

4PH3-S Phosphine Electrochemical Sensor

(P/N: SEC-4PH3-S)

Technical Specifications

MEASUREMENT

Operating Principle	3-electrode electrochemical
Detection Range	0~20 ppm
Maximum Overload	100ppm
Sensitivity	1.4 ± 0.6 μA /ppm
Response Time (T90)	≤60s
Repeatability	<±2% signal
Linearity	Linear
MEASUREMENT	<2% signal/month

ELECTRICAL

Resolution	0.1 ppm
Recommended Load	5~30 Ω
Bias Voltage	0mV

ENVIRONMENTAL

Operating Temp. Range	-20°C ~ 50°C
Operating Humidity Range	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

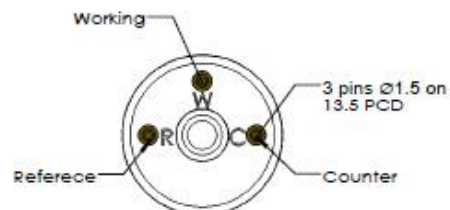
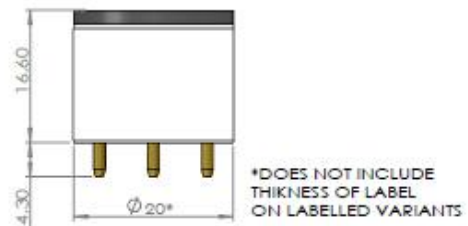
Storage Life

6 months in original packaging

Standard Warranty

18 months from date of despatch

Product Dimensions



All dimensions in millimeters (± 0.1mm)

AERI

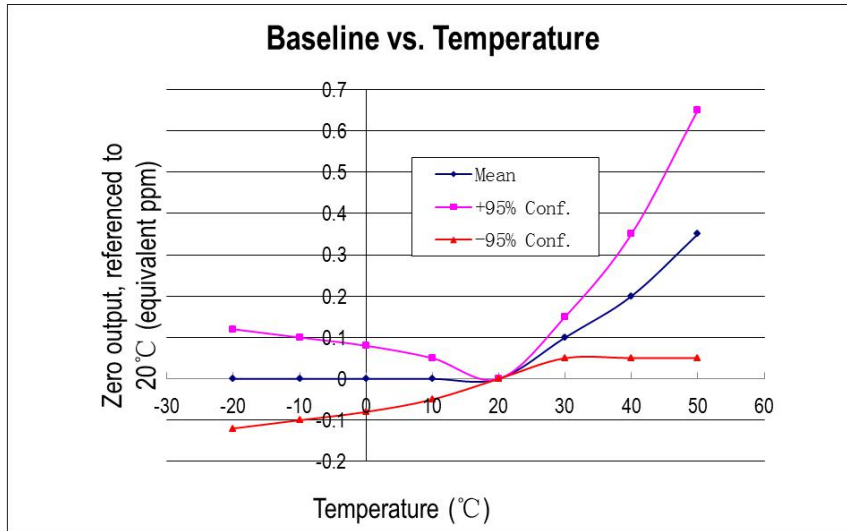
JingZhou Aeritech Co.,Ltd.

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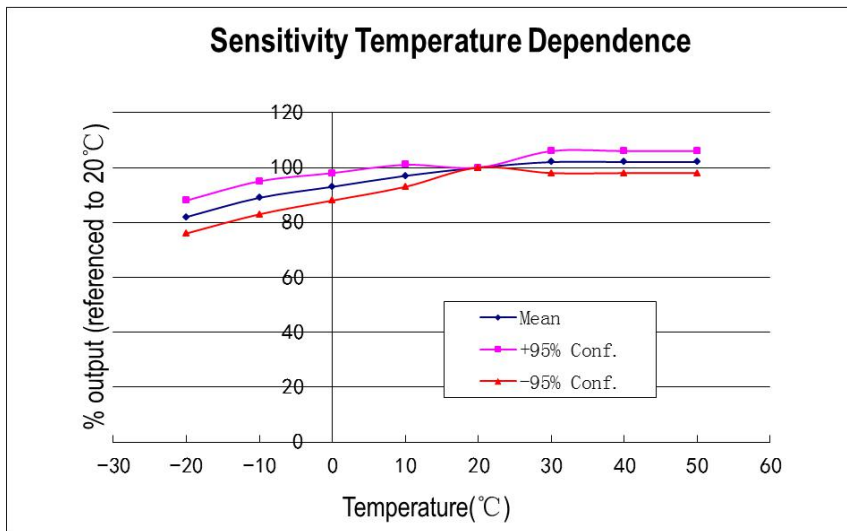
www.aerisensor.com, E-mail info@aeritech.cn

Temperature Data

Baseline drift



Sensitivity Temperature Dependence



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Cross-sensitivity Data

Gas	Concentration (ppm)	Output signal (ppm PH3 equivalent)
Carbon Monoxide	200	0
Nitric Oxide	30	0.4
Nitrogen Dioxide	5	-1
Hydrogen Sulfide	15	11

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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