

Ethylene Gas Sensor

Product Data Sheet Model #SB-4C2H4-500-F

2026. Ver 1.0

Applications & Features

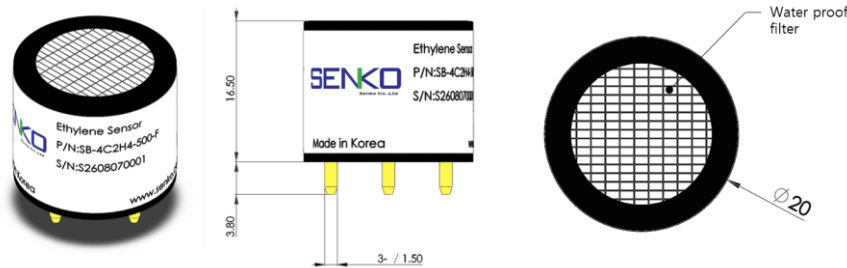
- Portable and fixed gas detectors
- Fruit ripening
- Wide range of linearity
- High selectivity



Specifications

Performance Characteristics	
Output Signal	30 ± 15 nA / ppm
Typical Baseline Range (pure air, @ 20°C)	≤ 5 ppm C ₂ H ₄ equivalent
Baseline Shift (-20°C ~50°C)	≤ ±10 ppm Typical
Response Time (T80)	< 90 seconds
Measurement Range	0 - 200 ppm
Maximum Overload	500 ppm
Linearity	Linear
Repeatability	< ±5% of signal
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	< 3 ppm typical
Bias Voltage	Not required
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	12 months from date of dispatch
Intrinsic Safety Data	
Maximum at 500 ppm	15 µA
Maximum o/c Voltage	<1.0 V
Maximum s/c Current	<0.1 A

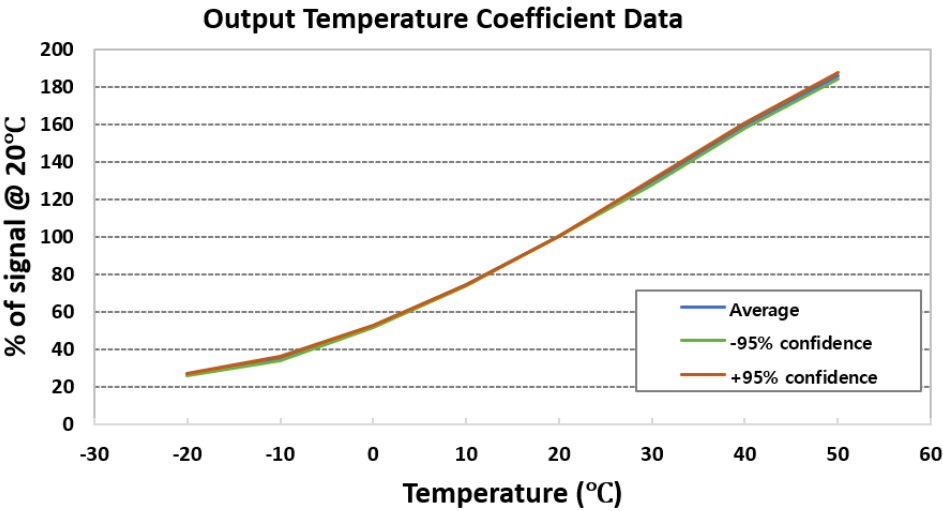
Dimension



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

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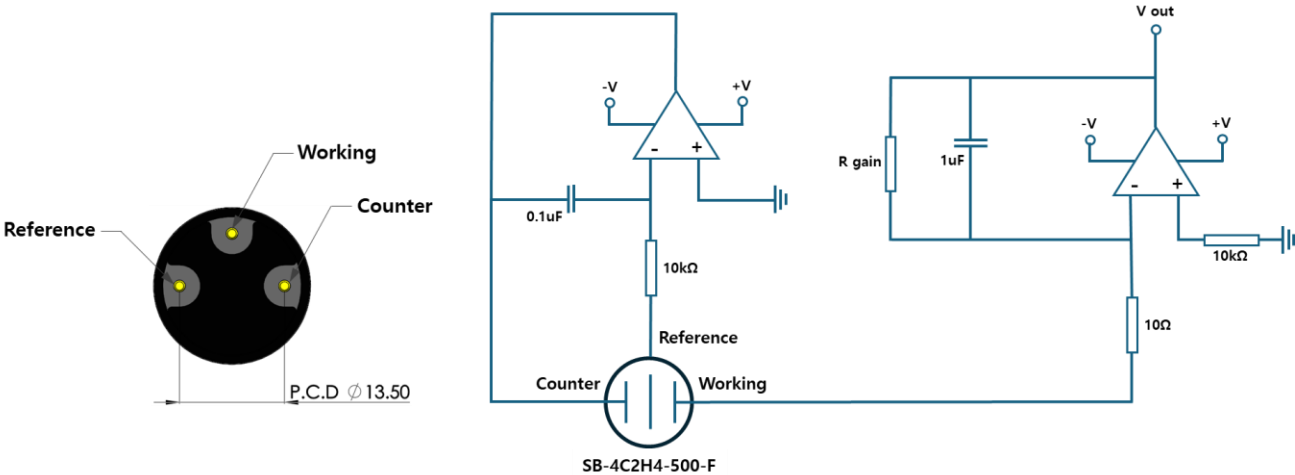
Temperature Effects



Cross Sensitivity

Gas	Concentration [ppm]	Reading [ppm]	Gas	Concentration [ppm]	Reading [ppm]
Ethylene	100	100	Alcohol	200	0
Carbon monoxide	100	132	Hydrogen	500	80
Hydrogen sulfide	50	0	Ammonia	100	0
Nitric oxide	100	41	Nitric dioxide	10	0
Sulfur dioxide	20	0			

Standard Operating Circuit



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