Sensoric NH3 3E 500 SE

Performance Characteristics

Measuring Range 0-500ppm

Sensitivity Range $35nA/ppm \pm 15nA/ppm$

Expected Operating Life >24 months in air*

Zero Current at 20°C <± 100nA, typically 40nA

Response Time at 20°C t50 < 30s calculated from

5min. expsoure time t90 < 90s calculated from

5min. expsoure time

Temperature Range -20°C to +40°C

> 0mV **Bias Potential**

> > <10% full scale Linearity

Long Term Sensitivity Drift <5% per 6 months

> **Pressure Coefficient** <0.03% signal/mBar

Operating Humidity 15-90% RH non-condensing

Effect of Humidity No effect on zero reading during abrupt changes of RH

Recommended Load

 100Ω Resistor

Physical Characteristics

Orientation Sensitivity None

Storage Life 4 weeks in container

Recommended

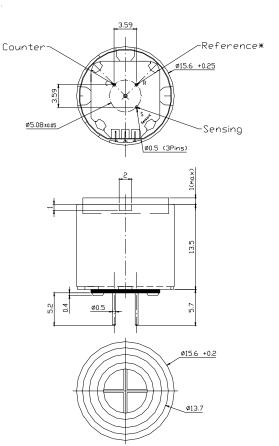
Storage Temperature 0-20°C

> Warranty 12 Months

Features

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

Outline Dimensions (Example Mini)



All dimensions in mm All tolerances ±0.15mm unless othewise stated

Part Number Information

Mini 1850-932-30009 Sensoric Classic 1850-932-30069 CTL4 Series Adaptation 1850-932-30049 CTL 7 Series Adaptation 1850-932-30079

Note: Dimensions available at www.citytech.com reference Sensoric applications notes.

Typical Applications

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

All technical specifications are based on conditions at 20°C, 50%RH, and 1013mBar unless otherwise noted.

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

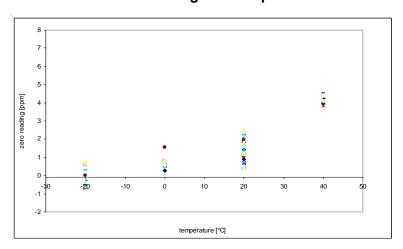
Cross Sensitiivities at 20°C

| Gas | Concentration | Reading (ppm) |
|------------------|---------------|----------------|
| Alcohols (IPA) | 600 ppm | No effect / <1 |
| Carbon Monoxide | 100 ppm | No effect / <1 |
| Carbon Dioxide | 5% | -4 |
| Hydrogen | 3000 ppm | No effect / <5 |
| Hydrogen Sulfide | 20 ppm | 5 |

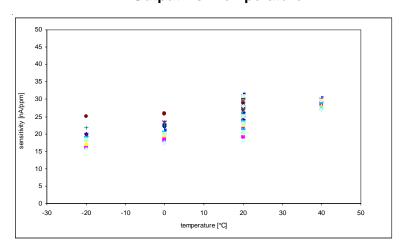
Notes

- 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.

Zero Reading vs. Temperature



Output vs. Temperature



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