

## EC4-20-SO2

### Industrial Sulfur Dioxide Sensor

(Application : Portable Gas Detectors)

#### PERFORMANCE

Range	0 – 20 ppm
Maximum Overload	150 ppm
Sensitivity	400 to 600 nA/ppm SO <sub>2</sub>
Zero in Air at 20°C	< ±0.4 µA
Baseline Drift (-20°C to +40°C)	0 to 0.05 ppm SO <sub>2</sub> equivalent
Resolution	0.1 ppm SO <sub>2</sub>
Linearity	Linear Across Range
Response time (T <sub>90</sub> )	< 45 seconds
Long-term Output Drift	< 2% signal/month
Warranty	1 year
Bias	No Bias

#### OPERATING CONDITIONS

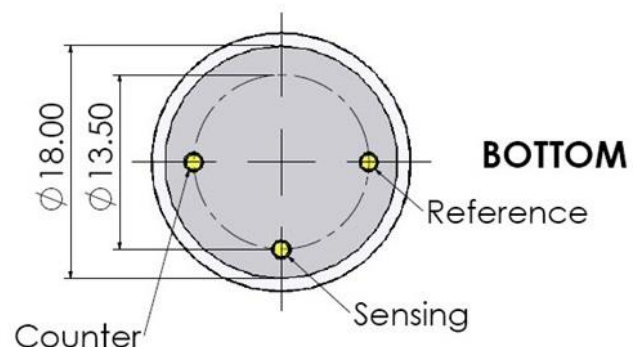
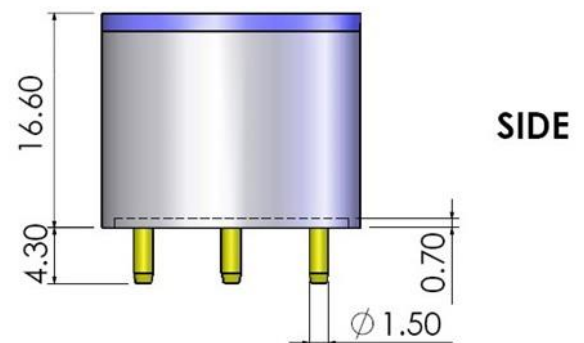
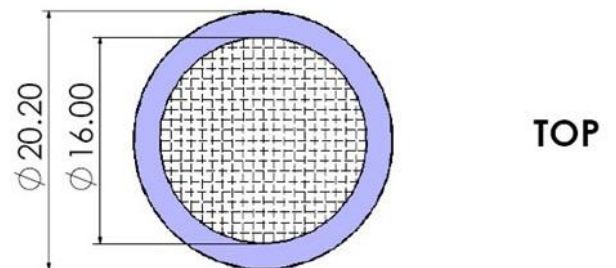
Temperature Range	-20°C to +40°C
Operating Humidity	15 – 90% RH (non-condensing)
Pressure range	90 to 110 kPa
Operating Circuit	See Application Note 2
Storage life	6 months in original packing
Storage Temperature	0°C to 20°C
Expected Operating Life	2 years in air

#### PHYSICAL CHARACTERISTICS

Weight	5 g
Orientation Sensitivity	None
Dimensions	See Outline

#### OUTLINE

All Dimensions are in mm  
 All tolerances are ±0.2mm



## CROSS-SENSITIVITY DATA

GAS	CONCENTRATION (ppm)	OUTPUT SIGNAL (ppm SO <sub>2</sub> equivalent)
Carbon Monoxide	300	<3
Hydrogen Sulfide	15	0
Nitric Oxide	35	0
Nitrogen Dioxide	5	<-5

