Ammonia

SensoriC NH3 3E 5000 SE



FEATURES

Amperometric 3 electrode sensor cell Low susceptibility to abrupt changes of humidity No CO2 interference High selectivity 0 voltage biased operation

TYPICAL APPLICATIONS

Portable & fixed point applications Monitoring of IDLH levels, General Industry, Chemical Industry, Food & Refrigeration Industry

PART NUMBER INFORMATION

MINI	1858-931-30009
SENSORIC CLASSIC	1858-931-30069
CTL4 series adaptation	1858-931-30049
CTL 7 series adaptation	1858-931-30079



TECHNICAL SPECIFICATIONS

Measuring Range 0–5000 ppm

Sensitivity Range $4 \text{ nA/ppm} \pm 2 \text{ nA/ppm}$ Zero Current at 20°C $<\pm 100 \text{ nA}$, typically 40 nA Resolution at 20°C <50 ppm, typically 20 ppm

Bias Potential 0 mV

Linearity <10% full scale

Response Time at 20°C

< 30 s calculated from 5 min. exposure time< 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 during abrupt changes of r.H.

Sensor Life Expectancy > 24 months in air*

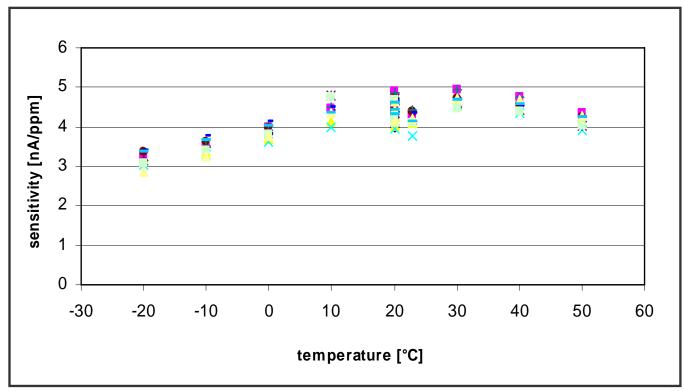
Warranty 12 months

Note:



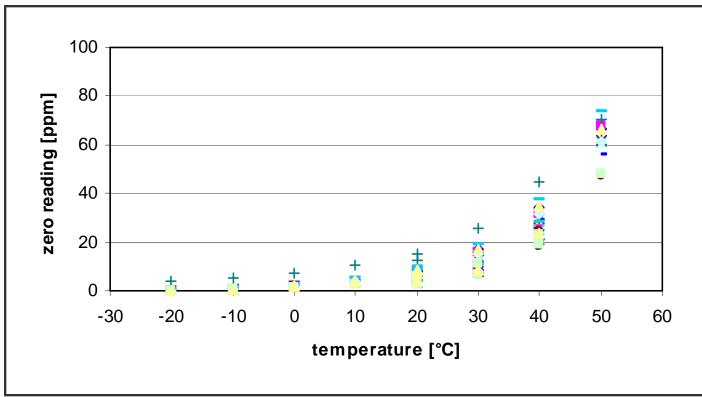
^{*} Background concentrations of ammonia might shorten life time of sensor .

OUTPUT vs. TEMPERATURE:





ZERO READING vs. TEMPERATURE:





CROSS SENSITIVITIES AT 20°C

Gas	Concentration	Reading [ppm]
Alcohols Carbon Monoxide Chlorine Nitrogen Dioxide Sulfur Dioxide	1000 ppm 100 ppm 5 ppm 10 ppm 20 ppm	0 0 0 0 expected / no data
Hydrogen	3000 ppm	0
Hydrogen Sulfide	20 ppm	yes / no data

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.

