

Product Specification of:

## NO<sub>2</sub> - Industrial Sensor / Type I-50



### :: KEY FEATURE ::

**Amperometric gas sensor shows low interferences to other gases and has a fast response time.**

*All characteristics are based on conditions at 25°C, 50% RH and 1013 hPa.*

|  |  |                               |
|--|--|-------------------------------|
| <b>Operating Principle:</b>            | 3-electrode potentiostatic cell w/o potentiostat |                               |
| <b>Electrical Connector:</b>           | 3-pin Molex®                                     |                               |
| <b>Sensor Lifetime:</b>                | ~ 2 years  |                               |
| <b>Gas Connector:</b>                  | M16 x 1 thread                                   |                               |
| <b>Measurement Range:</b>              | 0 to 500 ppm                                     |                               |
| <b>Maximum Overload:</b>               | up to 2,000 ppm                                  |                               |
| <b>Sensitivity:</b>                    | - 150 to - 250 nA/ppm                            |                               |
| <b>Response Time t<sub>90</sub>:</b>   | < 15 s   |                               |
| <b>Warm-up Time:</b>                   | < 1 h, when connected to bias                    |                               |
| <b>Bias Voltage:</b>                   | 0 mV   |                               |
| <b>Drift:</b>                          | < 10 % signal/year                               |                               |
| <b>Zero Offset Current:</b>            | < ± 1 ppm  |                               |
| <b>Operating Temperature:</b>          | 0 to 50 °C                                       |                               |
| <b>Pressure Range:</b>                 | 750 to 1250 hPa                                  |                               |
| <b>Humidity Range:</b>                 | 30 to 98 % RH                                    |                               |
| <b>Interferences:</b>                  | CO <sub>2</sub> : none                           | SO <sub>2</sub> : < 5 nA/ppm  |
|  | CO: < 1 nA/ppm                                   | H <sub>2</sub> S: < 30 nA/ppm |
|  | H <sub>2</sub> : < 1 nA/ppm                      | NO: < 2 nA/ppm                |
|  | O <sub>2</sub> : none                            |                               |
| <b>Weight:</b>                         | approximately 13 g                               |                               |
| <b>Material in Contact with Media:</b> | PP, PPS, PTFE, stainless steel                   |                               |



### :: STORAGE CONDITIONS ::

|                           |                         |
|---------------------------|-------------------------|
| <b>Temperature Range:</b> | recommended: 5 to 30 °C |
|                           | maximum: -20 to 50 °C   |
| <b>Ambient Pressure:</b>  | 600 to 1250 hPa         |
| <b>Humidity:</b>          | 10 to 98 % RH           |
| <b>Shelf Life:</b>        | < 3 months recommended  |

### :: RELATED PRODUCTS ::

| Product                       | Part-No. | Housing Colour |
|-------------------------------|----------|----------------|
| NO <sub>2</sub> - Sensor I-50 | 48 00 09 | grey           |

*This data sheet is subject to change without prior notice. [I-50-Rev\_022012.doc]*

page 1 of 1