

SGX-4NH3 Datasheet

Industrial Ammonia Sensor Application : Portable Gas Detectors

PERFORMANCE

Range	0 – 100 ppm
Typical Baseline Range (pure air)	<±1 ppm equivalent
Output Signal	100 ± 30nA/ppm
Linearity	Linear
Response Time, t90	
Maximum Overload	200 ppm
Long-term Output Drift	<2% per month
Recommended Load Resistor	10 ohms
Repeatability	±10%
Bias voltage	0V (no bias)
Warranty	12 Months
Resolution	1 ppm

OPERATING CONDITIONS

Temperature Range	-40°C to +50°C
Operating Humidity	15% to 90% RH
Pressure Range	
Operating Circuit	see Electrochemical Toxic
	Sensor Application Note
Recommended Storage Te	emperature 0°C to 20°C
Expected Operating Life	> 24 Months in Air

INTRINSIC SAFETY DATA

Maximum at 2000 ppm	. 0.3 mA
Maximum o/c Voltage	1.3 V
Maximum s/c Current	<1.0 A

CROSS-SENSITIVITY DATA

Gas	CONC.	SGX-4NH3
Hydrogen Sulphide	25 ppm	30 ppm
Sulphur Dioxide	20 ppm	-6 ppm
Hydrogen	100 ppm	0 ppm
Nitric Oxide	50 ppm	0 ppm
Carbon Monoxide	500 ppm	0 ppm
Nitrogen Dioxide	5 ppm	-7.5 ppm
Ethanol	100 ppm	0 ppm
Carbon Dioxide	5000ppm	0 ppm

Note: This table is for reference only and are typical values. Cross Sensitivities may not be linear and should not be scaled. Calibration should be carried out with the actual gas at a known concentration.

This device is designed to be RoHS compliant.

2 Hanbury Road Chelmsford Essex CM1 3AE United Kingdom

T: +44 (0)1245-809110 F: +44 (0)1245-809112 E: sales.is@sgxsensortech.com www.sgxsensortech.com

PRODUCT DIMENSIONS

All dimensions in mm All tolerances ±0.15 mm



6.75 Working

IMPORTANT NOTES

All performance is based on conditions at 20°C, 50% RH and 1 atm, using SGX recommended circuitry.

Sensor performance is temperature dependant; please contact SGX for temperature performance other than 20°C.

Important Notes are continued on Page 2

Whilst SGX Sensortech has taken care to ensure the accuracy of the information contained herein it accepts no responsibility for the consequences of any use thereof and also reserves the right to change the specification of goods without notice. SGX Sensortech accepts no liability beyond the set out in its standard conditions of sale in respect of infringement of third party patents arising from the use of tubes or other devices in accordance with information contained herein. In case of modification of the product, SGX disclaims all liability.



2 Hanbury Road Chelmsford Essex CM1 3AE United Kingdom

T: +44 (0)1245-809110 F: +44 (0)1245-809112 E: sales.is@sgxsensortech.com www.sgxsensortech.com

IMPORTANT NOTES (Continued)

Do not solder to the connector pins as this may damage the sensor and thereby invalidate the warranty.

Details on recommended connector pins can be found in the Frequently Asked Questions within the Gas Sensor section of the SGX website.

POISONING

SGX sensors are designed to operate in a wide range of harsh environments and conditions. However it is important that exposure to high concentrations of solvent vapours is avoided, both during storage, fitting into instrument and operation. When using sensors on printed circuit boards (PCBs), degreasing agents should be used prior to the sensor being fitted.



Whilst SGX Sensortech has taken care to ensure the accuracy of the information contained herein it accepts no responsibility for the consequences of any use thereof and also reserves the right to change the specification of goods without notice. SGX Sensortech accepts no liability beyond the set out in its standard conditions of sale in respect of infringement of third party patents arising from the use of tubes or other devices in accordance with information contained herein. In case of modification of the product, SGX disclaims all liability.