



**SGX**

**SENSORTECH**

An Amphenol Company



# Carbon Monoxide Sensor

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# Datasheet



*Quality, Safety, Responsibility*

# Technical Specifications

## Performance

<b>Sensitivity</b>	50 ± 20 nA/ppm
<b>Measurement Range</b>	0 – 1000 ppm
<b>Zero Current</b>	± 5 nA
<b>Maximum Overload</b>	2000 ppm
<b>Response Time</b>	T90 < 30s
<b>Repeatability</b>	2%
<b>Lower Detectable Limit (LDL)</b>	≤ 0.05 ppm
<b>Linear Range</b>	up to 1500 ppm
<b>Resolution (Electronics dependent)</b>	< 0.5ppm typical

## Features

- Small size
- High stability
- High selectivity
- High sensitivity
- Fast response and recovery
- Excellent sensitivity at low temperatures

## Key Application

- Fire detection,
- Residential,
- Air quality

## Environmental Details

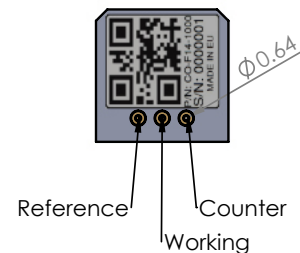
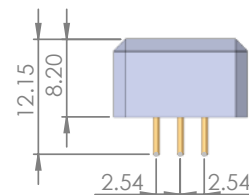
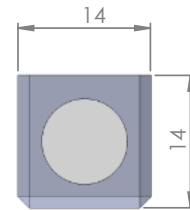
<b>Temperature Range</b>	-20 to +50°C
<b>Pressure Range</b>	0.9 to 1.1 atm
<b>Operating Humidity Range</b>	15-90% RH (Continuous) 0-99% (intermittent)

## Lifetime Details

<b>Long-Term Drift</b>	< 5 % per annum
<b>Expected Operating Life</b>	> 7 years in air
<b>Recommended Storage Temp</b>	0-20°C
<b>Warranty</b>	5 years

## Intrinsic Safety Data

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

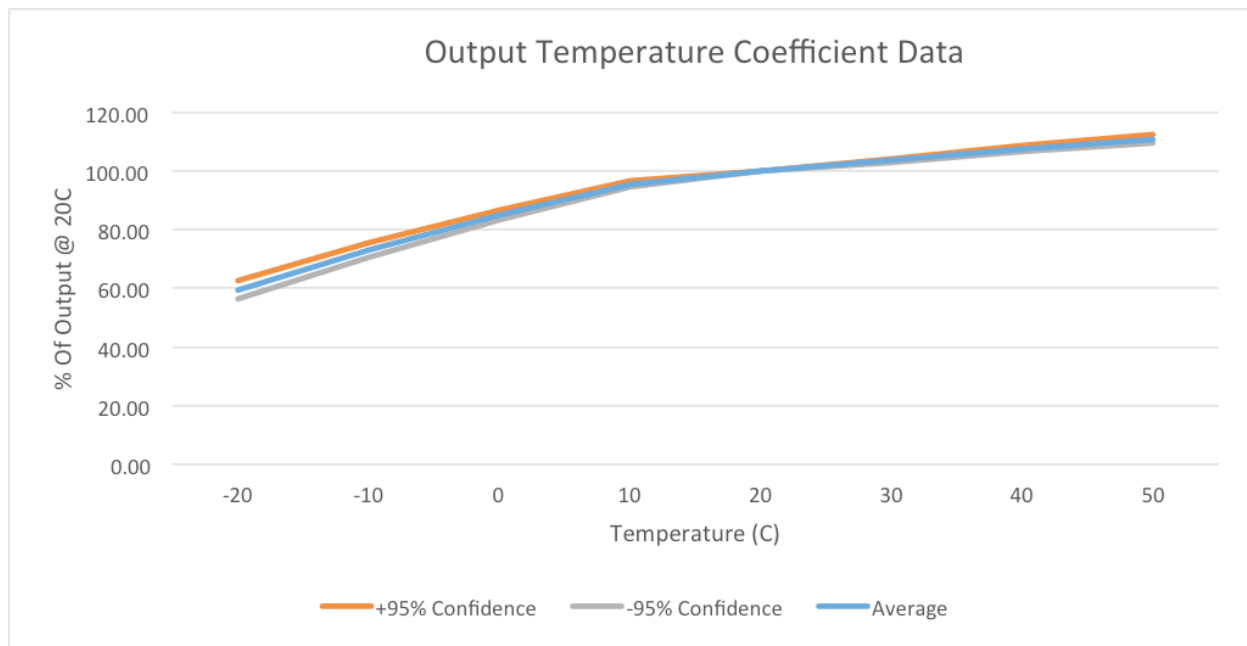


**Product Dimensions**  
All dimensions in mm

## Cross Sensitivity

Gas	Concentration	SGX-1CO-1000
Hydrogen Sulphide	50 ppm	0 ppm
Sulphur dioxide	20 ppm	0 ppm
Hydrogen	100 ppm	40 ppm
Nitric Oxide	50 ppm	0 ppm
Ethanol	200 ppm	<2 ppm
Ammonia	50 ppm	0 ppm
Chlorine	15 ppm	0 ppm
Ethylene	100 ppm	0 ppm

## Temperature Curve



## Poisoning

SGX Sensortech 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 vapors is avoided, both during storage, fitting into instrument and operation. When using sensors on printed circuit boards (PCB's), 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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