Hydrogen Sensor

Sensoric H2 3E 1%

Rev. 11/2011

Sensoric Sensors are designed and manufactured in
Justus-von-Liebig-Str. 22, D- 53121 Bonn, Germany
Tel: ++49 (0) 228 52 66 40 **Fax**: ++49 (0) 228 5266439

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FEATURES

Amperometric 3 electrode sensor cell
Fast response
Good long term stability

TYPICAL APPLICATIONS

Ambient monitoring
Very sensitive leak detection

PART NUMBER INFORMATION

MINI	0361-034-30009
SENSORIC CLASSIC	0361-034-30069
CTL 4 series adaptation	0361-034-30049
CTL 7 series adaptation	0361-034-30079

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TECHNICAL SPECIFICATIONS

Measuring Range	0–10000 ppm
Sensitivity Range	10 nA/ppm ± 5 nA/ppm
Zero Current at 20 °C	< ± 250 nA
Resolution at 20 °C	< 20 ppm
Bias Potential	0 V
Linearity	< 5% full scale
Response Time at 20 °C	
t50	< 40 s calculated from 2 min. exposure time
t90	< 70 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	15–90% r.H., non–condensing
Effect of Humidity	no effect
Sensor Life Expectancy	> 24 months
Warranty	18 months

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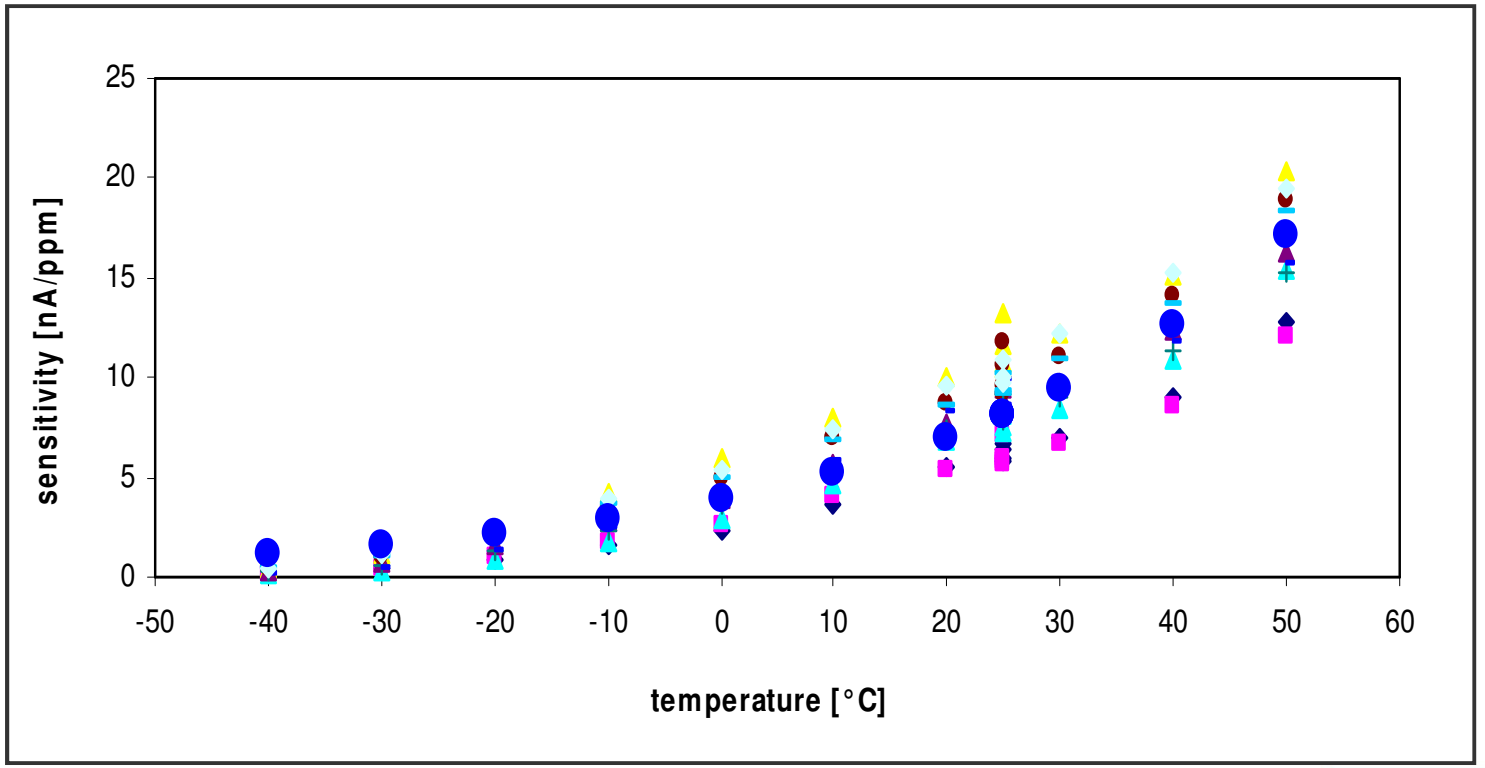
OUTPUT vs. TEMPERATURE:



