

**PERFORMANCE**

Typical Baseline Range..  $\pm 0.5$  ppm H2S equivalent  
 Measurement Range ..... 0 – 50 ppm  
 Output Signal ..... 1700  $\pm$  400 nA / ppm  
 Linearity ..... Linear  
 Repeatability .....  $< \pm 1\%$  H2S equivalent  
 Response time, t90 .....  $< 40$  s  
 Maximum Overload ..... 500 ppm  
 Long-term output drift .....  $< 5\%$  per annum  
 Recommended Load Resistor ..... 10 ohms  
 Warranty ..... 1 year  
 Resolution (Electronics dependent) .....  $< 0.1$  ppm typical

**OPERATING CONDITIONS**

Temperature Range .....  $-30$  to  $+50^\circ\text{C}$   
 Operating Humidity..  $15 - 90\%$  RH (non-condensing)  
 Pressure range ..... 800 mbar to 1200 mbar  
 Recommended Storage Temperature...  $0^\circ\text{C}$  to  $20^\circ\text{C}$   
 Expected Operating Life .....  $> 2$  years (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**

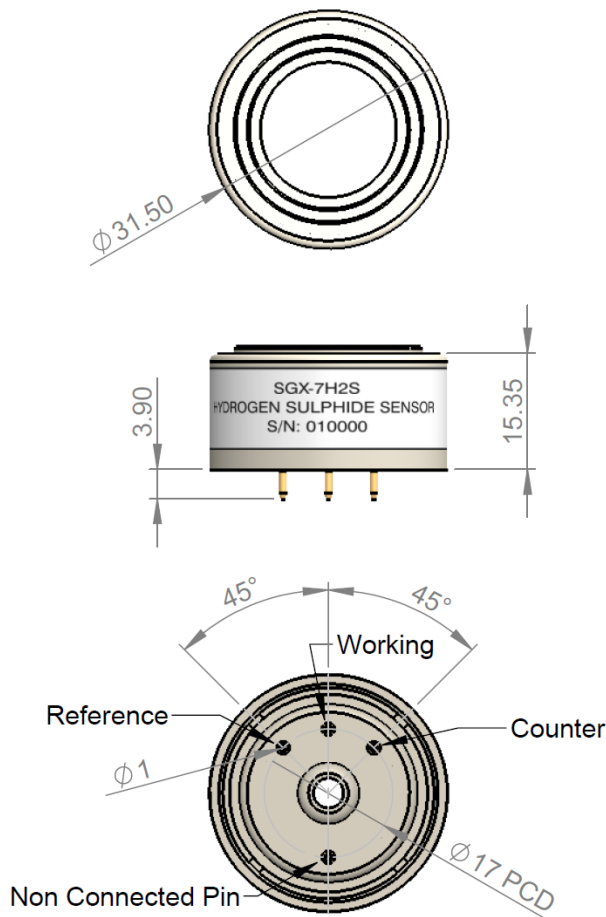
GAS	CONC.	SGX-7H2S
Carbon Monoxide	300 ppm	$< 3$ ppm
Sulfur Dioxide	5 ppm	$< 1$ ppm
Nitrogen Dioxide	5 ppm	$< \pm 0.5$ ppm
Nitric Oxide	50 ppm	$< 1$ ppm
Hydrogen	100 ppm	$< 1$ ppm
Chlorine	1 ppm	0 ppm
Ethylene	100 ppm	0 ppm
Carbon Dioxide	5000 ppm	0 ppm

**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  $\pm 0.15$  mm



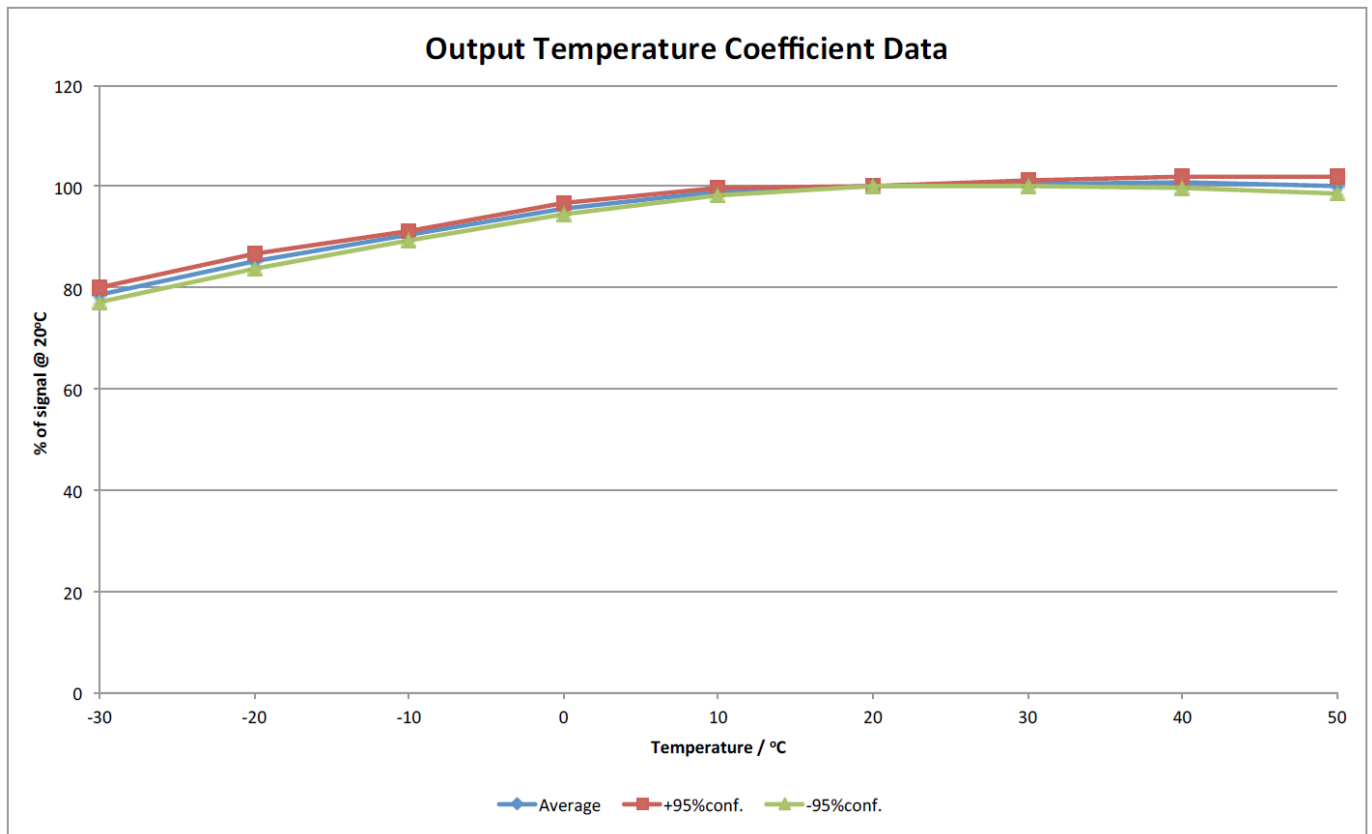
**IMPORTANT NOTES**

All performance is based on conditions at  $20^\circ\text{C}$ , 50% RH and 1 atm, using SGX recommended circuitry.

Sensor performance is temperature dependant; please contact SGX for temperature performance other than  $20^\circ\text{C}$ .

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 during storage, fitting into instruments and operation. When using sensors on printed circuit boards (PCBs), degreasing agents should be used prior to the sensor being fitted.