



RAE Systems 4H₂S-100 Sensor

4R, 0 – 100 ppm Hydrogen Sulfide Electrochemical Sensor

Part Number: CSE – 0112 – 400

Performance Characteristics

Range	0-100 ppm
Max Overload	500 ppm
Sensitivity Range	0.8± 0.2 µA/ppm
Zero signal @ 20 °C	< ±0.4 µA
Baseline drift (-20 °C to 50 °C)	0 to 0.5 ppm equivalent
Resolution	0.1 ppm
Response Time (t₉₀)	≤35 sec
Linearity	Linear
Long term output Drift	<2% signal/month

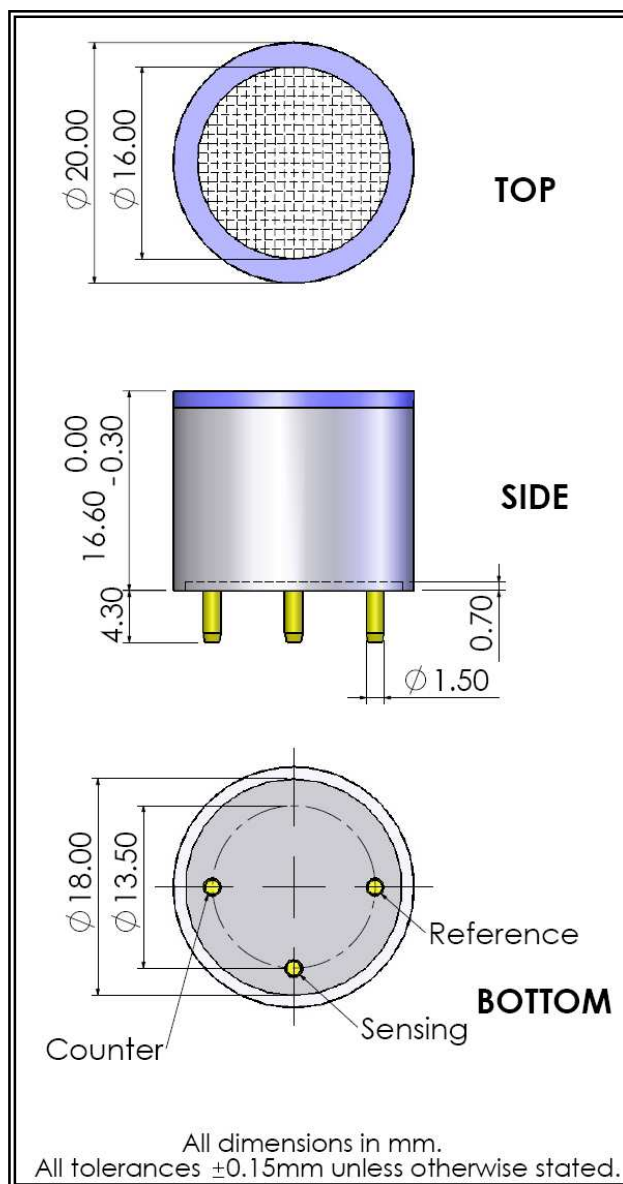
Operation Conditions

Temperature Range	-4°F to 122°F (-20°C to 50°C)
Operating Humidity	15 ~ 90%RH non-condensing
Pressure Range	Atmospheric ±10%
Bias Potential	0 mV
Storage Life	6 months in RAE container
Storage Temperature	32°F to 68°F (0 °C to 20°C)
Sensor Life Expectancy	2 year
Warranty	12 months from date of shipment

Physical Characteristics

Weight	5 g (approx)
Orientation sensitivity:	None

Outline Dimensions

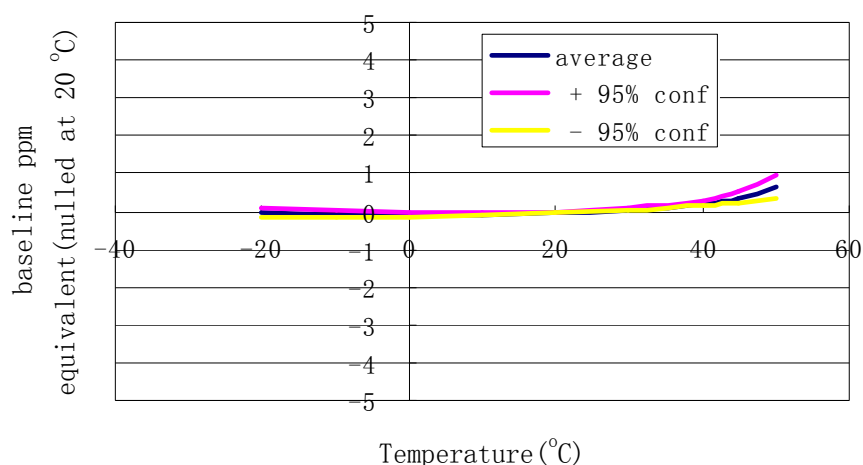




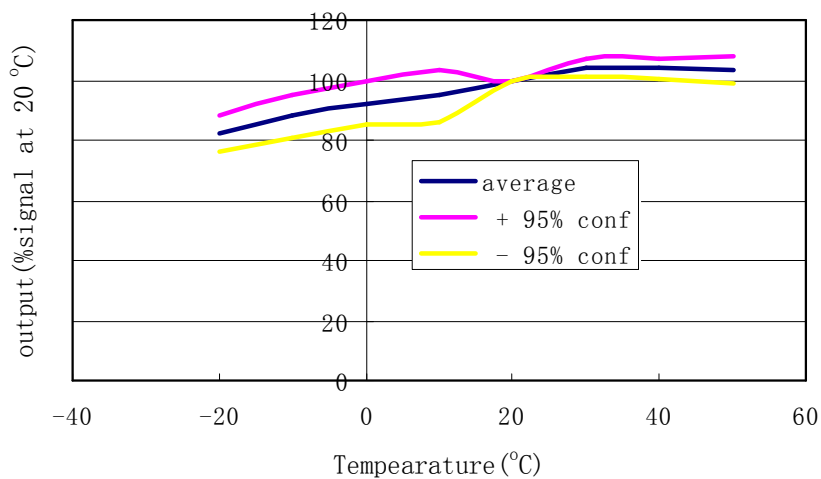
RAE Systems 4H₂S-100 Sensor

Temperature Dependence

4H₂S-100-Baseline vs Temperature



4H₂S-100-Sensitivity temperature dependence



Cross-sensitivity Data

Gas	Concentration (ppm)	Output signal (ppm H ₂ S equivalent)
Carbon Monoxide	300	≤1.5
Sulphur Dioxide	5	1
Nitric Oxide	35	≤0.7
Nitrogen Dioxide	5	-1
Hydrogen	100	0