SGX-4NO2

Premium Industrial NO_2 Sensor

Application : Fixed and Portable Gas Detectors

PERFORMANCE

Range …….……..…… 0 – 30 ppm
Output Signal…….....600±150 nA / ppm
Typical Baseline Range (pure air)…….. ±0.2ppm NO_2
Linearity……..……..…….. Linear
Response Time (T_{90}) ……..……..…… <30 s
Maximum Overload…….……..…… 200 ppm
Long-term Output Drift …..... <20% per annum
Recommended Load Resistor……..... 10 ohms
Repeatability……<±2%NO_2 equivalent
Warranty……..……..…… 2 years
Resolution ….……..…… 0.1 ppm typical
Bias Voltage ….……..…..……. 0V (no bias)

OPERATING CONDITIONS

Temperature Range …..…..... -30 to +50°C
Operating Humidity ….15 – 90% RH (non-condensing)
Pressure Range ……..……..….800 to 1200 mbar
Operating Circuit … see Electrochemical Toxic Sensor Application Note 2
Recommended Storage Temperature..... 0°C to 20°C
Storage Life ... 6 months in original packing (0 – 20°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

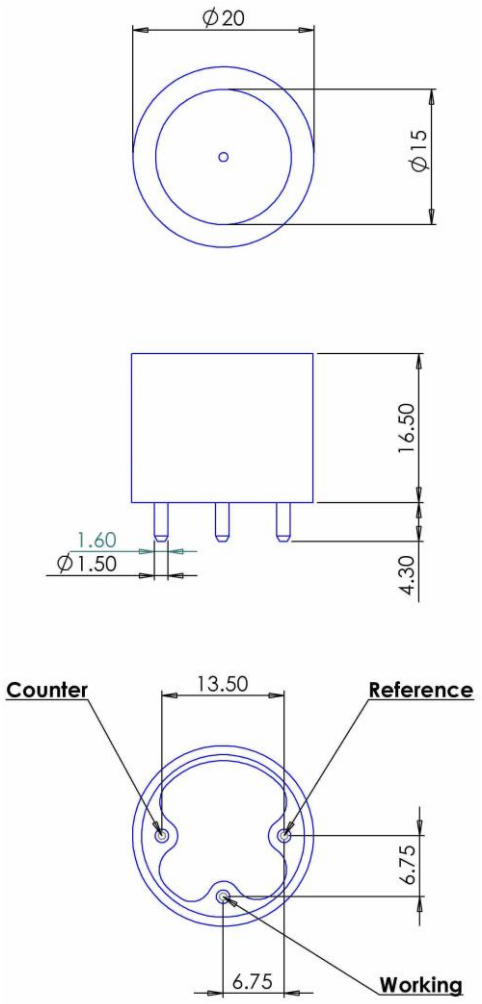
Gas	CONC.	SGX-4NO2
Carbon Monoxide	300 ppm	0 ppm
Sulphur dioxide	20 ppm	0 ppm
Hydrogen	200 ppm	0 ppm
Nitric Oxide	50 ppm	<-1 ppm
Ammonia	50 ppm	0 ppm
Chlorine	1 ppm	0.5 ppm
Hydrogen Sulphide	15 ppm	<1 ppm
Carbon Dioxide	5000 ppm	0 ppm

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



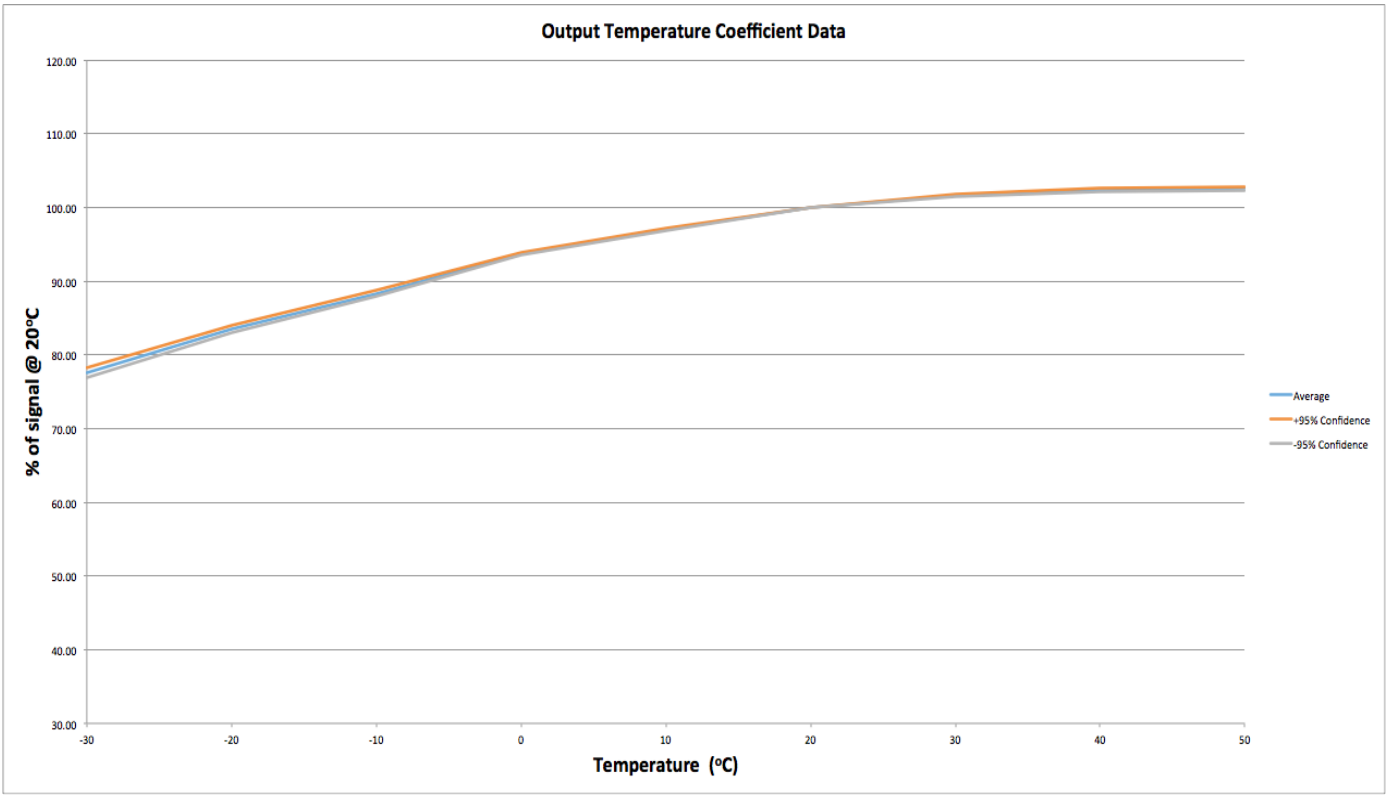
IMPORTANT NOTES

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 instruments and operation. When using sensors on printed circuit boards (PCB's), degreasing agents should be used prior to the sensor being fitted.