

# Ammonia

## SensoriC NH3 3E 1000 SE



Rev. 03/2007

SensoriC Sensors are designed and manufactured in  
Justus-von-Liebig-Str. 22, D- 53121 Bonn, Germany

## SensoriC NH3 3E 1000 SE

### FEATURES

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

### TYPICAL APPLICATIONS

Portable & fixed point applications  
Food industry, Semiconductor industry, Chemical Industry, General Industry  
No background concentrations of ammonia \*

### PART NUMBER INFORMATION

MINI	1854-932-30009
SENSORIC CLASSIC	1854-932-30069
CTL 4 series adaptation	1854-932-30049
CTL 7 series adaptation	1854-932-30079

#### Note:

\* Background concentrations of ammonia might shorten life time of sensor .

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.



Rev. 03/2007

## SensoriC NH3 3E 1000 SE

### TECHNICAL SPECIFICATIONS

Measuring Range	0–1000 ppm
Sensitivity Range	8 nA/ppm $\pm$ 4 nA/ppm
Zero Current at 20°C	< $\pm$ 40 nA
Resolution at 20°C	< 12 ppm
Bias Potential	0 mV
Linearity	< 5% full scale
Response Time at 20°C	
t50	< 20 s calculated from 5 min. exposure time
t90	< 90 s calculated from 5 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 on zero reading
Sensor Life Expectancy	> 24 months in air*
Warranty	12 months

Note:

\* Background concentrations of ammonia might shorten life time of sensor .

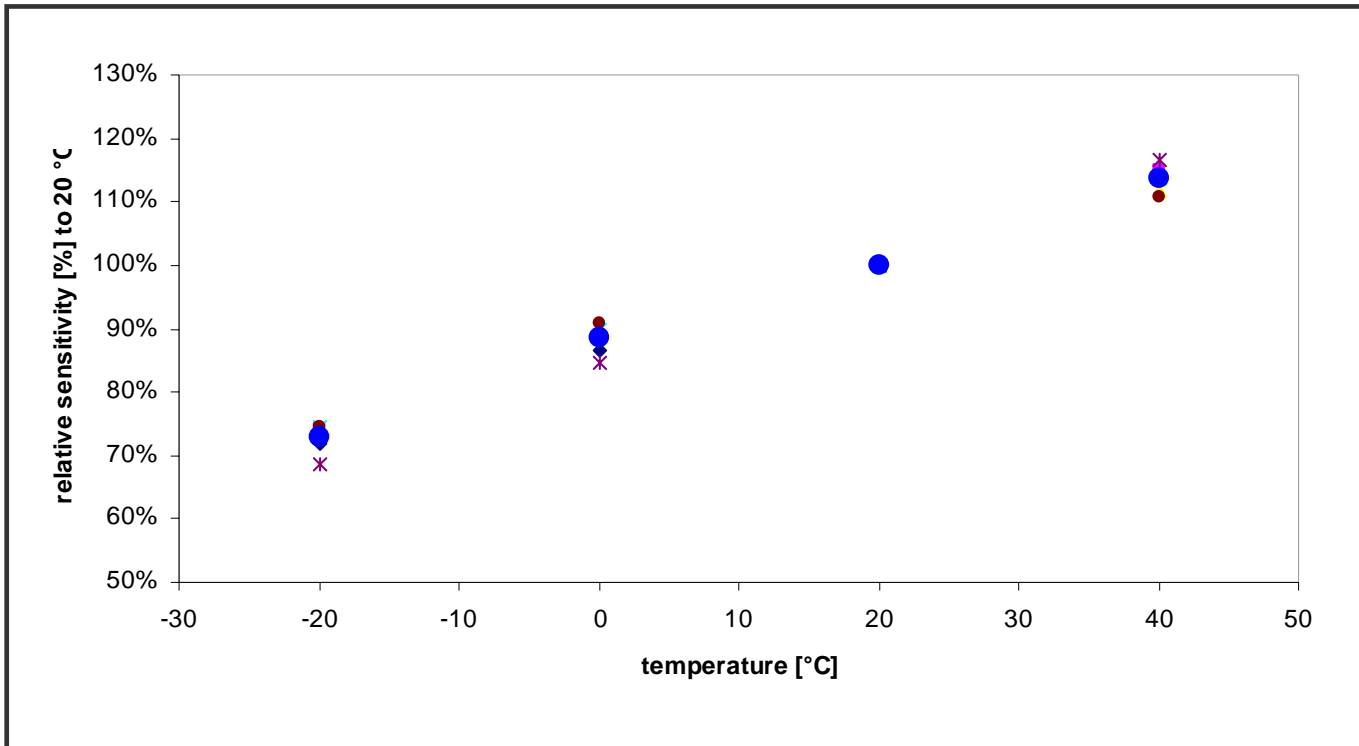
SensoriC deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which SensoriC assumes legal responsibility. The data are offered solely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



