

# EC4-1000-H2S Hydrogen Sulfide Electrochemical Sensor

# **SENSORTECH**

#### **PERFORMANCE**

| Range                  | 0 - 1000 ppm               |
|------------------------|----------------------------|
| Sensitivity            | 50 - 130 nA/ppm H2S        |
| Zero in air at 20 °C   | <±8 ppm H2S                |
| Resolution             | 1 ppm H2S                  |
| Expected lifetime      | 2 years                    |
| Linearity              | linear across range        |
| Response time, t90     | <45 s                      |
| Long-term output drift | change in output per month |

#### **OPERATING CONDITIONS**

| Temperature range       | 20 to +50 °C                        |
|-------------------------|-------------------------------------|
| Temperature coefficient | <0.5% signal per °C                 |
| Operating humidity      | 15 - 90% RH (non-condensing)        |
| Pressure range          | 90 - 110 kPa (nominal)              |
| Operating circuits      | ee Electrochemical Toxic Sensor     |
|                         | Application Note                    |
| Applied potential       | 0 V                                 |
| Storage life 6 months   | s in original packaging (0 - 25 °C) |

## PHYSICAL CHARACTERISTICS

| Label colour | silver |
|--------------|--------|
| Weight       | 6 g    |
| Dimensions   |        |

This device is designed to be RoHS compliant.

#### **CROSS-SENSITIVITY DATA**

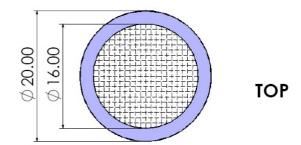
| GAS              | Concentration (ppm) | Sensor<br>Response<br>(As ppm H2S) |
|------------------|---------------------|------------------------------------|
| Carbon Monoxide  | 300                 | 0                                  |
| Sulfur Dioxide   | 5                   | 0                                  |
| Nitric Oxide     | 35                  | <3                                 |
| Nitrogen Dioxide | 5                   | 0                                  |
| Hydrogen         | 1000                | 0                                  |
| Isobutylene      | 100                 | 0                                  |

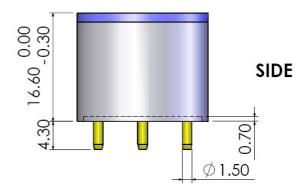
#### **Important Note**

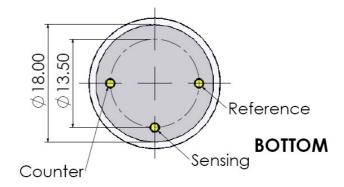
Do not solder to the connector pins as this may damage the sensor and thereby invalidate the warranty.

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

#### **OUTLINE**



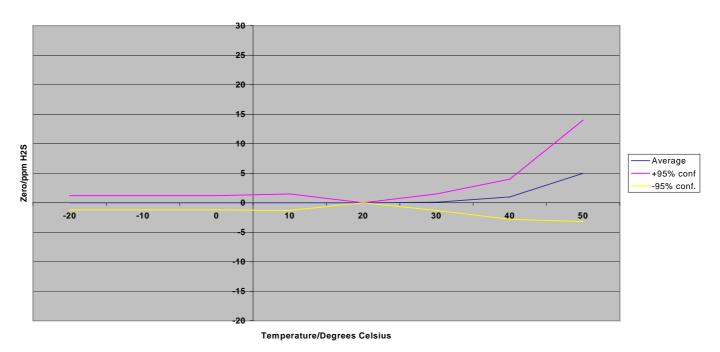




All dimensions in mm. All tolerances  $\pm 0.15$ mm unless otherwise stated.

# **TEMPERATURE DEPENDENCE**

## EC4-1000-H2S Graph of Zero vs Temperature



EC4-1000-H2S Graph of Net Sensitivity vs Temperature

