

Nitrogen Dioxide Gas Sensor

Product Data Sheet
Model #SS2148

2024. Ver 1.2

Applications & Characteristics

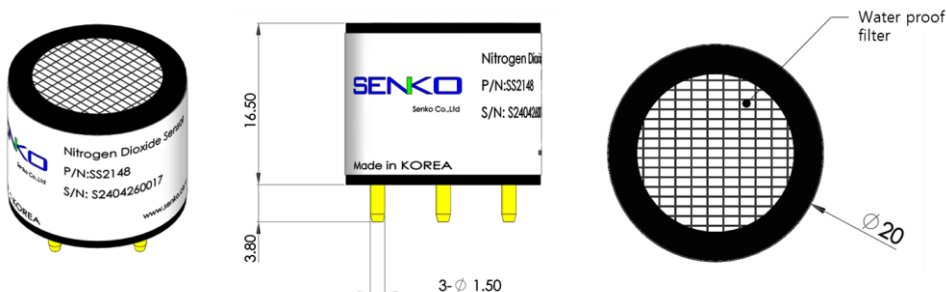
- Ideal for portable and fixed gas detector
- Industry safety (ambient air monitoring applications)
- Management ventilation in garages
- Low interference on H₂S
- Low zero drift level



Specifications

Performance Characteristics	
Output Signal	- 200±50 nA / ppm
Typical Baseline Range (pure air)	±0.5 ppm NO ₂ equivalent
T90 Response Time	< 30 seconds
Measurement Range	0-20 ppm
Maximum Overload	40 ppm
Linearity	Linear
Repeatability	<±5%
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	< 0.1 ppm typical
Environmental	
Temperature Range Continuous	-20°C to +50°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	15% to 90% RH
Life Time	
Long Term Output Drift	<10% per annum
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	>24 months in air
Standard Warranty	24 months from date of dispatch
Intrinsic Safety Data	
Maximum at 200ppm	40 mA
Maximum o/c Voltage	<1.0 V
Maximum s/c Current	<0.1 A

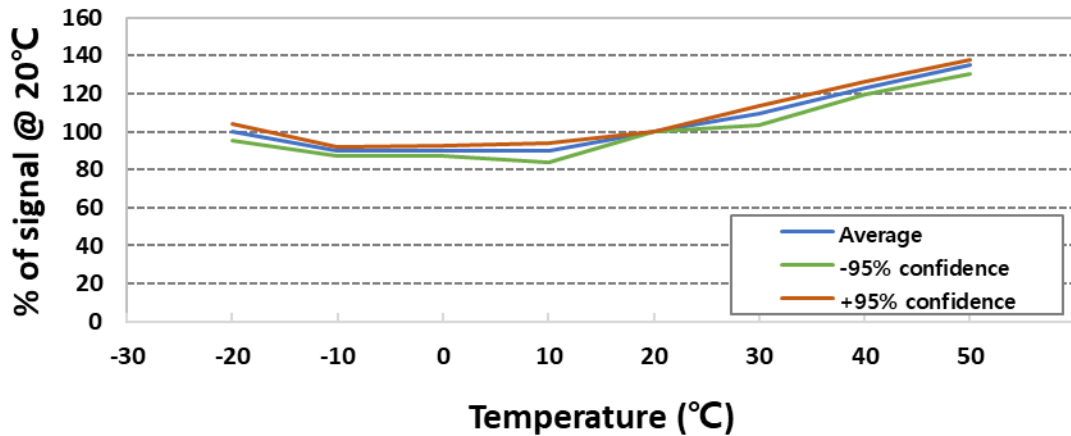
Dimension



Due to ongoing research and product improvement, specifications are subject to change without notice

Temperature effects

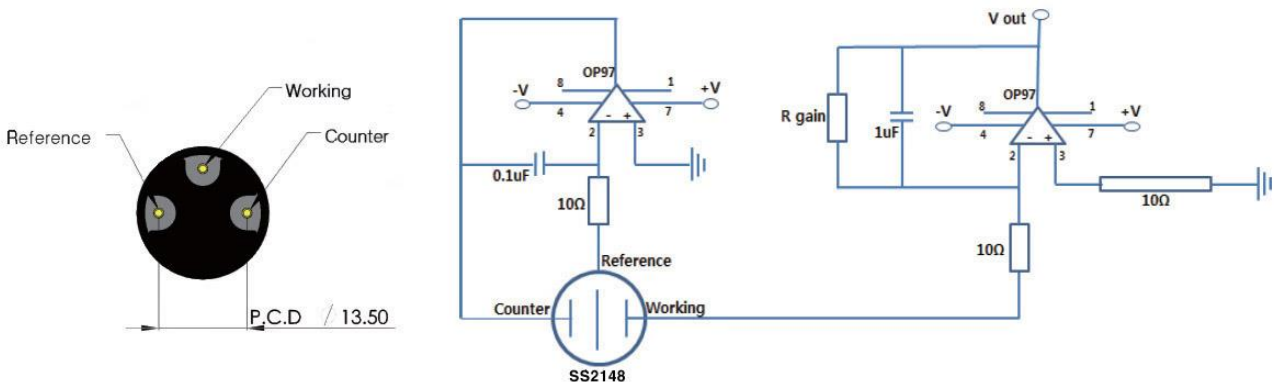
Output Temperature Coefficient Data



Cross sensitivity

Gas	Concentration [ppm]	Reading [ppm]
Nitrogen Dioxide	20	20
Hydrogen Sulfide	50	<-0.1
Carbon Monoxide	100	0.0
Chlorine	10	2.8
Hydrogen	5000	0.0
Sulfur Dioxide	20	0.0
Nitric Oxide	200	<0.1
Ammonia	100	<0.1

Standard operating circuit



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