

# Dual (CO & H<sub>2</sub>S) Gas Sensor

## Product Data Sheet Model #SS21CH

2025. Ver 1.0

### Applications & Features

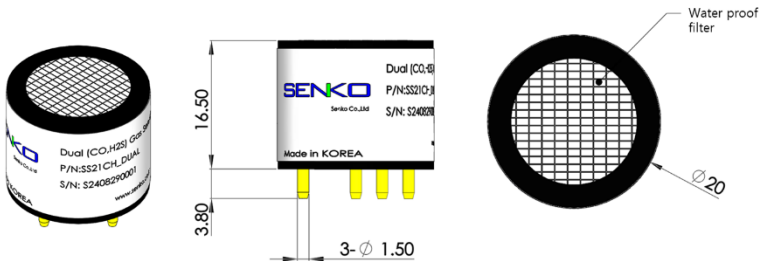
- Ideal for multi-gas portable instrument
- Industrial safety (ambient air monitoring applications)
- Residential CO alarms
- Sewers, wastewater treatment, mining



### Specifications

Performance Characteristics	
Output Signal	70±20 nA / ppm CO / 800±250 nA / ppm H <sub>2</sub> S
Typical Baseline Range (pure air, @ 20°C)	≤ ±2 ppm CO / ≤ ±0.5 ppm H <sub>2</sub> S equivalent
Response Time (T90)	< 30 seconds
Filter	None
Measurement Range	0-500 ppm CO / 0-200ppm H <sub>2</sub> S
Maximum Overload	2,000 ppm CO / 500ppm H <sub>2</sub> S
Linearity	Linear
Repeatability	≤ ±3% CO / ≤ ±2% H <sub>2</sub> S equivalent
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	≤ 0.5 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 2,000ppm	0.3 mA
Maximum o/c Voltage	< 1.0 V
Maximum s/c Current	< 0.1 A

### Dimension



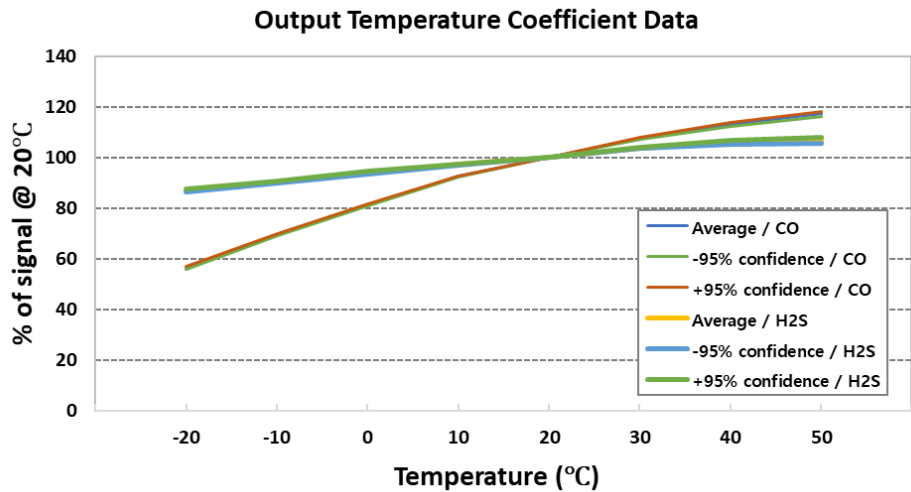
Due to ongoing research and product improvement, specifications are subject to change without notice.

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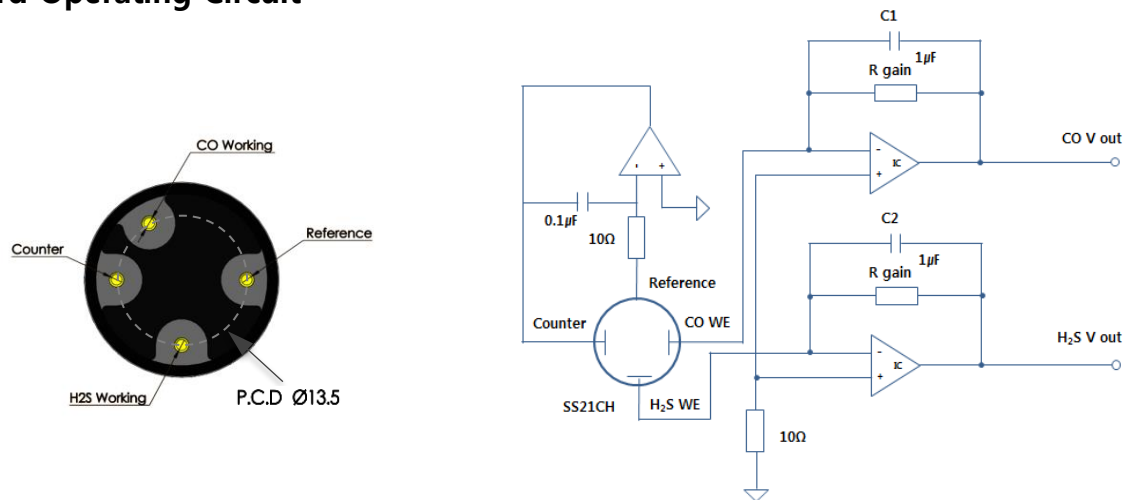
## Temperature Effects



## Cross Sensitivity

Gas	Concentration [ppm]	Reading [ppm]	
		CO Channel	H <sub>2</sub> S Channel
Hydrogen Sulfide	50	< 4.0	50
Carbon Monoxide	100	100	< 3.0
Hydrogen	500	<100	< 1.0
Sulfur Dioxide	20	0.0	< 3.5
Nitric Oxide	50	< 16	< 0.3
Nitrogen Dioxide	50	< 1.0	< 0.0

## Standard Operating Circuit



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