



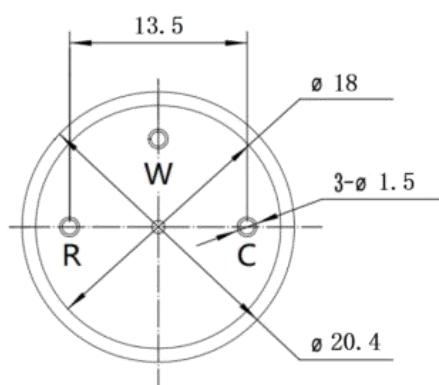
Hydrogen Sulfide Sensor (H₂S sensor)



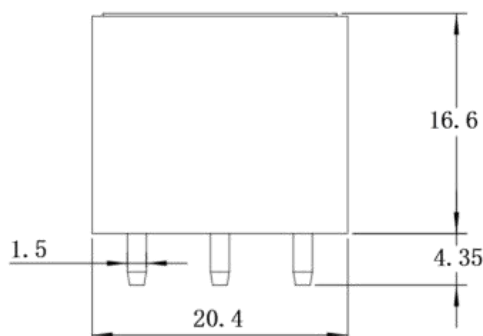
Sensor specification

Repeatability	1% output signal
Linearity	Linearity, regression coefficient R ² =0.999
Temperature	-40°C ~ +50°C
Humidity	15%~90%RH (relative humidity), non-condensing
Pressure	Atmospheric pressure ±10%
Pressure factor	< 0.02% signal /MBar
Baseline extent	< ±0.4μA
Long term drift	< 5% signal loss / year
Bias voltage	No bias voltage
Load resistance	10Ω
Built-In Filters	No
Lifetime	2 years (in air)
Warranty	1 year (from the date of shipment)
Output current polarity	Positive current (define the output current of carbon monoxide and hydrogen sulfide sensor as positive)

Product size (unit: mm)



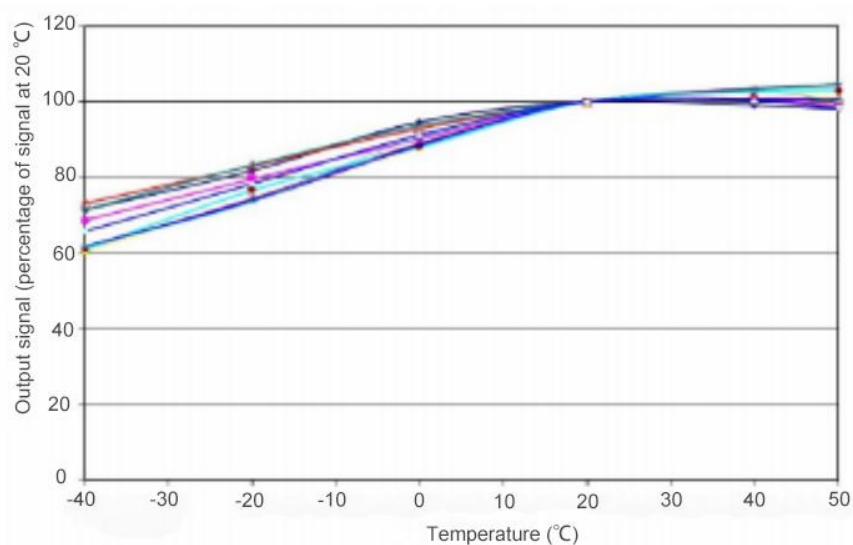
R : reference electrode
W: working/sensing electrode
C : counter electrode





Product Model	Normal range (ppm)	Max range (ppm)	Sensitivity ($\mu\text{A/ppm}$)	Resolution (ppm)	Response time (T90, s)	Max zero drift (+20 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$)
4H ₂ S-10	0-10	20	2.0 $\pm$ 0.40	0.005	<30	0.1ppm
4H ₂ S-20	0-20	50	1.8 $\pm$ 0.40	0.01	<30	0.2ppm
4H ₂ S-50	0-50	100	1.20 $\pm$ 0.30	0.05	<30	0.5ppm
4H ₂ S-100	0-100	500	0.70 $\pm$ 0.15	0.1	<30	1ppm
4H ₂ S-200	0-200	500	0.35 $\pm$ 0.08	0.2	<30	1ppm
4H ₂ S-500	0-500	1000	0.20 $\pm$ 0.06	0.5	<30	2ppm
4H ₂ S-1000	0-1000	10000	0.09 $\pm$ 0.04	1	<30	2ppm
4H ₂ S-2000	0-2000	3000	0.05 $\pm$ 0.02	2	<30	3ppm
4H ₂ S-5000	0-5000	10000	0.02 $\pm$ 0.005	5	<30	5ppm
4H ₂ S-10000	0-10000	15000	0.01 $\pm$ 0.002	10	<30	10ppm

Response temperature characteristic curve





Cross interference: Due to the difference of standard gas, cross-interference data is for reference only. The measurement of intersecting gases is not linear. There is no guarantee for accuracy of the measurement of the crossing gases.

GAS	Concentration(ppm)	Sensor response(ppm)
CO	100	0
H ₂	1000	0
NH ₃	1000	0
NO	20	0
C ₂ H ₅ OH	500	0
CH ₃ OH	500	0
CH ₄	1000	0
C ₂ H ₄	1000	0

Declaration:

1. 4-Series electrochemical gas sensors are designed for gas leak monitoring and alarm. They are not suitable for long-term exposure to the gas to be measured or long-term on-line continuous detection and analysis instruments.
2. Sensor pins must be connected through a PCB socket, Welding the pin directly will damage the sensor.
3. Sensors should avoid contact with organic solvents, alcohol, paint, oil and high concentration of gas, including silica gel and other adhesives.
4. Electrochemical sensors with positive output current (such as CO, H₂S, SO₂, NH₃, etc.) require oxygen to participate in the reaction and should be calibrated with the standard gas of air as the background gas and test, otherwise it will destroy the sensor's performance.
5. Do not remove or insert the sensor when it is powered on. Otherwise, the sensor may be damaged or abnormal.

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