



# SGX-7CO

## Industrial Carbon Monoxide Sensor

Application : Fixed Gas Detectors

### PERFORMANCE

Measurement Range ..... 0 – 1000 ppm  
 Zero Current (in air) ..... <±2 ppm CO equivalent  
 Output Signal ..... 100 ± 20 nA / ppm  
 Linearity ..... Linear  
 Repeatability ..... < ±1% CO equivalent  
 Response time, t90 ..... <30 s  
 Maximum Overload ..... 2000 ppm  
 Long-term Output Drift ..... <5% per annum  
 Recommended Load Resistor ..... 10 ohms  
 Warranty ..... 1 year  
 Resolution (Electronics dependent) ..... < 0.5 ppm typical

### OPERATING CONDITIONS

Temperature Range ..... -30 to +50°C  
 Operating Humidity... 15 – 90% RH (non-condensing)  
 Pressure range ..... 800 mbar to 1200 mbar  
 Recommended Storage Temperature ... .0°C to 20°C  
 Expected Operating Life ..... >2 years (in air)

### INTRINSIC SAFETY DATA

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

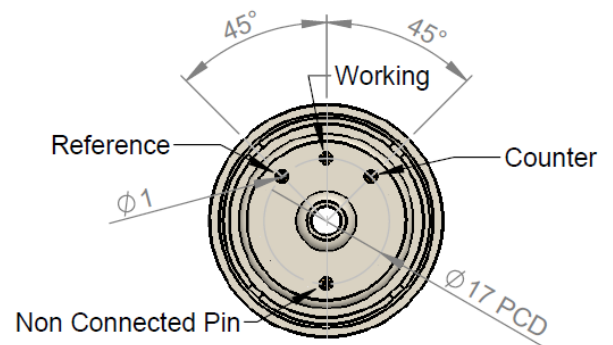
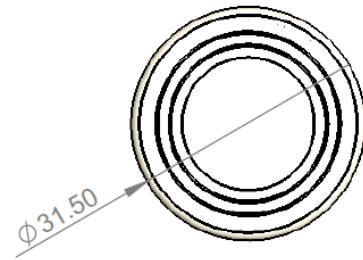
This device is designed to be RoHS compliant.

Cross-Sensitivity Data		
GAS	CONC.	SGX-7CO
Hydrogen Sulfide	15 ppm	<0.1 ppm
Sulfur Dioxide	5 ppm	0 ppm
Nitrogen Dioxide	5 ppm	-0.5 ppm
Nitric Oxide	35 ppm	<7 ppm
Hydrogen	100 ppm	<60 ppm
Chlorine	1 ppm	0 ppm
Ethylene	100 ppm	<90 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



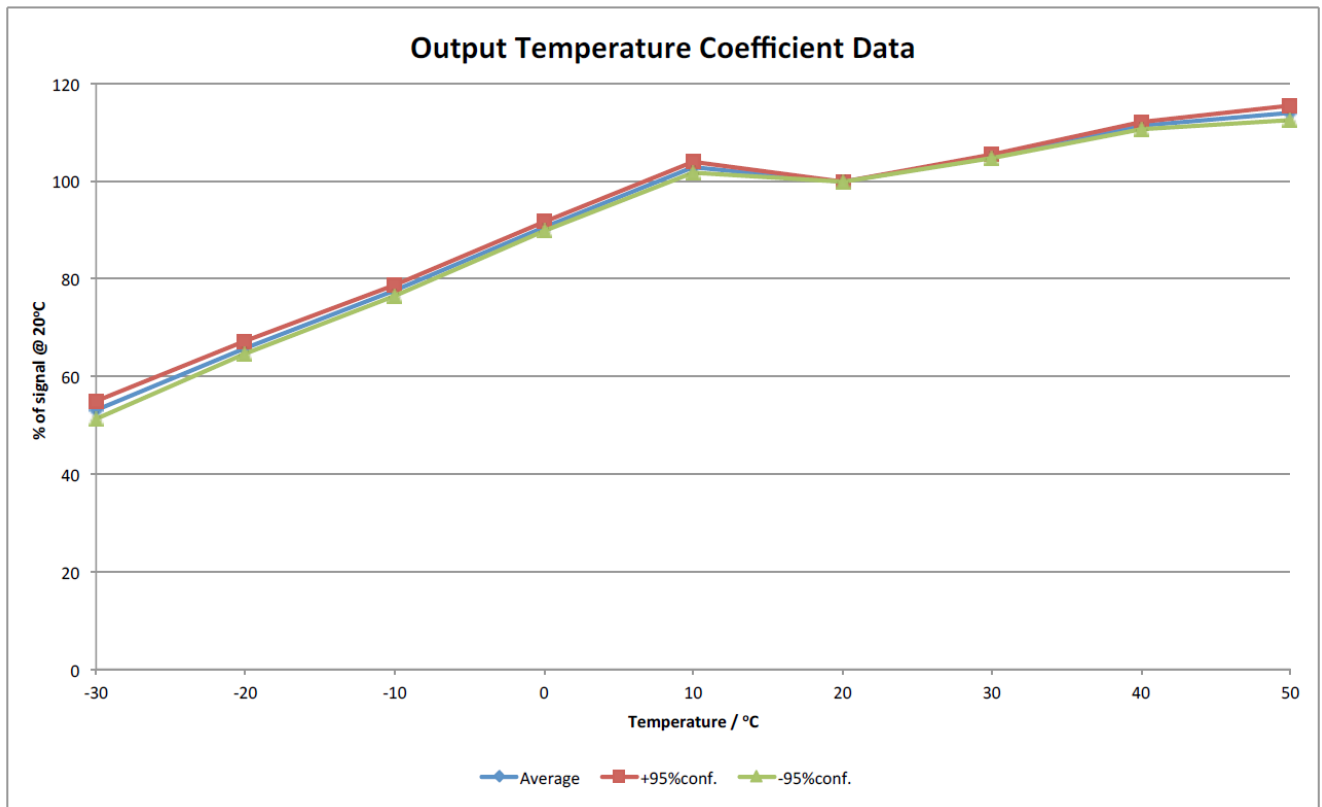
### IMPORTANT NOTES

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.



## 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 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.