

# Product Data Sheet

P/N : SE+CO

**SE+CO**  
Carbon Monoxide Sensor (CO)

**Introduction** The SE+CO is a multi-purpose carbon monoxide sensor designed for use in industrial safety applications. It is a drop in replacement for the SensoriC CO-3E-300 (Classic) sensor.

**Key Features:** High stability, fast response and recovery, suitable for use up to 2000 ppm

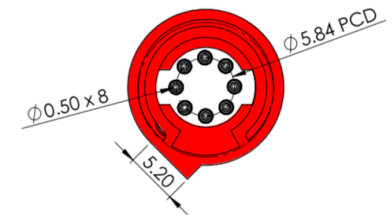
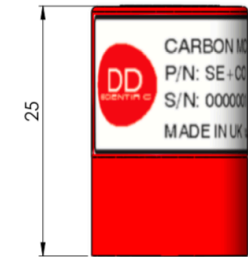
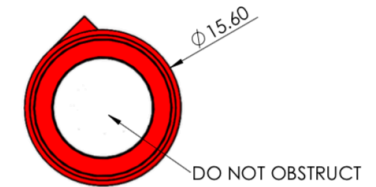
Performance Characteristics	
Output signal	70 ± 20 nA / ppm
Typical Baseline Range (pure air)	<150 nA
T90 Response Time	< 30 seconds
Measurement Range	0 - 2000 ppm
Maximum Overload	2000ppm
Linearity	Linear
Repeatability	< ±2% FSD
Recommended Load Resistor	10 ohms
Resolution (Electronics dependent)	< 3 ppm typical

Environmental Details	
Temperature Range Continuous	-40°C to +50°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	15% to 90% RH non condensing

**Important Note:**

All performance data is based on conditions at 20°C, 50%RH and 1 atm, using DD Scientific recommended circuitry.

Sensor performance is temperature dependent, and please contact DD Scientific for temperature performance other than 20°C.



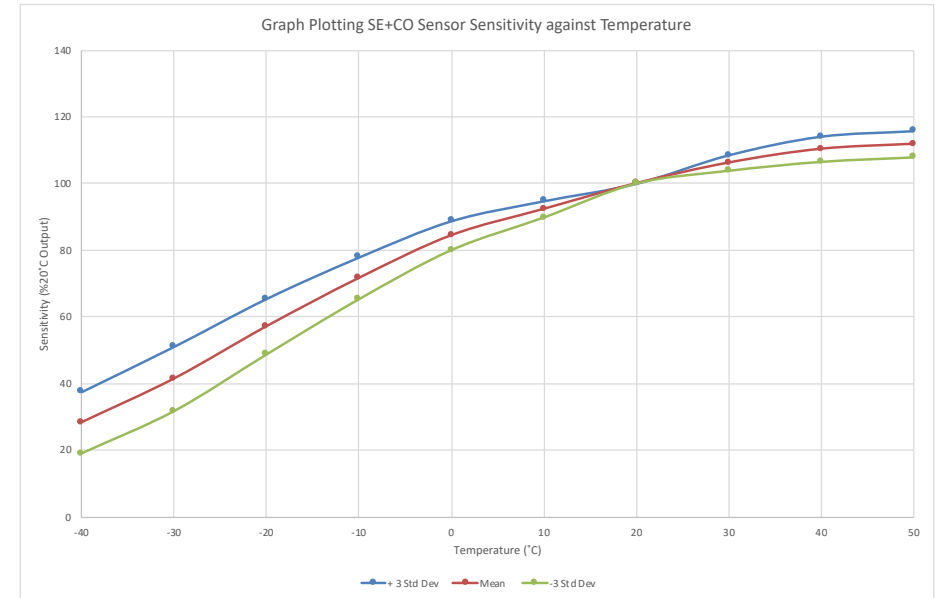
**Product Dimensions**  
All dimensions in mm  
All tolerances ±0.15 mm

## Lifetime Details

Long Term Output Drift	<5% per 6 months
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	> 24 months in air
Standard Warranty	24 months from date of dispatch

## Cross - Sensitivity Data

GAS	CONC.	SE+CO
Sulphur dioxide	20 ppm	0 ppm CO
Nitrogen Dioxide	20 ppm	0 ppm CO
Nitric Oxide	50 ppm	< 15 ppm CO
Hydrogen	100 ppm	< 30 ppm CO
Hydrogen Sulphide	25 ppm	< 1ppm CO



### Poisoning:

DD Scientific 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 instrument and operation. When using sensors on printed circuit boards (PCB's), degreasing agents should be used prior to the sensor being fitted.

Please note gluing or soldering direct to the pins of DD Scientific Ltd gas sensors will void warranty, please use PCB sockets when connecting DD Scientific sensors.

## Intrinsic Safety Data

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

**WARNING:** By the nature of the technology used, any electrochemical gas sensor offered by DD Scientific can potentially fail to meet specification without warning. Although DD Scientific Ltd makes every effort to ensure the reliability of our products of this type, 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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