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SGX-7NH3 Industrial Ammonia Sensor

Application : Fixed Gas Detectors

PERFORMANCE

Range $0-50 \text{ ppm}$ Typical Baseline Range (pure air) -20 ppm equivalentOutput Signal $120 \pm 50 \text{ nA/ppm}$ Zero Shift (-40°C to +50°C) $\pm 3 \text{ ppm}$ equivalentLinearitywithin $\pm 2\%$ Response Time, t90 -90 s Maximum Overload 500 ppm Long-term Output Drift -5% per annumRecommended Load Resistor 10 ohms Repeatability $-\pm10\%$ of signalBias voltage $+300 \text{ mV}$
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Warranty 1 year

OPERATING CONDITIONS

Temperature Range		
Operating Humidity 5 -	90% RH (non-condensing)	
Pressure Range	Atmospheric ±10%	
Operating Circuit	see Electrochemical Toxic	
	Sensor Application Note	
Recommended Storage Temperature 0°C to 20°C		
Storage life6 months in original packing $(0 - 25 °C)$		

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-7NH3
Hydrogen Sulphide	15 ppm	<30 ppm
Sulphur Dioxide	5 ppm	<1 ppm
Hydrogen	100 ppm	<5 ppm
Nitric Oxide	35 ppm	<7 ppm
Carbon Monoxide	300 ppm	<9 ppm

Note: This table is for reference only. Calibration should be carried out with the actual gas at a known concentration.

This device is designed to be RoHS compliant.

PRODUCT DIMENSIONS

All dimensions in mm All tolerances ±0.15 mm



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.

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.