

# 4HCl-M Hydrogen Chloride Electrochemical Sensor

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

## Technical Specifications

### MEASUREMENT

<b>Operating Principle</b>	3-electrode electrochemical
<b>Detection Range</b>	0~50 ppm
<b>Maximum Overload</b>	100 ppm
<b>Sensitivity</b>	0.3± 0.1μA/ppm
<b>Response Time (T90)</b>	≤60 s (typical 15s)
<b>Repeatability</b>	<±2% signal
<b>Linearity</b>	Linear
<b>Long term output Drift</b>	<2% signal/month

### ELECTRICAL

<b>Resolution</b>	1 ppm
<b>Recommended Load</b>	5~35 Ω
<b>Bias Voltage</b>	+ 200mV

### ENVIRONMENTAL

<b>Operating Temp. Range</b>	-20°C ~ 50°C
<b>Operating Humidity Range</b>	15% RH ~ 90% RH non-condensing
<b>Operating Pressure Range</b>	800 ~ 1200 mbar

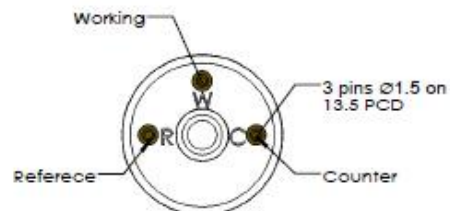
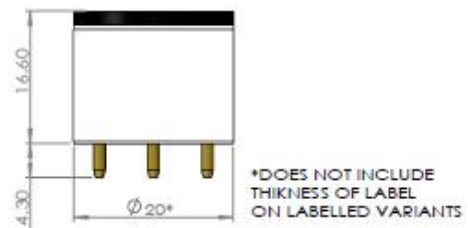
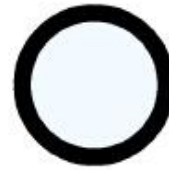
### LIFETIME

<b>Recommended Storage Temp.</b>	0°C to +20°C in sealed container
<b>Expected Operating</b>	24 months in air

### Life

<b>Storage Life</b>	6 months in original packaging
<b>Standard Warranty</b>	18 months from date of despatch

## Product Dimensions



All dimensions in millimeters (± 0.1mm)

# AERI

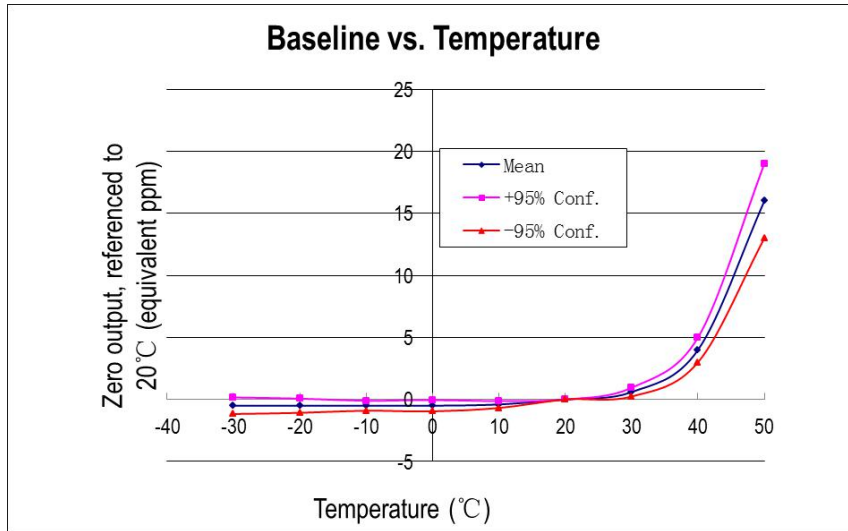
**JingZhou Aeritech Co.,Ltd.**

Tel +86 18995851100, Fax +86 0716 8499894

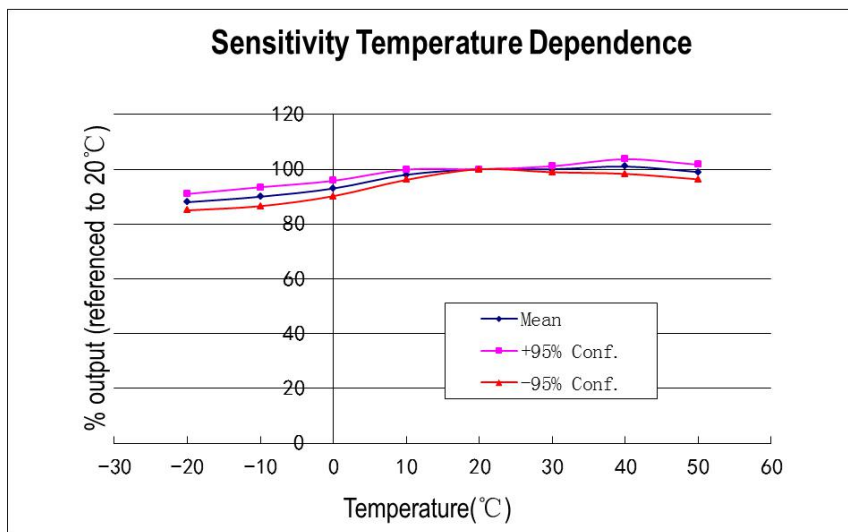
[www.aerisensor.com](http://www.aerisensor.com), E-mail [info@eritech.cn](mailto:info@eritech.cn)

## Temperature Data

### Baseline drift



### Sensitivity Temperature Dependence



## Cross-sensitivity Data

**Gas                      Concentration                      Output signal**

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	(ppm)	(ppm HCl equivalent)
Hydrogen	1000	0
Sulphur Dioxide	10	12
Nitrogen	100%	0
Nitric Oxide	20	45
Nitrogen Dioxide	10	1
Carbon Monoxide	50	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;

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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