4NH3-S Ammonia Electrochemical Sensor

(P/N: SEC-4NH3-S)

Technical Specifications

MEASUREMENT

Operating3-electrodePrincipleelectrochemicalDetection Range $0\sim100$ ppmSensitivity 40 ± 12 nA /ppmResponse Time \leq 40s (typical 16S)

(T90)

Repeatability <±2% signal

Linearity Linear

Long term

<2% signal/month
output Drift</pre>

ELECTRICAL

Resolution 1 ppm

Recommended

5~100 Ω

Bias Voltage 0 mV

ENVIRONMENTAL

Operating $-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$

Temp. Range

Operating 45% DIL 05% DI

Humidity non-condensing

Range

Operating

Pressure 800 ~ 1200 mbar

Range

LIFETIME

Recommended 0°C to +20°C in sealed

Storage Temp. container

Expected

Operating Life 24 months in air

6 months in original

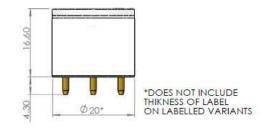
Storage Life packaging

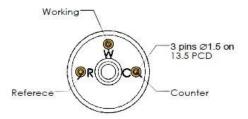
Standard 12 months from date of

Warranty despatch

Product Dimensions







All dimensions in millimeters (± 0.1mm)

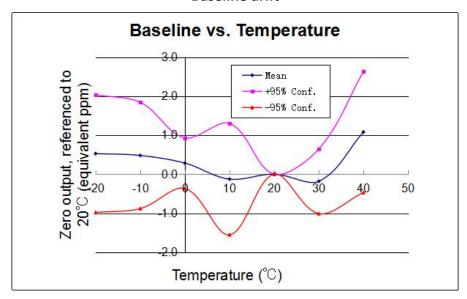


JingZhou Aeritech Co.,Ltd.

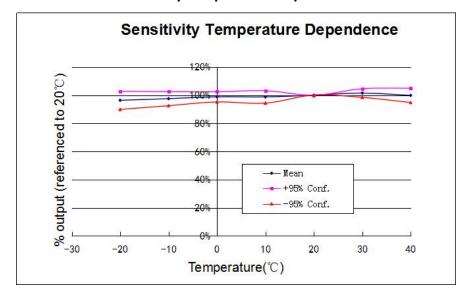
Tel +86 18995851100, Fax +86 0716 8499894 www.aerisensor.com, E-mail info@aeritech.cn

Temperature Data

Baseline drift



Sensitivity Temperature Dependence





Cross-sensitivity Data

Gas	Concentration (ppm)	Output signal (ppm NH3 equivalent)
Carbon Monoxide	100	125
Hydrogen	100	15
Ethanol	1000	0
Carbon Dioxide	1000	0
Nitrogen Dioxide	5	-10
Hydrogen Sulfide	1	5
Chlorine	2	-4.5

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.