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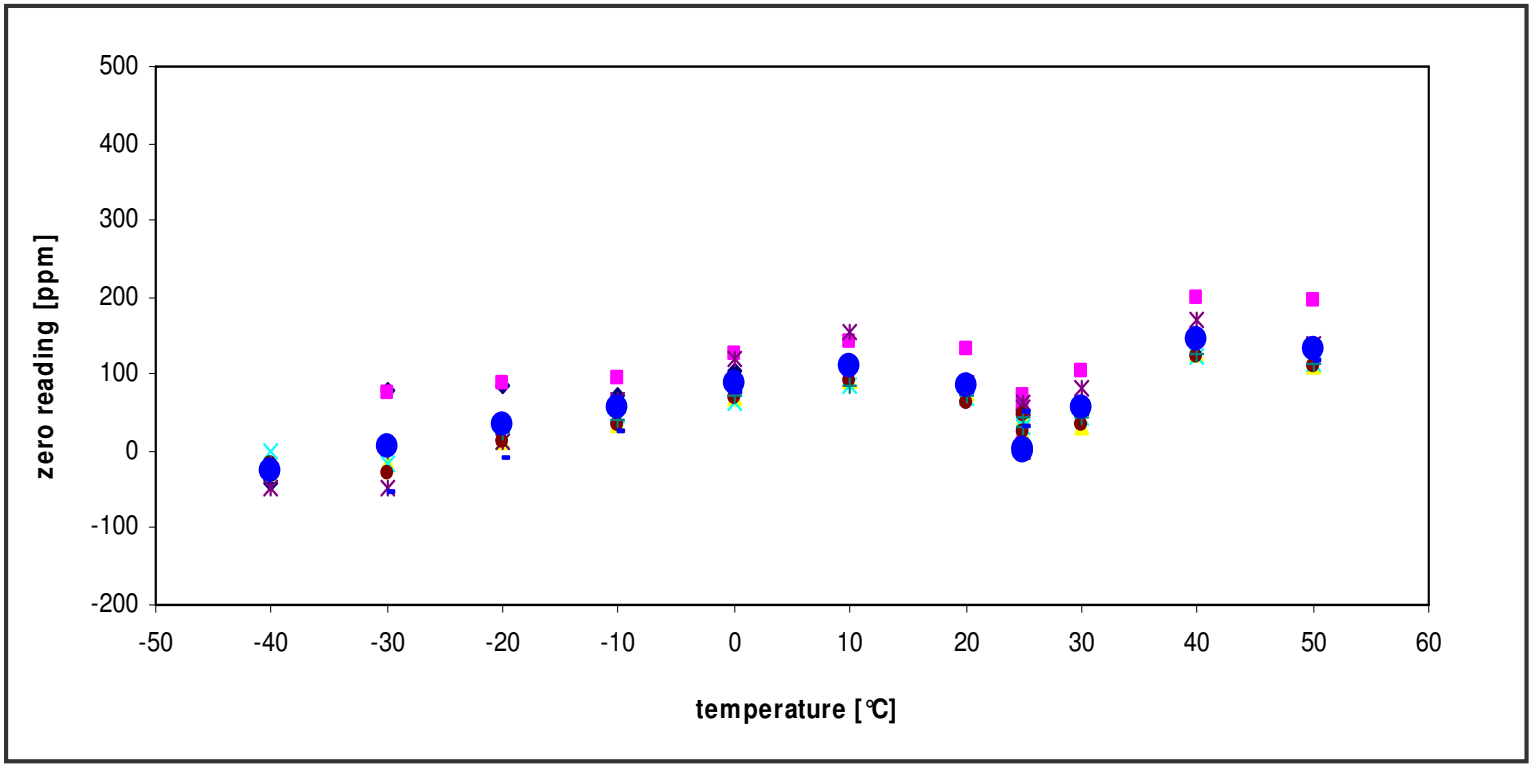
ZERO READING vs. TEMPERATURE:



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CROSS SENSITIVITIES AT 20 °C

Gas	Concentration	Reading [ppm]
Ammonia	100 ppm	0
Arsine	0.2 ppm	0
Carbon Dioxide	1000 ppm	0
Carbon Monoxide	100 ppm	60
Chlorine	1 ppm	0
Ethylene	500 ppm	yes; n/d
Hydrogen Cyanide	20 ppm	0
Hydrogen Sulfide	20 ppm	0[1)]
Isopropanol	1100 ppm	yes; n/d
Methane	1 %	0
Nitrogen Dioxide	10 ppm	-40
Ozone	0.25 ppm	0
Sulfur Dioxide	5 ppm	0

1) With inboard filter; to remove TLV levels of interfering gases; continuous high level exposure may reduce the efficiency of the 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.

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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.

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