# **Hydrogen Sulfide**

Sensoric H2S 3E 100



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#### **FEATURES**

Amperometric 3 electrode sensor cell Fast response High reliability High dynamic range

#### **TYPICAL APPLICATIONS**

TLV-monitoring, leakage detection portable & fixed point applications Oil & Petrochemical industry, water treatment plants, Biogas applications

### PART NUMBER INFORMATION

MINI	0145-034-30009
SENSORIC CLASSIC	0145-034-30069
CTL4 series adaptation	0145-034-30049
CTL 7 series adaptation	0145-034-30079



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#### **TECHNICAL SPECIFICATIONS**

Measuring Range 0–100 ppm

Sensitivity Range 750 nA/ppm ± 150 nA/ ppm

Zero Current at  $20\,^{\circ}\text{C}$   $< \pm 200\,\text{ nA}$ Resolution at  $20\,^{\circ}\text{C}$   $< 0.3\,\text{ppm}$ Bias Potential  $0\,\text{mV}$ 

Linearity < 5% full scale

Response Time at 20 ℃

< 15 s calculated from 2 min. exposure time</li>
 < 30 s calculated from 2 min. exposure time</li>

Long Term Sensitivity Drift < 10% per 6 months

**Operation Conditions** 

Temperature Range -40 °C to +40 °C

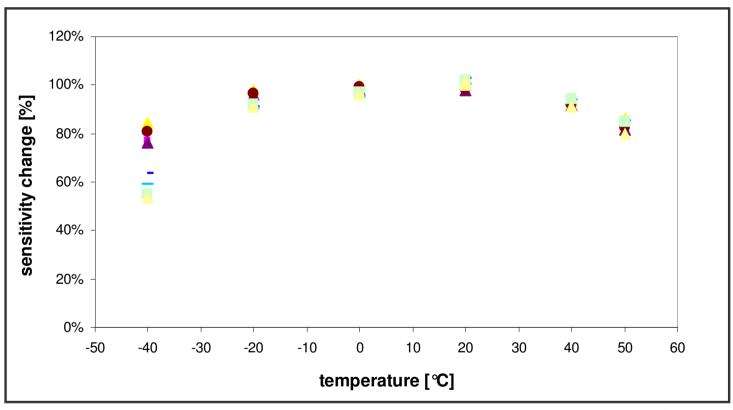
Humidity Range 15–90% r.H., non–condensing

Effect of Humidity no effect

Sensor Life Expectancy > 48 months
Warranty 24 months



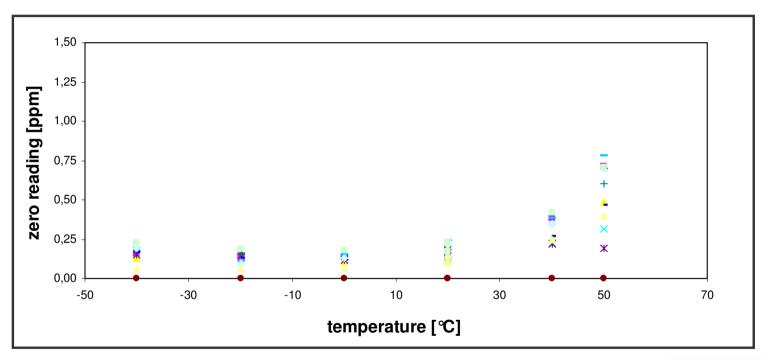
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### **ZERO READING vs. TEMPERATURE:**





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#### **CROSS SENSITIVITIES AT 20 ℃**

Gas	Concentration	Reading [ppm]
Ammonia	110 ppm	<0.1
Arsine	0.2 ppm	0
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	5
Chlorine	1 ppm	0
Chlorine Dioxide	1 ppm	<-0.1
Ethylene	500 ppm	2
Hydrogen	3000 ppm	45
Hydrogen Cyanide	20 ppm	2
Isopropanol	200 ppm	20
Methane	1 %	0
Nitrogen Dioxide	10 ppm	0
Ozone	0.25 ppm	0
Sulfur Dioxide	20 ppm	5

#### 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.



## **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 <a href="www.citytech.com">www.citytech.com</a> under the heading 'Support' -> 'Product Safety Datasheets'

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

