# Hydrazine

SensoriC N2H4 2E 1



#### **FEATURES**

Amperometric 2 electrode sensor cell organic gel electrolyte high reliability high resolution

### **TYPICAL APPLICATIONS**

leakage detection portable & fixed point applications

### PART NUMBER INFORMATION

| MINI                    | 2131-021-30009 |
|-------------------------|----------------|
| SENSORIC CLASSIC        | 2131-021-30069 |
| CTL4 series adaptation  | 2131-021-30049 |
| CTL 7 series adaptation | 2131-021-30079 |



#### TECHNICAL SPECIFICATIONS

Measuring Range 0–1 ppm

Sensitivity Range 1200 nA/ppm ± 300 nA/ ppm

Zero Current at 20°C < ± 15 nA
Resolution at 20°C < 0.01 ppm
Bias Potential not required
Linearity < 10% full scale

Response Time at 20°C

< 30 s calculated from 4 min. exposure time</li>
 < 120 s calculated from 4 min. exposure time</li>

Long Term Sensitivity Drift < 10% per 6 months

**Operation Conditions** 

Temperature Range -10°C to +40°C

Humidity Range 20–95% r.H., non–condensing

Effect of Humidity an abrupt change of rel. humidity will cause a short term drift in zero reading

Sensor Life Expectancy > 12 months Warranty 42 weeks



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

Due to the nature of the gas the temperature dependence of the sensor as a function of the environmental temperature conditions is strongly related to the experimental conditions.

SensoriC is currently revising this set of data.

Based on the current experience with this sensor the temperature dependence

- a) on the zero reading is < 0.1 ppm
- b) on the sensitivity is < 20% of the sensitivity at 20°C

within the specified temperature range.

Please contact our Technical Support Department (tech@sensoric.de) for further details.



#### **CROSS SENSITIVITIES AT 20°C**

| Gas              | Concentration | Reading [ppm] |
|------------------|---------------|---------------|
| Alcohols         | 1000 ppm      | 0             |
| Ammonia          | 200 ppm       | $0.04^{1}$    |
| Arsine           | 0.1ppm        | 0.1           |
| Carbon Dioxide   | 5000 ppm      | 0             |
| Carbon Monoxide  | 100 ppm       | 0             |
| Chlorine         | 1 ppm         | 0.75          |
| Hydrocarbons     | % range       | 0             |
| Hydrogen         | 3000 ppm      | 0             |
| Hydrogen Cyanide | 20 ppm        | 0.7           |
| Hydrogen Sulfide | 1 ppm         | 0.1           |
| Isopropanol      | 200 ppm       | 11            |
| Nitrogen         | 100 %         | 0             |
| Nitrogen Dioxide | 10 ppm        | -5.4          |
| Ozone            | 0.25 ppm      | -0.2          |
| Sulfur Dioxide   | 5 ppm         | 0.5           |

<sup>1)</sup> short time, then decreasing signal; after exposure the reading is negative, then again zero

#### 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.

