# **Nitrogen Dioxide**

# Sensoric NO2 3E 50



www.citytech.com

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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## Sensoric NO2 3E 50

#### **FEATURES**

Amperometric 3 electrode sensor cell Good zero stability Fast response High resolution

#### **TYPICAL APPLICATIONS**

TLV monitoring, parking garages

#### PART NUMBER INFORMATION

MINI	2241-032-30009
SENSORIC CLASSIC	2241-032-30069
CTL 4 series adaptation	2241-032-30049
CTL 7 series adaptation	2241-032-30079

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#### **TECHNICAL SPECIFICATIONS**

Measuring Range Sensitivity Range Zero Current at 20℃ Resolution at 20℃ Bias Potential Linearity	0–50 ppm 200 nA/ppm ± 40 nA/ppm (negative signal) < ± 20 nA < 0.1 ppm 0 mV < 5% full scale
Response Time at 20 ℃	10 a calculated from 1 min. avecause time
t50 t90	< 10 s calculated from 4 min. exposure time < 30 s calculated from 4 min. exposure time
Long Term Sensitivity Drift	< 5% per month
Operation Conditions Temperature Range Humidity Range	-20 ℃ to +40 ℃ 15–90% r.H, non–condensing
Effect of Humidity	an abrupt change of r.H. will cause a short term drift of zero reading
Sensor Life Expectancy Warranty	> 24 months in air 12 months

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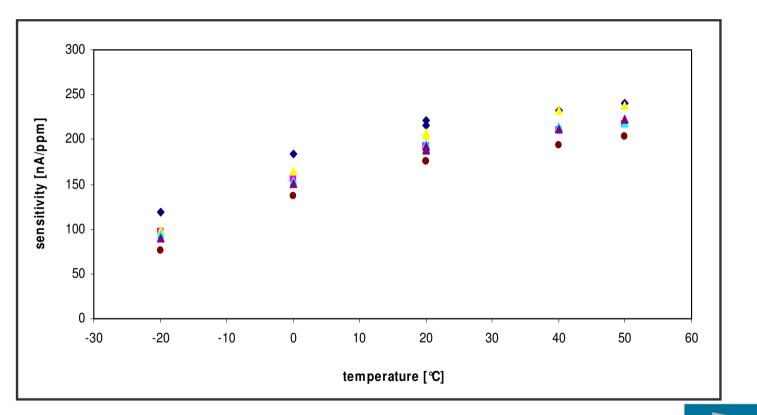


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#### **OUTPUT vs. TEMPERATURE:**



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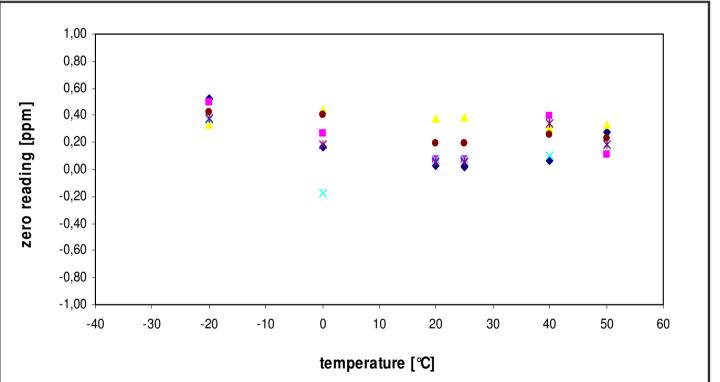
TECHNOLOGY

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#### ZERO READING vs. TEMPERATURE:



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## Sensoric NO2 3E 50

#### **CROSS SENSITIVITIES AT 20 ℃**

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	0
Carbon Dioxide	5000 ppm	0
Chlorine	1 ppm	1
Nitric Oxide	100 ppm	0.4
Sulfur Dioxide	20 ppm	-5
Hydrogen	3000 ppm	0

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**

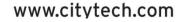
Use of the Sensoric range sensors requires complete understanding of the instructions. Before using Sensoric range sensors please carefully read 'Application Notes' which can be found at www.citytech.com under the heading '*Support' -> 'Application Notes' -> 'Sensoric'* 

Product Safety Data Sheets (PSDS) can be obtained at <u>www.citytech.com</u> 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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