# **SPECIFICATION SHEET FOR NH3 SENSOR TYPE NH3/MR-2000**

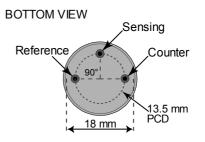
# PERFORMANCE CHARACTERISTICS

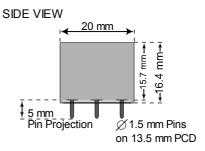
| Nominal Range                 | 0 – 2000 ppm              |  |
|-------------------------------|---------------------------|--|
| Maximum Overload              | ND                        |  |
| Expected Operation Life       | 2 years in air            |  |
| Output Signal                 | $12 \pm 4$ nA/ppm         |  |
| Resolution                    | 4 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       | 15 % to 90 % R.H.         |  |
|                               | non-condensing            |  |
| Typical Baseline Range (pure  | 0 ppm +/- 25 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               | < 35 ppm                  |  |
|                               |                           |  |

### PHYSICAL CHARACTERISTICS

| Weight                             | ~ 5.4 g                            |
|------------------------------------|------------------------------------|
| Position Sensitivity               | None                               |
| Storage Life                       | Six months in container            |
| Recommended Storage<br>Temperature | 5 °C – 20 °C                       |
| Warranty Period                    | 12 months from date<br>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  |
| $H_2S^{-3)}$                  | 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

Safety and Environmental Control For Portable Gas Detectors

The data contained in this document is for guidance only. Membrapor AG accepts no liability for any consequential losses, injury or damage resulting from the use of this document or the information contained within it. The data is given for guidance only. Customers should test under their own conditions, to ensure that the sensors are suitable for their own requirements.

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