

Chlorine

Sensoric Cl2 3E 50



Product Data Sheet

Sensoric CI2 3E 50

FEATURES

Amperometric 3 electrode sensor cell
Low susceptibility to abrupt changes of humidity
High dynamic range
0 voltage biased operation

TYPICAL APPLICATIONS

Portable & fixed point applications
TLV monitoring
Water treatment plants, swimming pools, chemical industry

PART NUMBER INFORMATION

MINI	0441-032-30009
SENSORIC CLASSIC	0441-032-30069
CTL 4 series adaptation	0441-032-30049
CTL 7 series adaptation	0441-032-30079

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 CI2 3E 50

TECHNICAL SPECIFICATIONS

Measuring Range	0-50 ppm; typically: 0–5 ppm
Sensitivity Range	450 nA/ppm \pm 200 nA/ppm (negative current)
Zero Current at 20°C	< \pm 20 nA
Resolution at 20°C	< 0.05 ppm
Bias Potential	0 mV
Linearity	< 5% full scale
Response Time at 20°C	
t50	<20 s calculated from 2 min. exposure time *
t90	<60 s calculated from 2 min. exposure time *
Long Term Sensitivity Drift	< 10% per 6 months
Operation Conditions	
Temperature Range	-20°C to + 40°C
Humidity Range	10–90% r.H., non–condensing
Effect of Humidity	no effect on zero current
Sensor Life Expectancy	> 24 months in air
Warranty	12 months

*t50 = 10 s and t90 = 30 s if sensors are exposed to at least 1 ppm Chlorine for at least 2 min

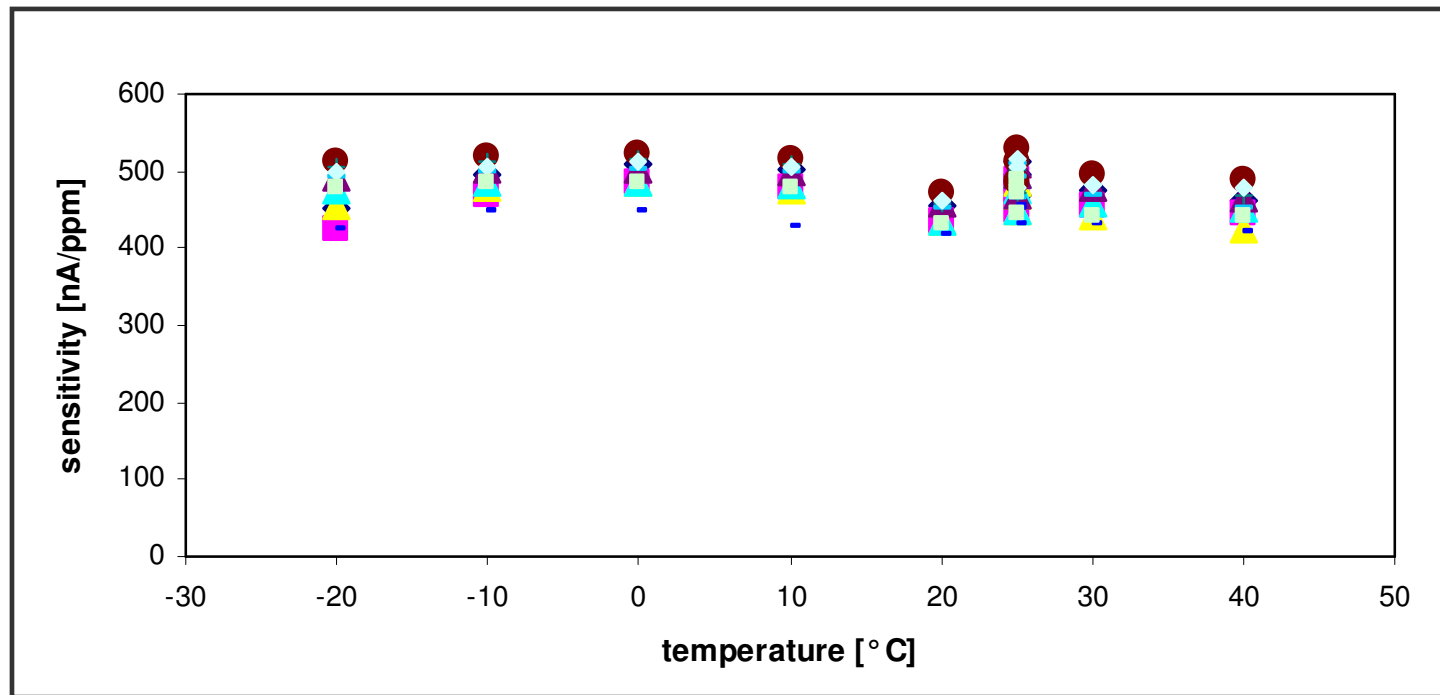
Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely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