Rev. 03/2007

## SensoriC NH3 3E 1000 SE

### OUTPUT vs. TEMPERATURE:



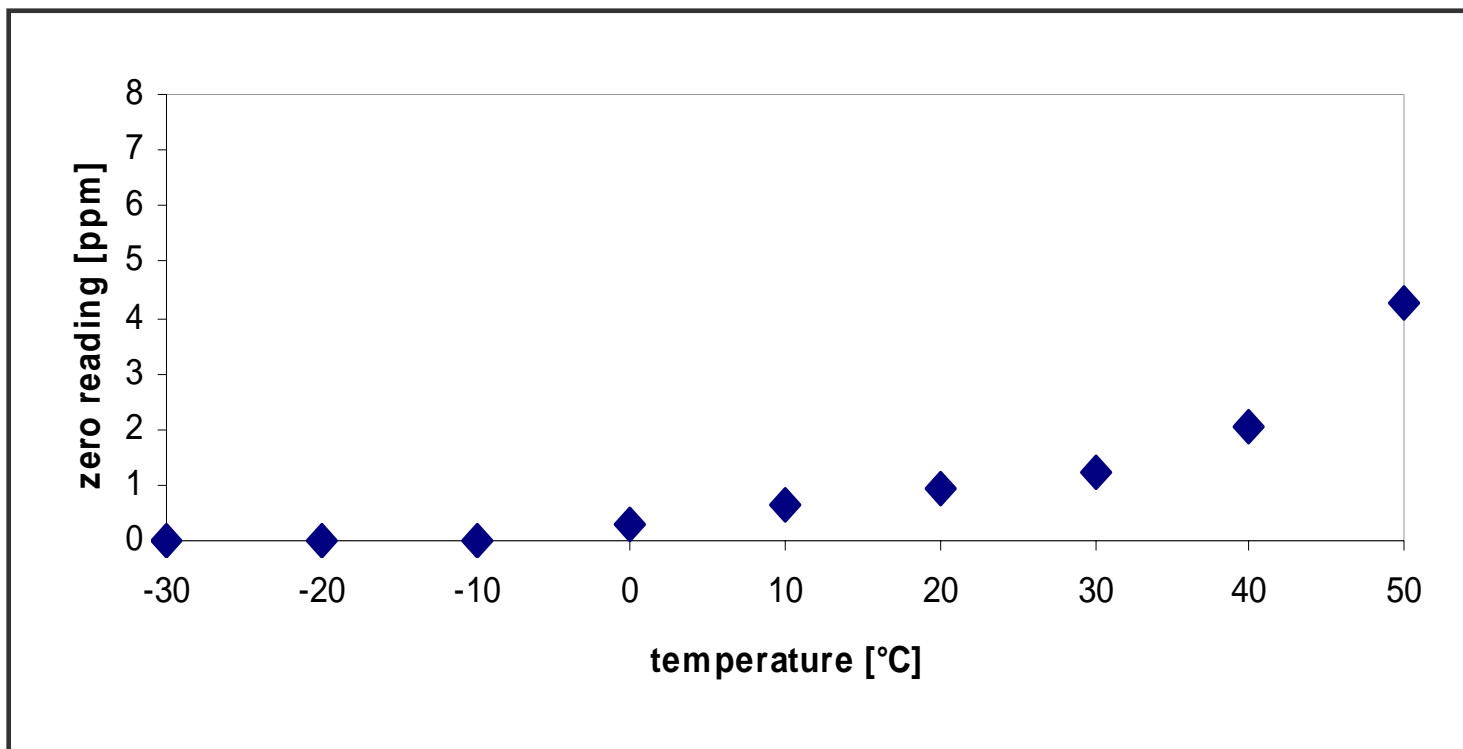
SensoriC deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which SensoriC assumes legal responsibility. The data are offered solely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



Rev. 03/2007

## SensoriC NH3 3E 1000 SE

### 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.



Rev. 03/2007

## SensoriC NH3 3E 1000 SE

### CROSS SENSITIVITIES AT 20°C

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	0
Carbon Monoxide	100 ppm	0
Chlorine	5 ppm	0
Nitrogen Dioxide	10 ppm	0
Sulfur Dioxide	20 ppm	-40
Hydrogen	3000 ppm	0
Hydrogen Sulfide	20 ppm	2

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.



Rev. 03/2007