



# TECHNICAL INFORMATION SHEET

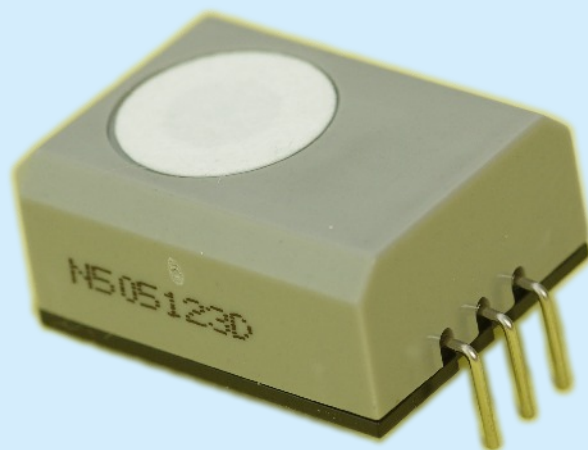
## NAP-505 Low-cost Electrochemical Carbon Monoxide (CO) Gas Sensor

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

### General Description

The NAP-505 Gas Sensor is a 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.

- **Highly specific to target gas**
- **Unaffected by humidity**
- **7 year lifetime**
- **Very low long term drift**
- **Low power consumption**
- **3-Electrode design for greater stability**
- **Compact, leak-proof enclosure**
- **Resistant to shocks and vibration**
- **Terminals may be soldered**



### Specifications:

Detectable Gas	Carbon monoxide (CO)
Detection Range	0-1000ppm
Maximum overload	2000ppm
Output Current	40 +/- 10 nA/ppm
Reproducibility (same day)	+/- 2%
Zero in clean air	<+/- 5ppm equivalent)
Long term output drift	< 5% / year
Response time (T <sub>90%</sub> )	< 30 seconds
Temperature drift (zero)	<10ppm (-20°C to +50°C)
Expected lifetime	> 7 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
Bias voltage	Not required
Recommended storage temp	0°C to +20°C
Storage time	6 months
(Without compromising lifetime)	

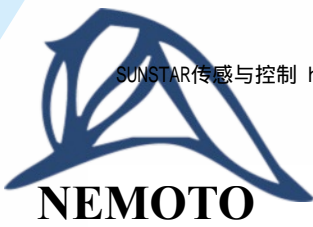
### Typical Cross-Sensitivities

Gas	% Cross-sensitivity
Carbon Monoxide	100
Hydrogen sulphide	0
Hydrogen	40
Methane	0
Carbon dioxide	0
Sulphur dioxide	0
Nitric oxide	0
Nitrogen dioxide	< 5
Ammonia	0
Ethanol	< 2
Ethylene	0
Chlorine	0

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

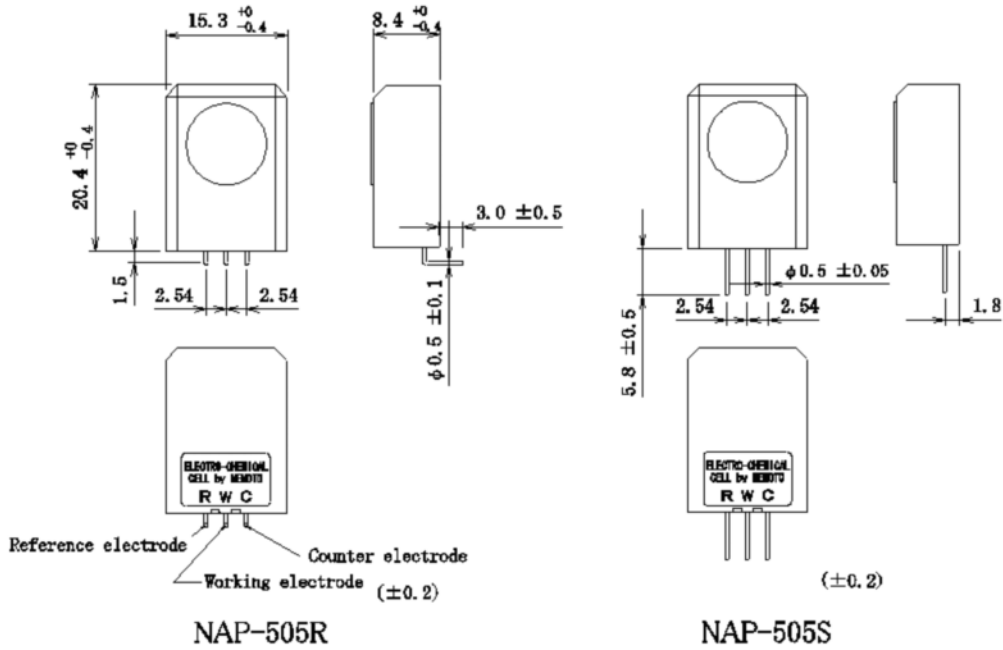
Nemoto has a policy of continuous development and improvement of its products. As such the specification for the device outlined in the data sheet may be changed without notice

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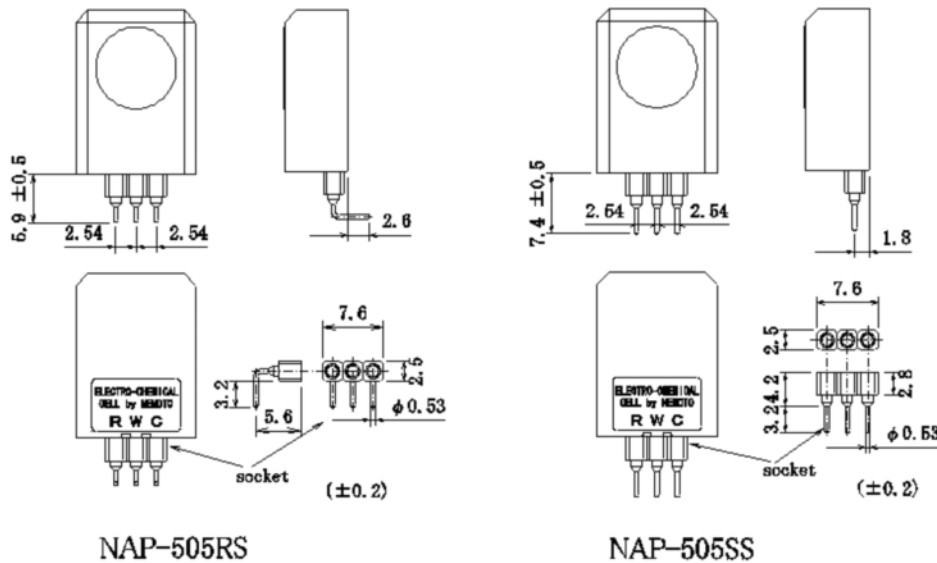


**Dimensions:**

**Direct Soldering Models**



**Socket Models**



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