# **Carbon Monoxide**

SensoriC CO 3E 500 S



#### **FEATURES**

Amperometric 3 electrode sensor cell Low susceptibility to hydrogen High reliability Fast response 0 voltage biased operation

#### **TYPICAL APPLICATIONS**

Portable & fixed point applications
Where hydrogen can be present in the background

### PART NUMBER INFORMATION

MINI	0250-134-30009
SENSORIC CLASSIC	0250-134-30069
CTL 4 series adaptation	0250-134-30049
CTL 7 series adaptation	0250-134-30079



#### **TECHNICAL SPECIFICATIONS**

Measuring Range 0–500 ppm

Sensitivity Range 70 nA/ppm ± 20 nA/ ppm

Zero Current at  $20^{\circ}$ C  $< \pm 200 \text{ nA}$ Resolution at  $20^{\circ}$ C < 3 ppmBias Potential 0 mV

Linearity < 5% full scale

Response Time at 20°C

< 30 s calculated from 2 min. exposure time<sup>1</sup>
 < 60 s calculated from 2 min. exposure time<sup>1</sup>

Long Term Sensitivity Drift < 2% per month

**Operation Conditions** 

Temperature Range -20°C to +50°C

Humidity Range 15–90% r.H., non–condensing

Effect of Humidity no effects

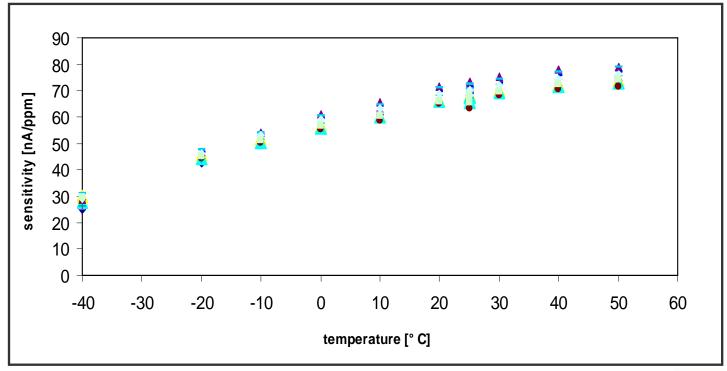
Sensor Life Expectancy > 24 months in air

Warranty 12 months



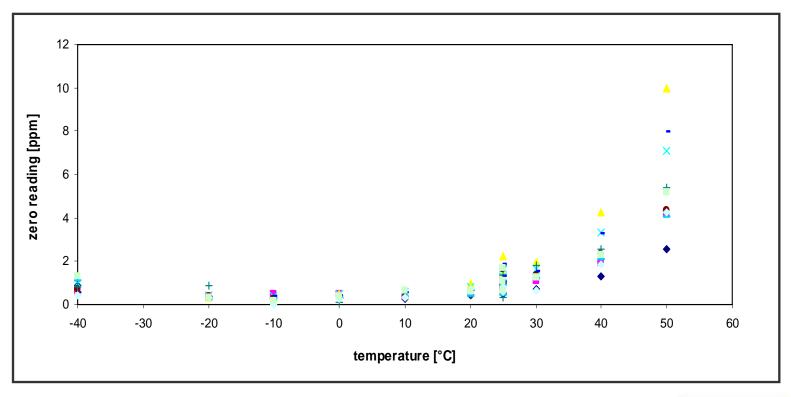
### Temperature dependence - CO reading:

Calibration with 100 ppm CO / air at each listed temperature





### **Temperature dependence – zero reading:**





#### **CROSS SENSITIVITIES AT 20°C**

Gas	Concentration	Reading [ppm]
Alcohols (i.e. IPA)	600 ppm	01
Gasoline Vapour	% range	01
Hydrogen	3000 ppm	<300
Hydrogen Chloride	10 ppm	7
Hydrogen Sulfide	20 ppm	<21
Nitric Oxide	20 ppm	20
Nitrogen Dioxide	10 ppm	0
Sulfur Dioxide	2 ppm	0

<sup>1)</sup> With inboard filter; to remove TLV levels of interfering gases; continuous high level exposure may reduce efficiency of filter material.

#### Notes:

- 1. Interference factors may differ from sensor to sensor and with life time. It is not adviseable to calibrate with interference gases.
- 2. This table does not claim to be complete. The sensor might also be sensitive to other gases.

