

Phosphine Gas Sensor

Product Data Sheet
Model #SS21P8

2023. Ver 1.0

Applications

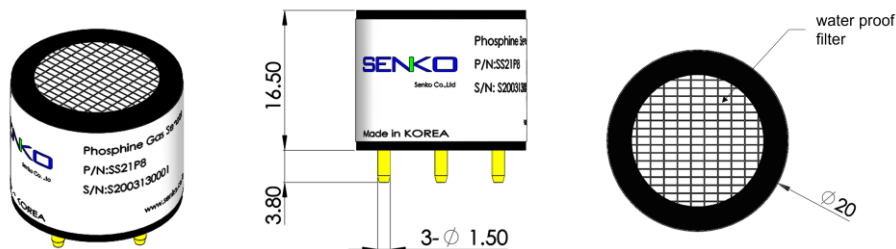
- Ideal for portable and fixed instrument
- Industry safety (Semiconductor production)
- Etc.



Specifications

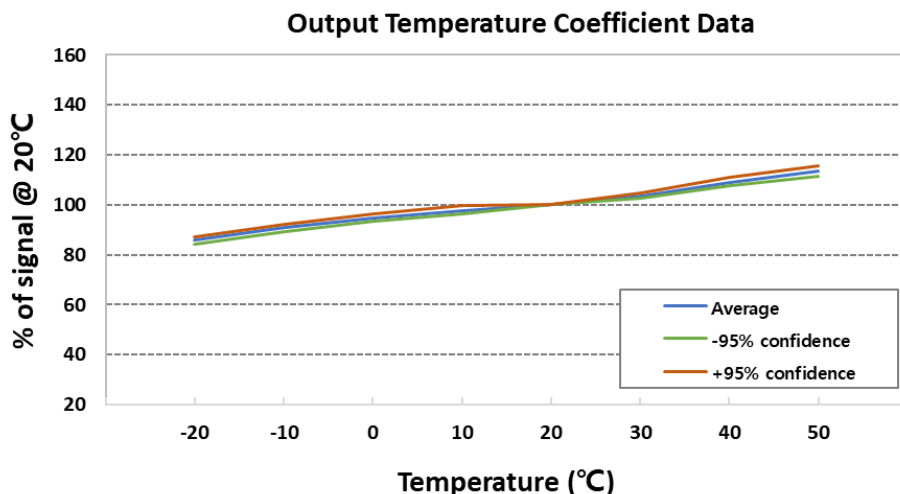
Performance Characteristics	
Output Signal	1000±300 nA / ppm
Typical Baseline Range (pure air)	±0.1 ppm PH ₃ equivalent
T90 Response Time	<20 seconds
Measurement Range	0-5 ppm
Maximum Overload	10 ppm
Linearity	Linear
Repeatability	<±5% of signal
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	<0.1 ppm typical
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	<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 20ppm	20µA
Maximum o/c Voltage	<1.0V
Maximum s/c Current	<0.1A

Dimension



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

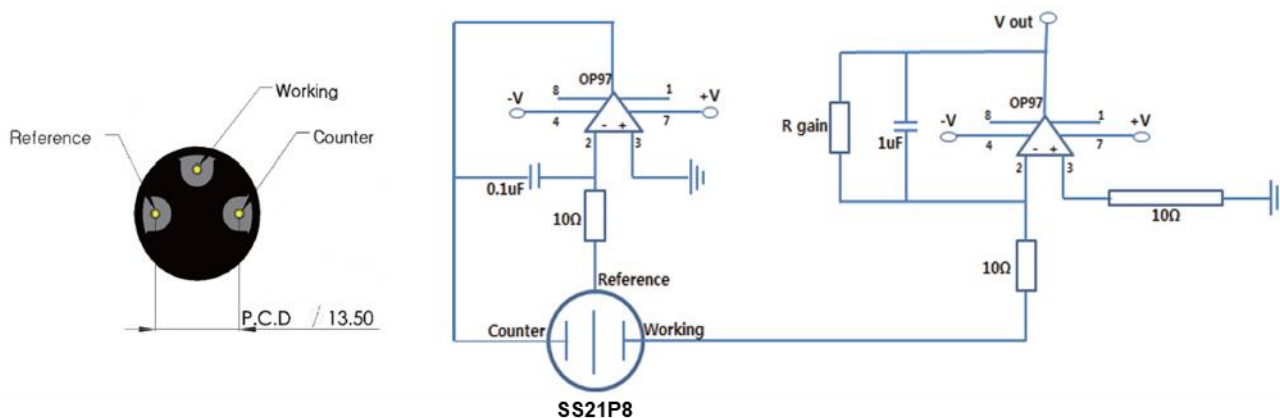
Temperature effects



Cross sensitivity

Gas	Concentration [ppm]	Reading [ppm]	Gas	Concentration [ppm]	Reading [ppm]
Phosphine	5	5	Sulfur Dioxide	10	0
Carbon Monoxide	100	0	Nitrogen Dioxide	50	-5
Hydrogen	500	0	Ammonia	100	0
Hydrogen Sulfide	50	<6	Arsine	5	<1.5

Standard operating circuit



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