Product Data Sheet

Sensoric CI2 3E 50

OUTPUT vs. TEMPERATURE:



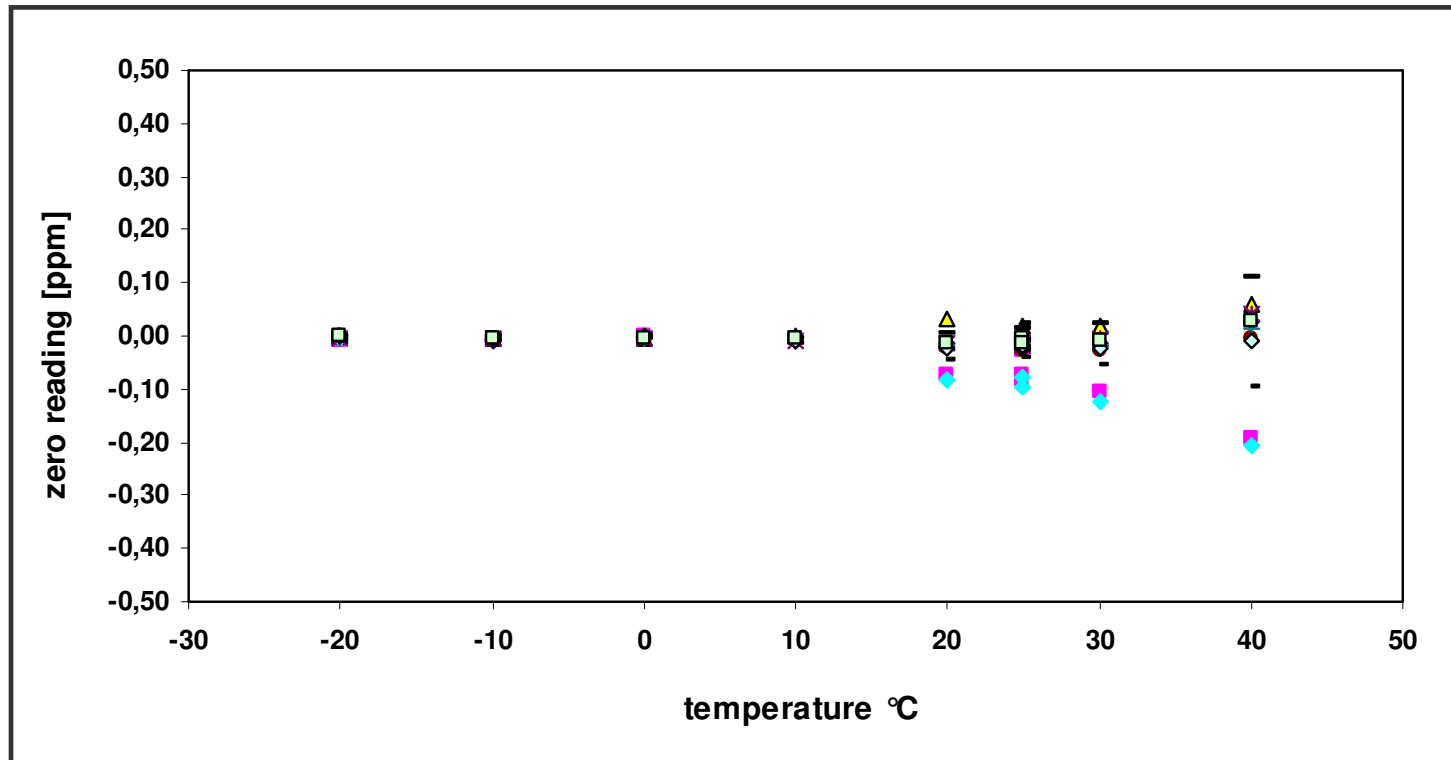
Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely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



Product Data Sheet

Sensoric CI2 3E 50

ZERO READING vs. 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 CI2 3E 50

CROSS SENSITIVITIES AT 20 °C

Gas	Concentration	Reading [ppm]
Ammonia	100 ppm	0
Bromine	1 ppm	1.0
Carbon Dioxide	1 %	0
Carbon Monoxide	100 ppm	0
Chlorine Dioxide	1 ppm	0.5
Fluorine	1.0 ppm	0.4
Hydrogen	3000 ppm	0
Hydrogen Sulfide	20 ppm	0 ¹
Nitrogen Dioxide	10 ppm	2
Ozone	0.25 ppm	0.05
Sulfur Dioxide	20 ppm	3.5

1) Exposure to H₂S will poison the cell; further exposure to chlorine will re-activate the sensor.

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'

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

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.

