

Carbon Monoxide

Sensoric CO 3E 500 S



Product Data Sheet

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
Note: Further information is available at www.citytech.com under the heading Support - Application notes

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

Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.



Product Data Sheet

Sensoric CO 3E 500 S

TECHNICAL SPECIFICATIONS

Measuring Range	0–500 ppm
Sensitivity Range	70 nA/ppm \pm 20 nA/ ppm
Zero Current at 20°C	< \pm 200 nA
Resolution at 20°C	< 3 ppm
Bias Potential	0 mV
Linearity	< 5% full scale
Response Time at 20°C	
t50	< 30 s calculated from 2 min. exposure time ¹
t90	< 60 s calculated from 2 min. exposure time ¹
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

Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.

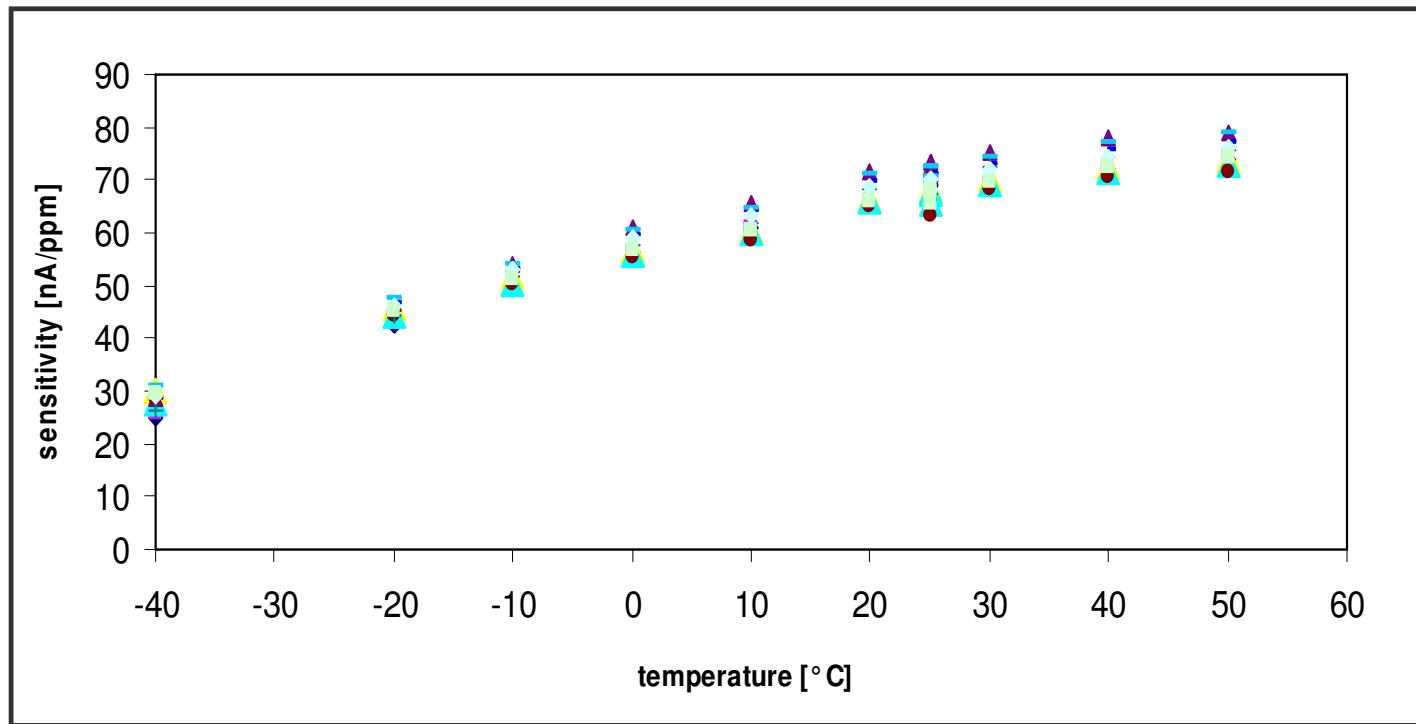


Product Data Sheet

Sensoric CO 3E 500 S

Temperature dependence – CO reading:

