



Electrochemical Nitrogen Dioxide Sensor

# NO2-MD-1000



## Design Features

- High Sensitivity and Quick Response
- Excellent Selectivity
- Linearity
- Stability
- High Reliability
- Perfect Leak-proof Structure

## Specifications

### Sensitivity Characteristics

Detection Gas	Nitrogen Dioxide
Detection Range	0 ~ 10ppm
Maximum Overload	100ppm
Output Signal	1000 ± 250 nA/ppm
Repeatability	± 2%
Resolution	0.05ppm
Typical Baseline Range (pure air)	± 0.1ppm
Typical Response Time (t90)	< 25seconds
Baseline Shift (-20 ~ 40°C)	< 0.1ppm
Long Term Output Drift	< 2% / month
Expected Life Time	> 2years

Performance data conditions: 20 °C , 50%RH and 1013mBar, using MGK SENSOR recommended circuitry.

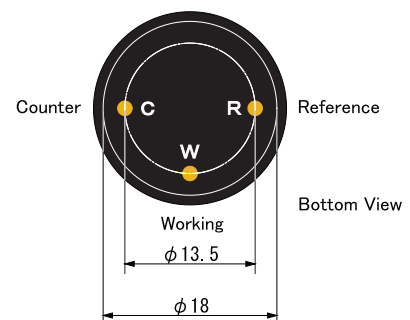
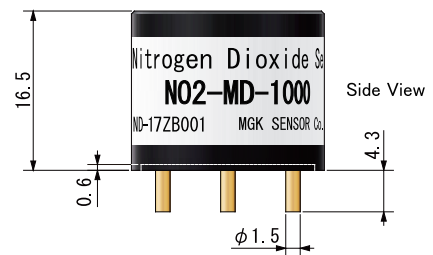
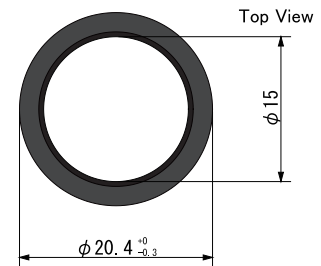
### Operating Conditions

Operating Temperature	-20 ~ 50°C
Operating Humidity	15 ~ 90% RH
Operating Pressure Range	Atmospheric ± 10%
Recommended Load Resistor	33Ω
Bias Voltage	Not required
Position Sensitivity	None
Recommended Storage Temp.	0 ~ 20°C
Storage Life	6months

### Physical Characteristics

Cap Color	Black
Weight	4.5g (approx.)

## Appearance and Dimensions



All dimensions in mm

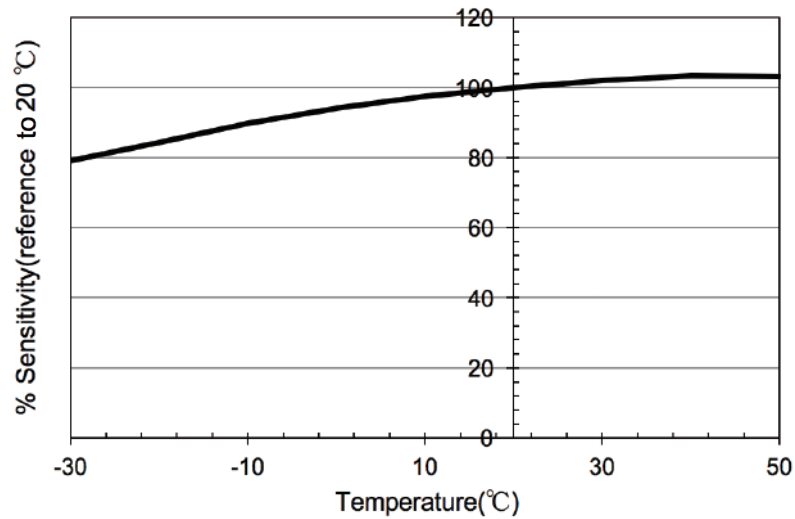
All tolerance +/-0.1 mm unless otherwise stated

NOTE: Do not solder to electrode pins. Use exclusive sockets.  
Do not blow organic solvents, paints, chemical agents, oils or high concentration gases onto sensor.

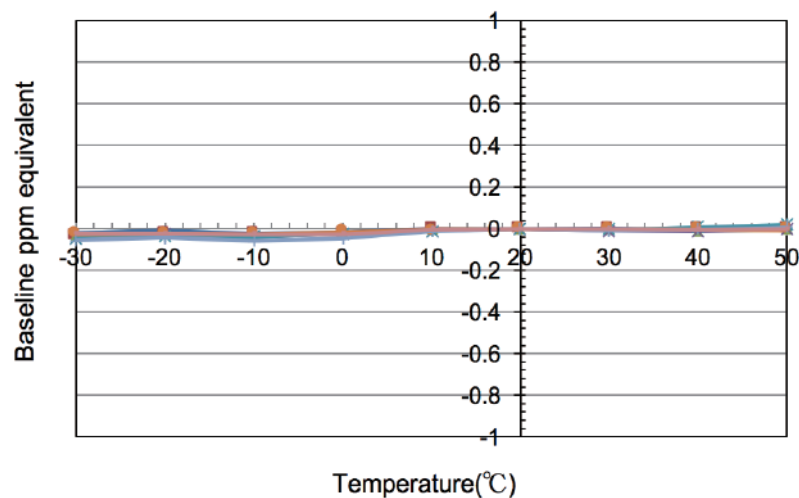
## Typical Cross Sensitivities

Gas	Concentration (ppm)	Typical Nitrogen Dioxide Concentration (ppm) Equivalent
Nitrogen Dioxide	10	10
Hydrogen	1000	0
Carbon Monoxide	300	0
Carbon Dioxide	5000	0
Sulphur Dioxide	20	0
Hydrogen Sulfide	10	-0.7 ~ 0
Nitric Oxide	30	0
Ammonia	100	0
Ethanol	100	0
Chlorine	1	1

## Temperature Dependency



## Baseline Shift



**NOTE:** NO2-MD-1000 DN-2032 Jul. 2015

As the products may be use outside control of MGK SENSOR, the information provided is given without legal responsibility. Customer should test under their own conditions, to ensure that the sensors are suitable for their own requirements.

In accordance with the company's policy of continued product improvement, MGK SENSOR reserves the right to make product changes without notice.



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