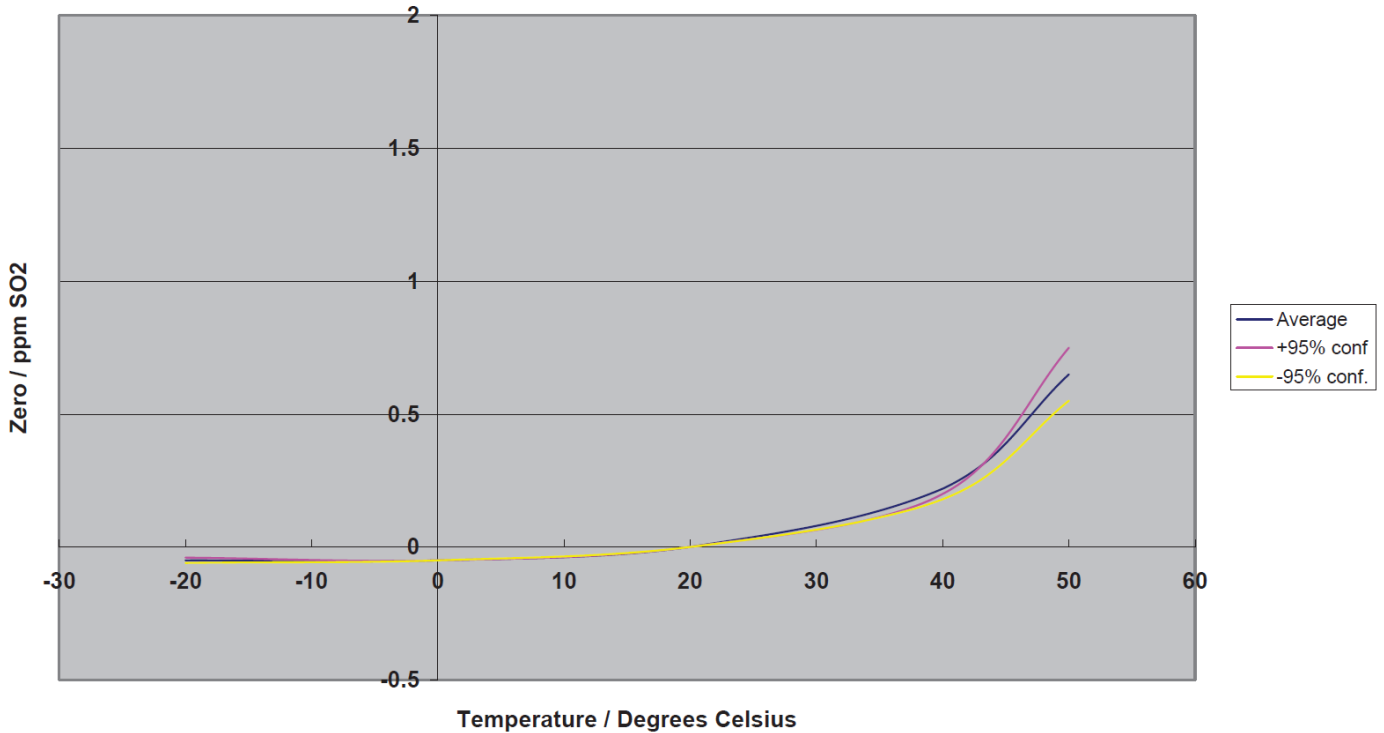
\* See Important Notes

## IMPORTANT NOTES

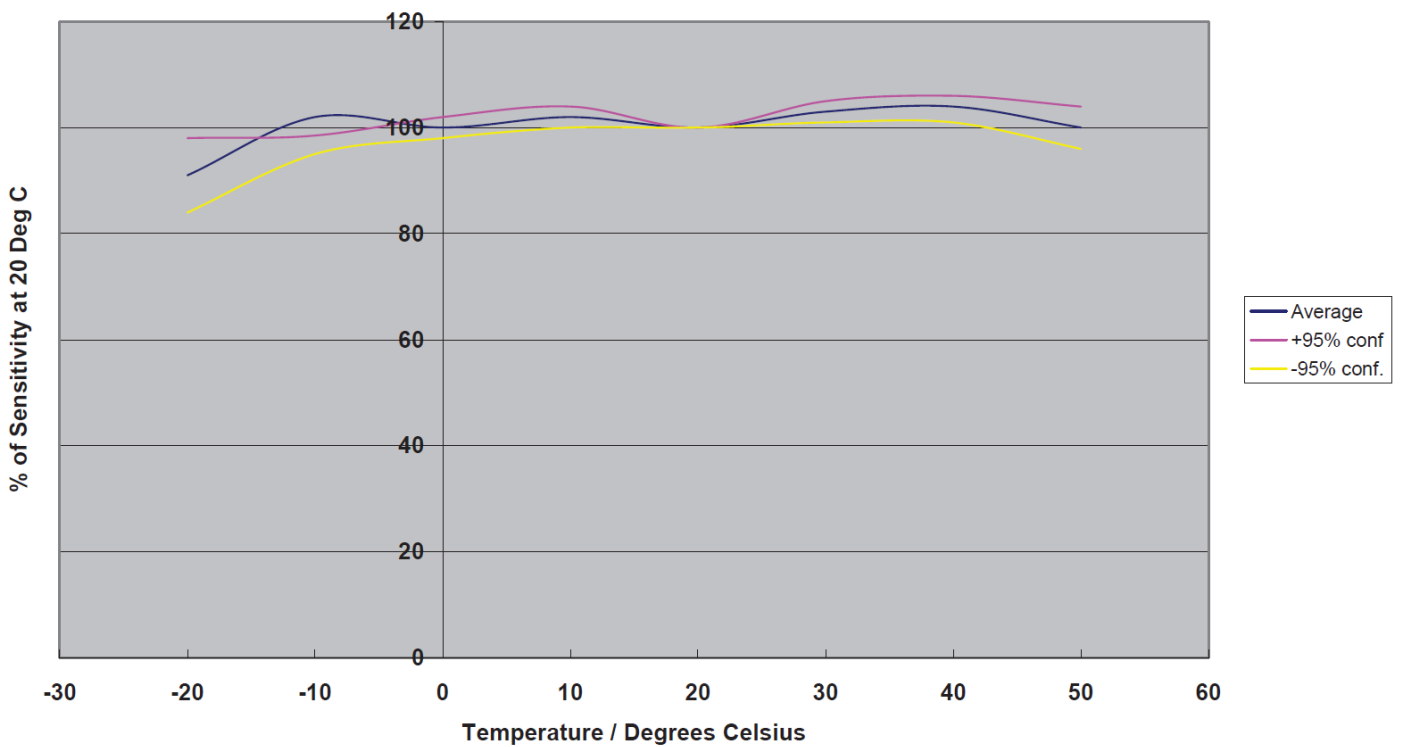
- 1.) Do not solder to the connector pins as this may damage the sensor and thereby invalidate the warranty.
- 2.) Details on recommended connector pins can be found in the Frequently Asked Questions within the Gas Sensor section of the SGX website.
- 3.) All performance specifications are based upon the following environmental conditions: 20°C, 50% relative humidity, 101kPa.
- 4.) Cross Sensitivity Data is for information only. Calibration is recommended with target gas as the accuracy of calibration and measurement cannot be ensured.
- 5.) The cross sensitivities are including but not limited to the gases stated in the table. It may respond to other gases.
- 6.) The cross sensitivities may fluctuate between  $\pm 30\%$  and may differ from batch to batch or across sensor's life time.
- 7.) The device is designed to be RoHS compliant.

## TEMPERATURE

EC4-20-SO2 Graph of Zero vs Temperature



