

# Hydrogen Gas Sensor

## Product Data Sheet Model #SS2178

2025. Ver 1.0

### Applications & Features

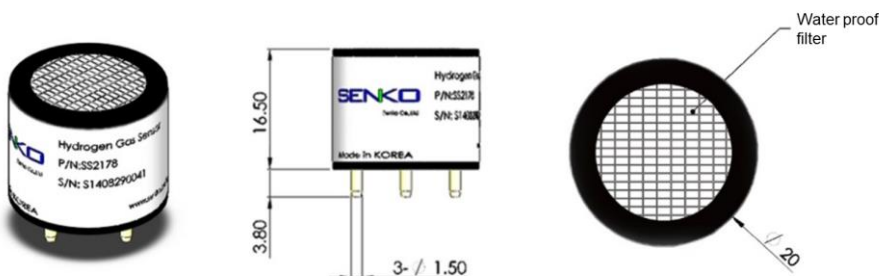
- Ideal for portable and fixed instrument
- Industrial safety (hydrogen storage, refineries)
- Etc.



### Specifications

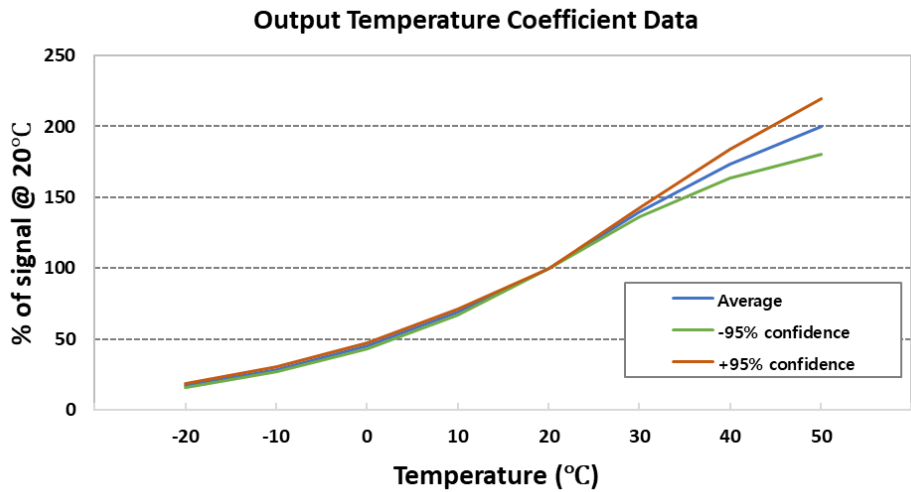
Performance Characteristics	
Output Signal	30±10 nA / ppm
Typical Baseline Range (pure air, @ 20°C)	≤ ±3 ppm H <sub>2</sub> equivalent
Response Time (T90)	< 30 seconds
Filter	Filter to reduce CO interference
Measurement Range	0-1,000 ppm
Maximum Overload	2,000 ppm
Linearity	Linear
Repeatability	2% of signal
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	< 2 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 2,000 ppm	50 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.

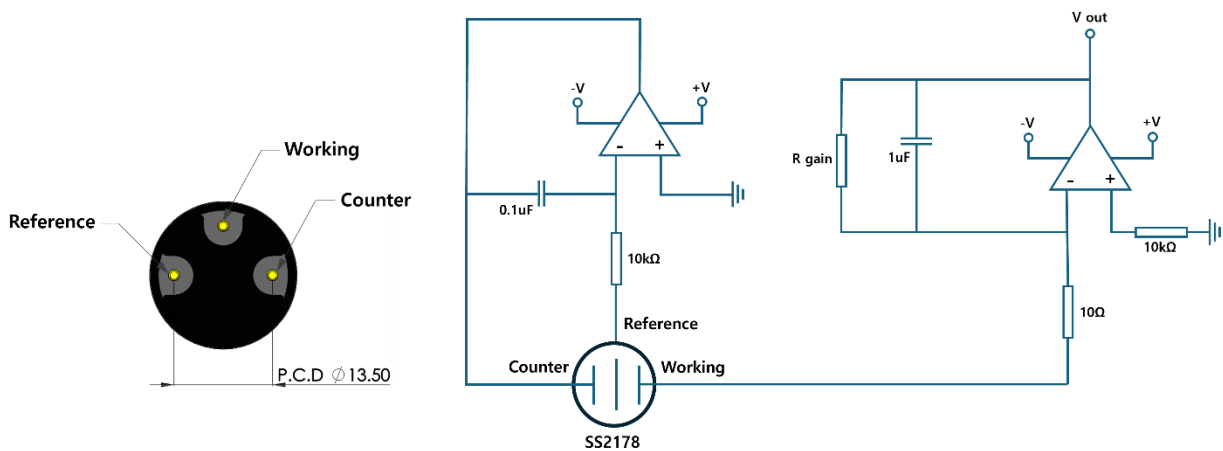
## Temperature Effects



## Cross Sensitivity

Gas	Concentration [ppm]	Reading [ppm]
Hydrogen	500	500
Carbon Monoxide	100	< 20
Sulfur Dioxide	10	0
Hydrogen Sulfide	50	< 10
Nitric Oxide	200	< 45
Nitrogen Dioxide	5	0

## Standard Operating Circuit



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