

## SPECIFICATION SHEET FOR NO SENSOR TYPE NO/SF-1000

### PERFORMANCE CHARACTERISTICS

|   |                                     |
|---|-------------------------------------|
| Nominal Range                           | 0 – 1000 ppm                        |
| Maximum Overload                        | 2500 ppm                            |
| Inboard Filter                          | To remove effect of SO <sub>2</sub> |
| Expected Operation Life                 | 3 years in air                      |
| Output Signal                           | 200 ± 50 nA/ppm                     |
| Resolution                              | 0,5 ppm                             |
| Temperature Range                       | - 20 °C to 50 °C                    |
| Pressure Range                          | Atmospheric ± 10%                   |
| Pressure Coefficient                    | No data                             |
| T <sub>90</sub> Response Time           | < 20 sec                            |
| Relative Humidity Range                 | 15 % to 90 % R.H. non-condensing    |
| Typical Baseline Range (pure air, 20°C) | +2 to + 10 ppm <sup>1)</sup>        |
| Maximum Zero Shift (+20°C to +40°C)     | 30 ppm                              |
| Long Term Output Drift                  | < 2% signal loss/month              |
| Recommended Load Resistor               | 10 Ohm                              |
| Bias Voltage                            | + 300 mV                            |
| Repeatability                           | < 2 % of signal                     |
| Output Linearity                        | Linear                              |

<sup>1)</sup> Sensors not older than a few weeks show typical baseline values of ~ 30 - 40 ppm after 12 h stabilization in biased operation. After two days the baseline stabilises to the specified value. Sensors older than a few month will stabilize faster.

### CROSS-SENSITIVITY DATA

| Interfering Gas  | Cross-Sensitivity (%) |
|------------------|-----------------------|
| CO               | 0                     |
| SO <sub>2</sub>  | 0                     |
| H <sub>2</sub> S | 0                     |
| NO <sub>2</sub>  | ~ 1                   |
| H <sub>2</sub>   | 0                     |

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

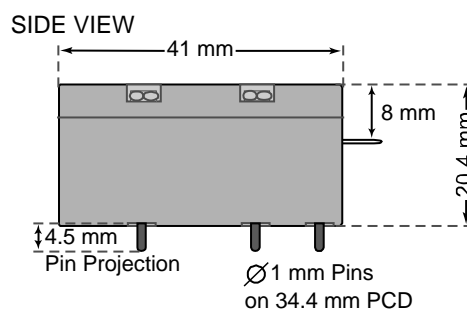
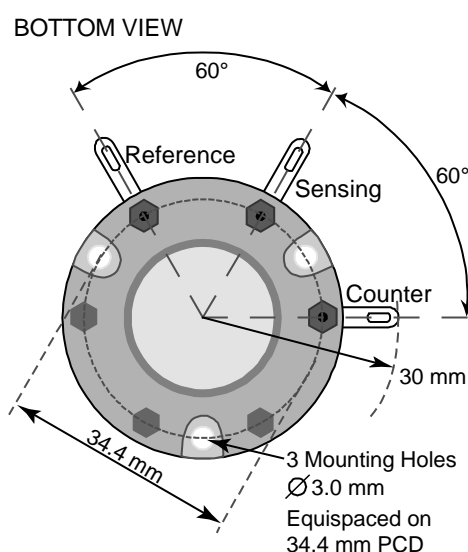
### APPLICATIONS

Safety and Environmental Control

### PHYSICAL CHARACTERISTICS

|                                 |                                 |
|---------------------------------|---------------------------------|
| Weight                          | ~ 32 g                          |
| Position Sensitivity            | None                            |
| Storage Life                    | Six months in container         |
| Recommended Storage Temperature | 5 °C – 20 °C                    |
| Warranty Period                 | 12 months from date of dispatch |

