



## SGX-4CO

### Industrial Carbon Monoxide Sensor

(Application : Portable Gas Detectors)

#### PERFORMANCE

Range	0 – 1000 ppm
Output Signal	70 ± 25 nA/ppm
Zero Shift (-40°C to +50°C)	< ±12 ppm equivalent
Linearity	Within ±5%
Response time (T <sub>90</sub> )	<30 s
Maximum Overload	2000 ppm
Long-term output drift	<20% per annum
Recommended Load Resistor	10 ohms
Warranty	2 years
Bias	No Bias

#### OPERATING CONDITIONS

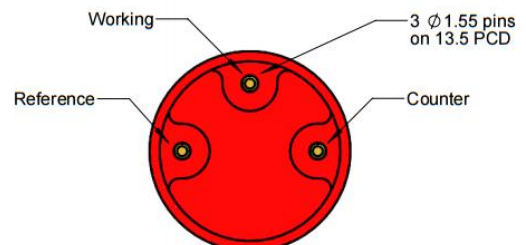
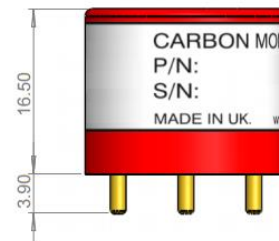
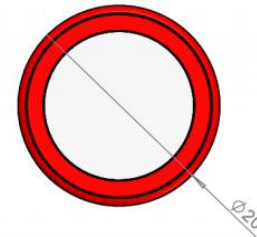
Temperature Range	-30°C to +50°C
Operating Humidity	15 – 90% RH (non-condensing)
Pressure range	900 to 1100 mbar
Operating Circuit	See Application Note 2
Recommended Storage Temperature	0°C to 20°C
Storage life	6 months in original packing (0 – 25°C)

#### INTRINSIC SAFETY DATA

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

#### PRODUCT DIMENSIONS

All dimensions in mm  
All tolerances ±0.15 mm



#### IMPORTANT NOTES

- All performance is based on conditions at 20°C, 50% RH and 1 atm, 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.
- This device is designed to be RoHS compliant.

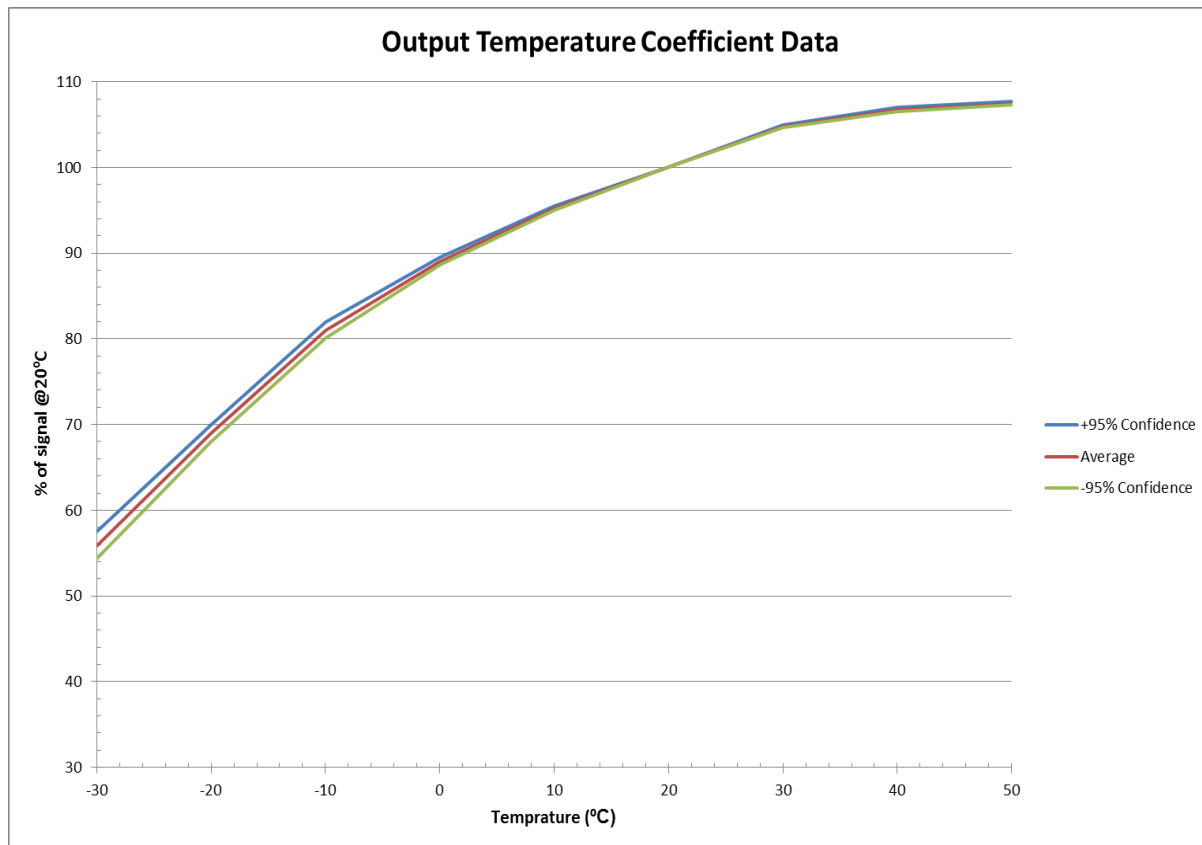
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**CROSS-SENSITIVITY DATA**

GAS	CONCENTRATION	SGX-4CO
Hydrogen Sulfide	20 ppm	<2 ppm
Sulphur Dioxide	20 ppm	<2 ppm
Hydrogen	100 ppm	<40 ppm
Nitric Oxide	35 ppm	<5 ppm
Ethanol	200 ppm	0 ppm
Ammonia	50 ppm	0 ppm
Chlorine	0.5 ppm	0 ppm

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



**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 is 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.

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