

## TECHNICAL INFORMATION SHEET NAP-508 Low-cost Electrochemical Carbon Monoxide (CO) Gas Sensor

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**Specifications:** 

## **General Description**

The NAP-508 Gas Sensor is a new low cost 3-Electrode Electrochemical cell designed for the detection and measurement of carbon monoxide in the range 0-1000ppm, in domestic carbon monoxide detectors, fire detectors and air quality monitors. The sensor benefits from a warranted lifetime of 10 years.

- Highly specific to target gas
- Unaffected by humidity
- 10 year lifetime!
- Very low long term drift
- Low power consumption
- 3-Electrode design for greater stability
- Compact, leak-proof enclosure
- Component Approved to UL 2075 / 2034
- · Terminals may be soldered



## **Typical Cross-Sensitivities**

Detectable Gas	Carbon monoxide (CO)
Detection Range	0-1000 ppm
Maximum overload	2,000 ppm
Output Current	21 +/- 5 nA/ppm
Reproducibility (same day)	+/- 2%
Zero in clean air	<+/- 5ppm equvalent)
Long term output drift	< 3% / year
Response time (T 90%)	< 45 seconds
Temperature drift (zero)	<10 ppm (-20°C to +50°C)
Expected lifetime (warranted)	> 10 years
Temperature Range:	-20°C to +50°C
Humidity range (constant)	15-90% RH
Humidity range intermittent)	0-99% RH (NC)
Pressure	0.9 - 1.1 atm
Recommended load resistor	10 Ω
Bias voltage	Not required
Recommended storage temp	0°C to +20°C
Storage time	12 months

Gas	% Cross-sensitivity
Carbon Monoxide	100
Hydrogen sulphide	0
Hydrogen	40
Methane	0
Carbon dioxide	0
Sulphur dioxide	0
Nitric oxide	< 50
Nitrogen dioxide	< 20
Ammonia	0
Ethanol	< 0.5
Ethylene	0
Chlorine	0

Test data on drift, poisoning, temperature performance, linearity etc are available on the Characterisation Document / Full manual.

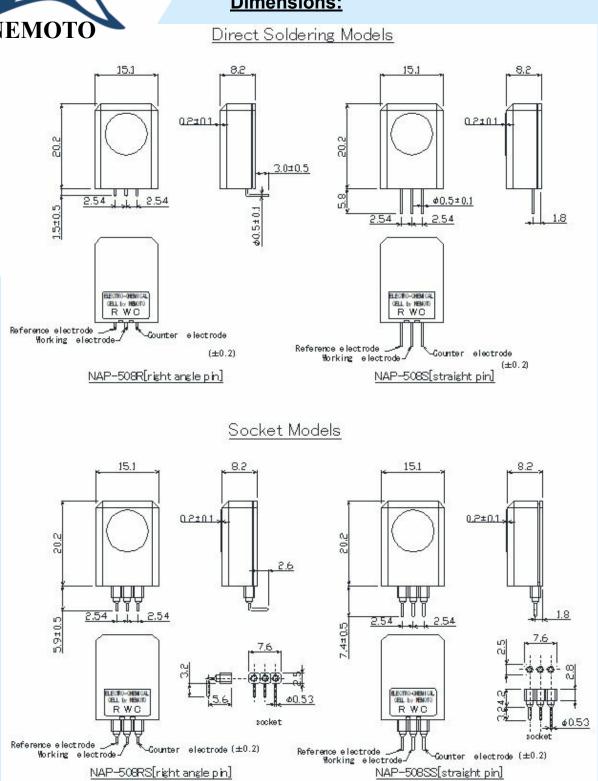
Nemoto has a policy of continuous development and improvement of its products. As such the specification for the device outlined in the data sheet may be changed without notice

nap-508.ppp, issue 5, March 2018

(Without compromising lifetime)



## **Dimensions:**



Test data on drift, temperature performance, linearity etc are available on the Characterisation Document / Full Manual



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