

4CH3SH-M Methyl Mercaptan Electrochemical Sensor

(P/N: SEC-4CH3SH-M)

Technical Specifications

MEASUREMENT

Operating Principle	3-electrode electrochemical
Detection Range	0~10 ppm
Maximum Overload	20 ppm
Sensitivity	$0.70 \pm 0.15 \mu\text{A/ppm}$
Response Time (T90)	$\leq 30 \text{ s}$
Repeatability	$< \pm 2\%$ signal
Linearity	Linear
Long Term Output Drift	$< 2\%$ signal loss/month

ELECTRICAL

Resolution	0.1 ppm
Recommended Load Resistor	5~50 Ω
Bias Voltage	0 mV

ENVIRONMENTAL

Operating Temp. Range	$-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$
Operating Humidity	15% RH ~ 90% RH non-condensing
Operating Pressure Range	800 ~ 1200 mbar

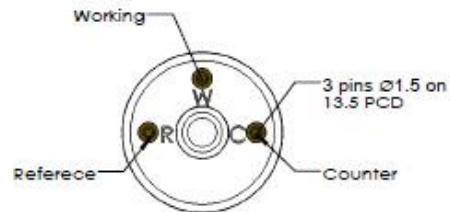
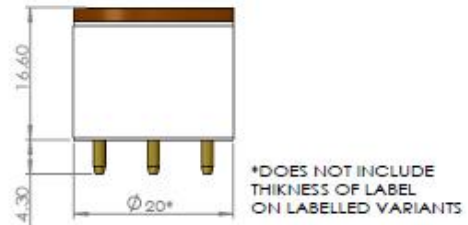
LIFETIME

Recommended Storage Temp.	0°C to +20°C in sealed container
Expected Operating Life	24 months in air
Storage Life	6 months in original packaging
Standard	18 months from date of

Warranty

despatch

Product Dimensions

All dimensions in millimeters ($\pm 0.1\text{mm}$)

AERI

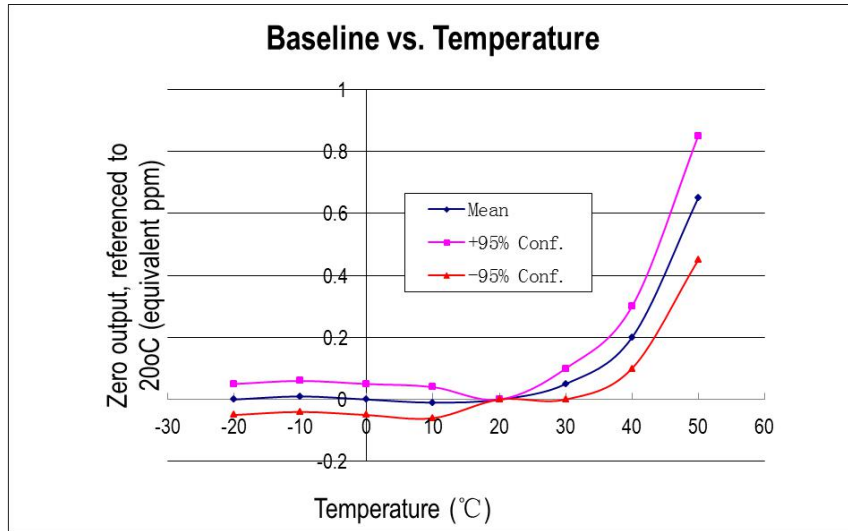
JingZhou Aeritech Co.,Ltd.

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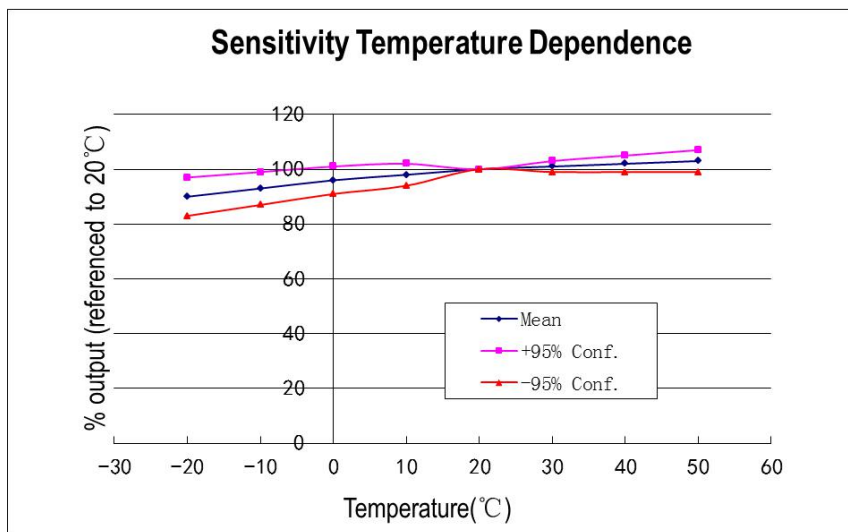
www.aerisensor.com, E-mail info@aeritech.cn

Temperature Data

Baseline drift



Sensitivity Temperature Dependence



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Cross-sensitivity Data

Gas	Concentration (ppm)	Output signal (ppm CH3SH equivalent)
Hydrogen Sulphide	25	45
Sulphur Dioxide	10	4
Nitric Oxide	20	0
Nitrogen Dioxide	10	-5
Hydrogen	1000	0

Whilst the Gas Sensor are designed to be highly specific to the gas they are intended to measure, they will still respond to some degree to various gases. The table below is not exclusive and other gases not included in the table may still cause a sensor to react. The cross-sensitivity values quoted are based on tests conducted on a small number of sensors. They are intended to indicate sensor response to gases other than the target gas. Sensors may behave differently with changes in ambient conditions and any batch may show significant variation from the values quoted.

SAFETY NOTE:

Connection should be made via a PCB mounting socket. Soldering to pins will void the sensor's warranty.

It is important that exposure to high concentrations of solvent vapours is avoided, both during storage, fitting into instruments, and operation;

If the Gas Sensor is removed from application circuit, a jumper should be added on 'R' and 'S' pin.

As applications of use are outside our control, the information provided is given without legal responsibility. Customers should test under their own conditions, to ensure that the sensors are suitable for their own. The data is given for guidance only. It does not constitute a specification or an offer for sale.

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