EC4-20-SO2 Graph of Sensitivity vs Temperature



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Air Quality Sensors](#) category:*

*Click to view products by [Amphenol](#) manufacturer:*

Other Similar products are found below :

[GMS-MSTH2.S.V.3](#) [MO86571](#) [MO86561](#) [076074 01](#) [DE800.A.1](#) [MF010-2-LC1](#) [MF020-2-LC3](#) [KGZ10-5PIN](#) [GMS10SENSORS](#) [IR25TT](#)  
[208280-0001](#) [IR11BD](#) [IR11GM](#) [IR12GM](#) [IR21BD](#) [GMS10-18C](#) [KGZ12](#) [S-300L-3V-5000-SLEEP-UART](#) [MP7227-TC](#) [SGPC3-TR-2.5KS](#)  
[T6713-6H](#) [POLOLU-1482](#) [3.000.475](#) [3.000.496](#) [3.000.497](#) [HPMA115S0-XXX](#) [SGPC3-2.5k](#) [T3032-2-10K-24-P](#) [VQ6MB](#) [INIR-CD-5%](#)  
[VQ23TB](#) [IR11GJ](#) [VQ31MB](#) [IR11BR](#) [GP2Y1026AU0F](#) [VQ549ZD](#) [MHM501-00](#) [MHM500-00A](#) [MHM305-01](#) [MICS-4514](#) [VQ548ZD-S](#)  
[SEN-09403](#) [IR15TT](#) [MICS-5524](#) [MICS-5914](#) [MICS-2714](#) [INIR-ME-100%](#) [T8100-D](#) [VQ21TB](#) [IR21EJ](#)