

Phosphine Gas Sensor

Product Data Sheet Model #SS21P8

2025. Ver 1.0

Applications & Features

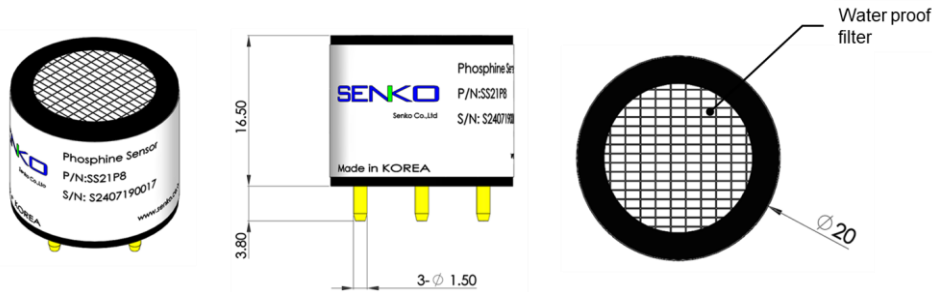
- Ideal for portable and fixed instrument
- Industrial safety (semiconductor production)
- Etc.



Specifications

Performance Characteristics	
Output Signal	1000±300 nA / ppm
Typical Baseline Range (pure air, @ 20°C)	±0.1 ppm PH ₃ equivalent
Response Time (T90)	< 40 seconds
Filter	None
Measurement Range	0-5 ppm
Maximum Overload	10 ppm
Linearity	Linear
Repeatability	< ±5% of signal
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	< 0.1 ppm typical
Bias Voltage	0 mV
Environmental	
Temperature Range Continuous	-20°C to +50°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	15% to 90% RH
Lifetime	
Long Term Output Drift	< 5% 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 10 ppm	20 µA
Maximum o/c Voltage	< 1.0 V
Maximum s/c Current	< 0.1 A

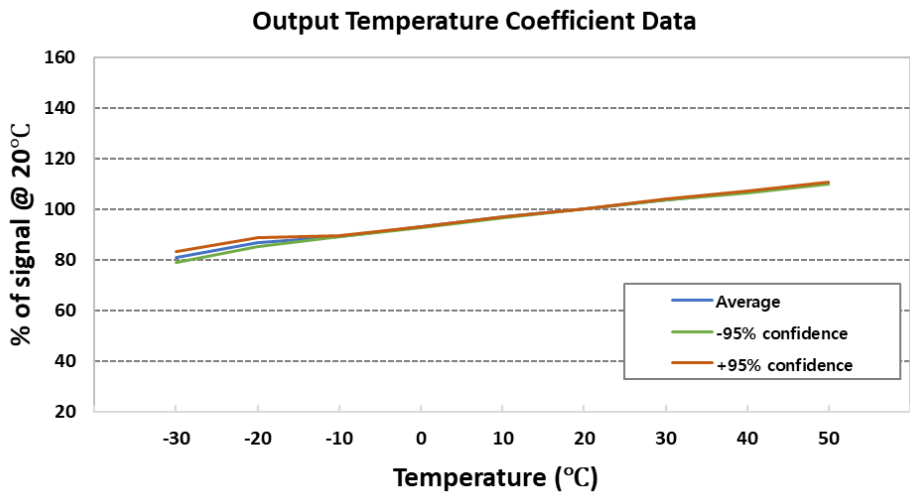
Dimension



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

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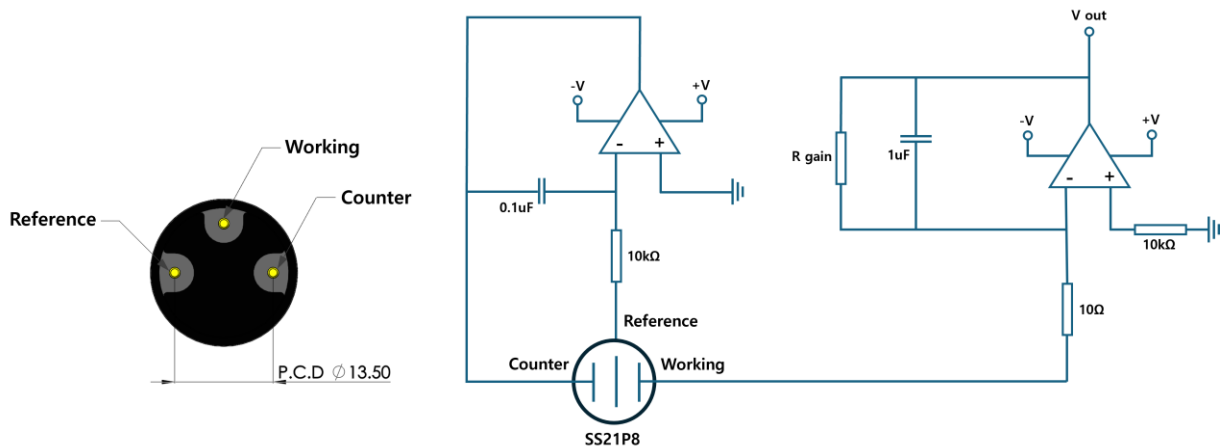
Temperature Effects



Cross Sensitivity

Gas	Concentration [ppm]	Reading [ppm]	Gas	Concentration [ppm]	Reading [ppm]
Phosphine	5	5	Ammonia	100	0
Carbon Monoxide	100	0	Arsine	5	2.7
Hydrogen	500	0	Diborane	5	0.9
Hydrogen Sulfide	50	13.9	Silane	50	5.8
Sulfur Dioxide	20	0	Hydrogen Chloride	10	0.3
Nitric Dioxide	50	-5.6			

Standard Operating Circuit



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