### Standard-Size Outline Dimensions

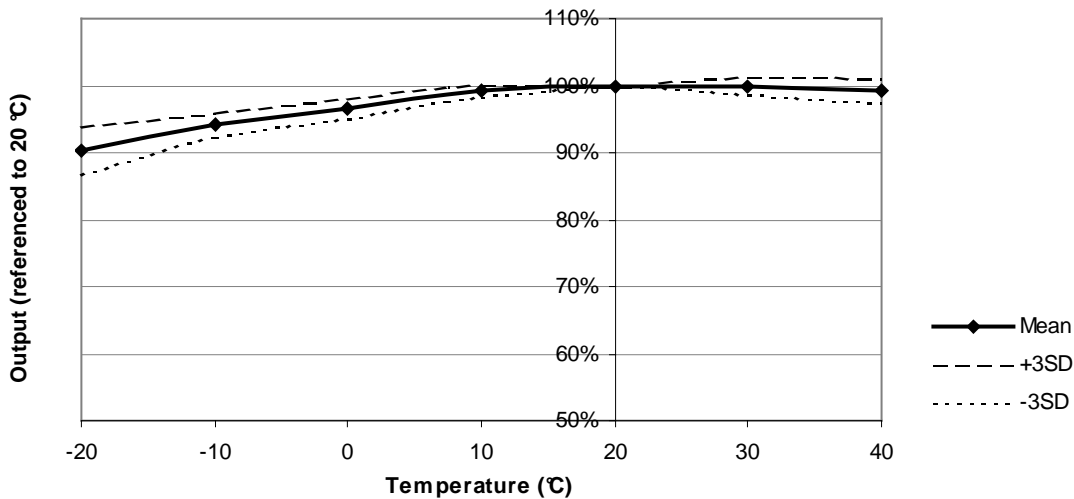


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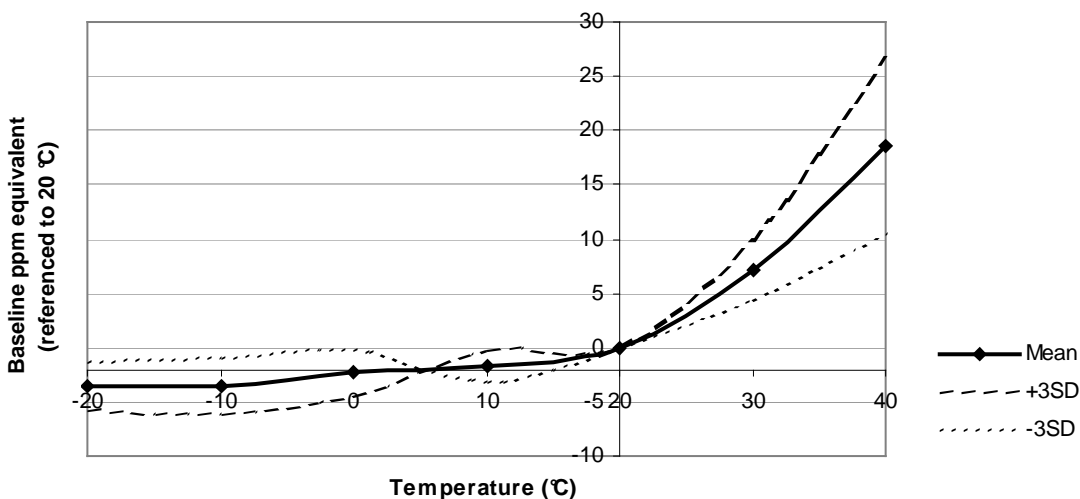
### TEMPERATURE DEPENDENCE

The output of an electrochemical sensor varies with temperature. The graphs below show the variation in output with temperature for this type of sensor. The results are shown in the graphs as a mean for a batch of sensors, along with confidence intervals corresponding to  $\pm 3$  times the standard deviation. The sensitivity dependence is expressed as a percentage of the signal at 20 °C. The shift in baseline is shown in ppm referenced to 20 °C.

**Sensitivity Temperature Dependence**



**Baseline Temperature Dependence**



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