# **Chlorine**

Sensoric Cl2 3E 10



### Sensoric CI2 3E 10

#### **FEATURES**

Amperometric 3 electrode sensor cell Low susceptibility to abrupt changes of humidity Low interference to SO2 High poison resistance

#### **TYPICAL APPLICATIONS**

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

#### PART NUMBER INFORMATION

MINI	0436-032-30009
SENSORIC CLASSIC	0436-032-30069
CTL 4 series adaptation	0436-032-30049
CTL 7 series adaptation	0436-032-30079



### Sensoric CI2 3E 10

#### **TECHNICAL SPECIFICATIONS**

Measuring Range 0-10 ppm; typically: 0–5 ppm

Sensitivity Range 450 nA/ppm ± 200 nA/ppm (negative current)

Zero Current at  $20\,^{\circ}$ C  $< \pm 20\,^{\circ}$ A Resolution at  $20\,^{\circ}$ C  $< 0.05\,^{\circ}$ ppm

Bias Potential 0 mV

Linearity < 5% full scale

Response Time at 20 ℃

< 30 s calculated from 2 min. exposure time</li>
 < 60 s calculated from 2 min. exposure time</li>

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 current

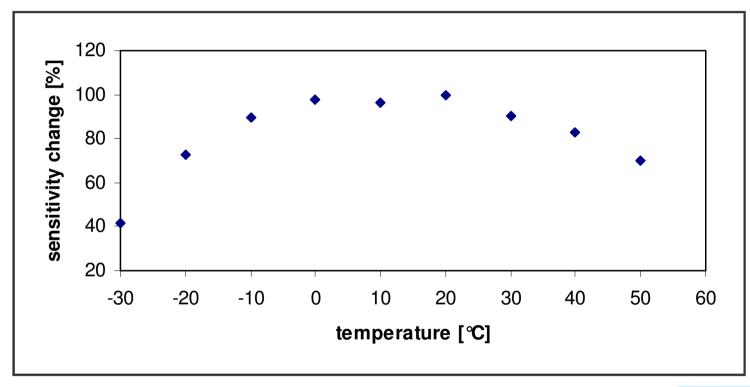
Sensor Life Expectancy > 24 months in air

Warranty 12 months



### Sensoric CI2 3E 10

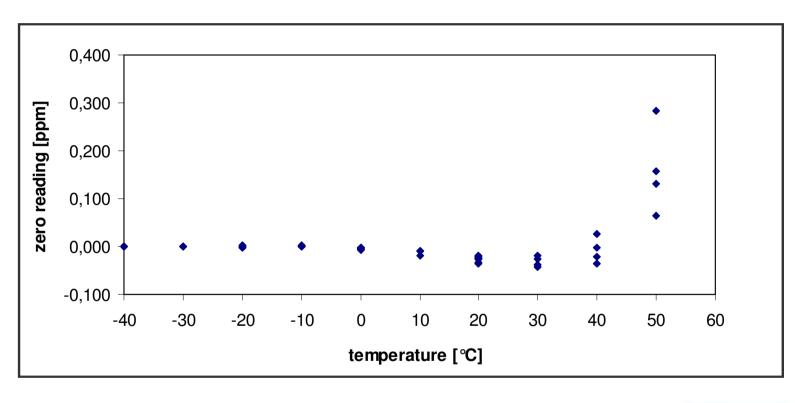
#### **OUTPUT vs. TEMPERATURE:**





### Sensoric CI2 3E 10

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





### Sensoric CI2 3E 10

#### **CROSS SENSITIVITIES AT 20 ℃**

Gas	Concentration	Reading [ppm]
Ammonia Bromine Carbon Dioxide Carbon Monoxide Chlorine Dioxide Hydrogen Hydrogen Sulfide Nitrogen Dioxide Ozone	100 ppm 1 ppm 1 % 100 ppm 2.4 ppm 3000 ppm 20 ppm 10 ppm 0.25 ppm	0 1.0 (theoretical) 0 0 0.55 0 0.1 4.5 0.11
Sulfur Dioxide	20 ppm	0.11
	• •	

#### 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.

