



# Carbon Monoxide sensors Datasheet



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# **Technical Specifications**

### **Performance**

Sensitivity		45 ± 15 nA/ppm
Measurement Range		0 – 1000 ppm
Response Time	$\supset$	T90 < 30s
Maximum Overload	$\supset$	2000 ppm
Repeatability	$\supset$	< ±5% CO equivalent
Long-term output drift	$\supset$	< 5% per Annum
Linearity	$\supset$	Within ± 5%
Recommended Load Resistor	<u></u>	10 Ω
Warranty	<u></u>	60 months from date of dispatch

### **Operating Conditions**

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Temperature Range		-30°C to +50°C
Pressure Range		800 to 1200 hPA
Operating Humidity Range		15-95% RH
Storage Temperature		0 to 20°C
Expected Lifetime	)	> 60 months

### Intrinsic safety data

Maximum at 2000 ppm	0.3 mA
Maximum o/c Voltage	1.3 V
Maximum s/c Current	< 1.0 A

### **Cross-sensitivity data**

	Gas	CONC.	SGX-SureCO
	Hydrogen Sulfide	25 ppm	0 ppm
	Sulfur Dioxide	20 ppm	<0.5 ppm
	Hydrogen	100 ppm	<20 ppm
	Nitric Oxide	50 ppm	<10 ppm
	Ethanol	2000 ppm	<5 ppm
I	Iso-Propanol	200 ppm	0 ppm
I	Chlorine	2 ppm	<0.5 ppm
	Acetone	1000 ppm	0 ppm
	Acetylene	40 ppm	80 ppm

**Note:** This table is for reference only. Calibration should be carried out with the actual gas at a known concentration.

### **Product dimensions**

All dimensions in mm All tolerances ±0.15 mm



### **Key applications**

- · Domestic CO detectors
- Air Quality monitors

### **Important Notes**

- All performance is based on conditions at 20°C, 50% RH and 1 atm, flow rate>150qcm/min, using SGX recommended circuitry.
- Sensor performance is temperature dependant; please contact SGX for temperature performance other than 20°C.
- Do not solder to the connector pins as this may damage the sensor and thereby invalidate the warranty.
- Details on recommended connector pins can be found in the Frequently Asked Questions within the Gas Sensor section of the SGX website.

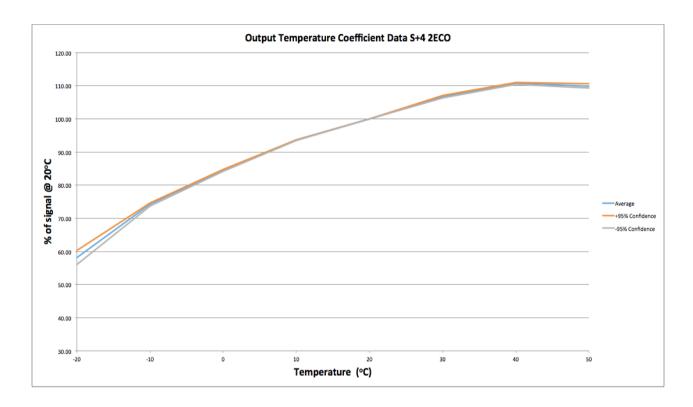


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## **Temperature Curve**



# **Poisoning**

SGX sensors are designed to operate in a wide range of harsh environments and conditions. However it is important that exposure to high concentrations of solvent vapours I avoid, both during storage, fitting into instruments and operation. When using sensors on printed circuit boards (PCBs), degreasing agents should be used prior to the sensor being fitted.

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SGX Europe Sp. z o.o. sensors are designed to operate in a wide range of harsh environments and conditions. However, it is important that exposure to high concentrations of solvent vapours is to be avoided, both during storage, fitting into instruments and operation. When using sensors on printed circuit boards (PCBs), degreasing agents should be used prior to the sensor being fitted. SGX Europe Sp. z o.o. makes every effort to ensure the reliability of its products. Where life safety is a performance requirement of the product, we recommend that all sensors and instruments using these sensors are checked for response to gas before use.

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