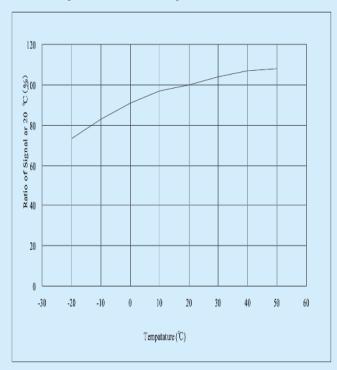
### **Specifications:**

**Detectable Gas** Carbon monoxide (CO) **Detection Range** 0-1000ppm Maximum overload 2000ppm **Output Current** 70 +/- 15 nA/ppm +/- 2% Reproducibility (same day) 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 0-99% RH Humidity range intermittent) 0.9 - 1.1 atm Pressure Recommended load resistor 10 Ω Storage time 6 months

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

## <u>Temperature response</u>



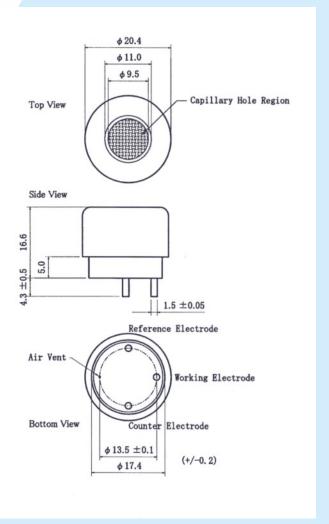
Nemoto has a policy of continuous development and improvement of its products. As such the specification for the device outlined in the data sheet may be changed without notice

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(Without compromising lifetime)

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### **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

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