Calibration with 100 ppm CO / air at each listed temperature



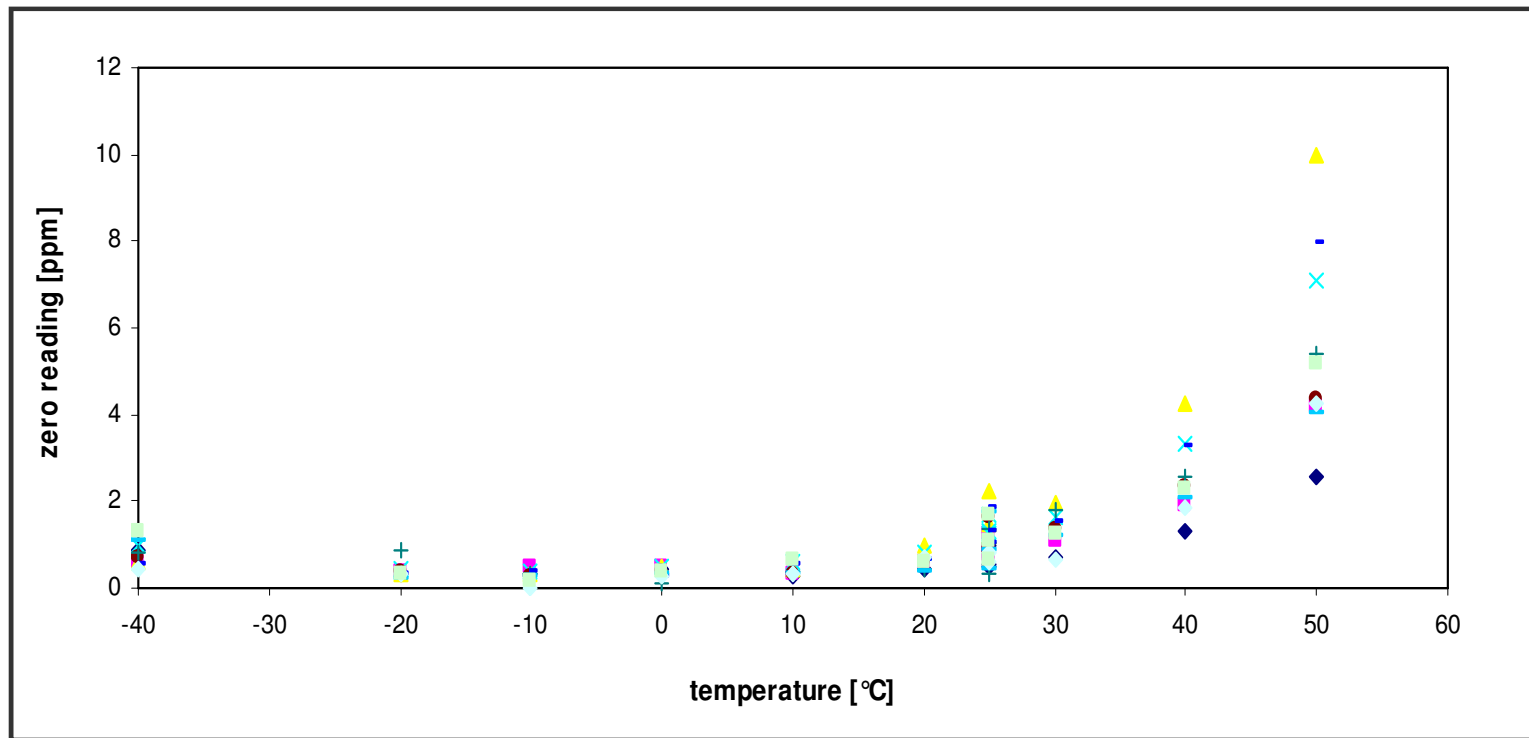
Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.



Product Data Sheet

Sensoric CO 3E 500 S

Temperature dependence – zero reading:



Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.



Product Data Sheet

Sensoric CO 3E 500 S

CROSS SENSITIVITIES AT 20 °C

Gas	Concentration	Reading [ppm]
Alcohols (i.e. IPA)	600 ppm	0 ¹
Gasoline Vapour	% range	0 ¹
Hydrogen	3000 ppm	<300
Hydrogen Chloride	10 ppm	7
Hydrogen Sulfide	20 ppm	0 ¹
Nitric Oxide	20 ppm	20
Nitrogen Dioxide	10 ppm	0
Sulfur Dioxide	2 ppm	0

1) 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 advisable to calibrate with interference gases.
2. This table does not claim to be complete. The sensor might also be sensitive to other gases.

Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.

Product Data Sheet

Safety Note

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

Attention

Use of the Sensoric range sensors requires complete understanding of the instructions. Before using Sensoric range sensors please carefully read 'Application Notes' which can be found at www.citytech.com under the heading 'Support' -> 'Application Notes' -> 'Sensoric'

Product Safety Data Sheets (PSDS) can be obtained at www.citytech.com under the heading 'Support' -> 'Product Safety Datasheets'

For further assistance on sensor selection and use, please contact a member of the Technical Sales team.

Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.

