# **SPECIFICATION SHEET FOR NH3 SENSOR TYPE NH3/MR-5000**

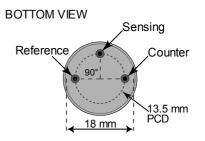
# **PERFORMANCE CHARACTERISTICS**

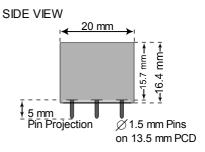
| Nominal Range                 | 0 – 5000 ppm              |  |
|-------------------------------|---------------------------|--|
| Maximum Overload              | ND                        |  |
| Expected Operation Life       | 2 years in air            |  |
| Output Signal                 | $5 \pm 2$ nA/ppm          |  |
| Resolution                    | 10 ppm                    |  |
| Temperature Range             | - 10 °C to 50 °C          |  |
| Pressure Range                | Atmospheric <sup>1)</sup> |  |
| Pressure Coefficient          | No data                   |  |
| T <sub>90</sub> Response Time | < 35 sec                  |  |
| Relative Humidity Range       | r Range 15 % to 90 % R.H. |  |
|                               | non-condensing            |  |
| Typical Baseline Range (pure  | 0 ppm +/- 80 ppm          |  |
| air, 20°C)                    |                           |  |
| Maximum Zero Shift (+20°C     | ND                        |  |
| to +40°C)                     |                           |  |
| Expected Long Term Output     | < 5 % signal loss per 6   |  |
| Drift                         | month                     |  |
| Recommended Load Resistor     | 10 - 20 Ohm               |  |
| Bias Voltage                  | Not allowed               |  |
| Repeatability                 | < 3 % of signal           |  |
| Output Linearity              | < 5 % full scale          |  |
| Humidity Effect               | < 90 ppm                  |  |
|                               |                           |  |

## PHYSICAL CHARACTERISTICS

| Weight               | ∼ 5.4 g             |
|----------------------|---------------------|
| Position Sensitivity | None                |
| Storage Life         | Six months in       |
|                      | container           |
| Recommended Storage  | 5 °C – 20 °C        |
| Temperature          |                     |
| Warranty Period      | 12 months from date |
|                      | of dispatch         |

#### **Miniature-Size Outline Dimensions**





## **CROSS-SENSITIVITY DATA**

| Interfering Gas                | Concentration | Reading |
|--------------------------------|---------------|---------|
| СО                             | 300 ppm       | 0 ppm   |
| H <sub>2</sub>                 | 200 ppm       | 0 ppm   |
| SO <sub>2</sub> <sup>3)</sup>  | 20 ppm        | -7 ppm  |
| H <sub>2</sub> S <sup>3)</sup> | 20 ppm        | 7 ppm   |
| NO <sup>3)</sup>               | 20 ppm        | -1 ppm  |
| NO <sub>2</sub> <sup>3)</sup>  | 20 ppm        | -20 ppm |
| Cl <sub>2</sub>                | 20 ppm        | -55 ppm |
| CO2                            | 2 %           | 0 ppm   |

<sup>3)</sup> Long term exposures and high concentrations may affect the performance characteristics

Performance data conditions: 20 °C, 50% RH and 1013 mbar

### **APPLICATIONS**

Discontinuous monitorin

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REV.: 4/2014

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