PERFORMANCE

Range ................................................................... 0 - 20 ppm
Maximum overload ........................................... 100 ppm PH3
Sensitivity ......................................... 800 - 2000 nA/ppm PH3
Zero in air at 20 °C ........................................ <±0.5 ppm PH3
Resolution ......................................................... 0.1 ppm PH3
Linearity ................................................... linear across range
Response time, t90 ....................................................... <60 s
Long-term output drift ................. <2% signal/month
Warranty ......................................................... 2 years

OPERATING CONDITIONS

Temperature range ........................................... -20 to +50 °C
Operating humidity............... 15 - 90% RH (non-condensing)
Pressure range .......................... 90 - 110 kPa (nominal)
Operating circuit............. see Electrochemical Toxic Sensor Application Note

Applied potential .............................................................. 0 V
Storage life........... 6 months in original packaging (0 - 25 °C)

PHYSICAL CHARACTERISTICS

Label colour ................................................................... silver
Weight .................................................................. 5 g approx.
Dimensions ........................................................... see outline

This device is designed to be RoHS compliant.

CROSS-SENSITIVITY DATA

<table>
<thead>
<tr>
<th>GAS</th>
<th>Concentration (ppm)</th>
<th>Sensor Response (As ppm PH3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>5</td>
<td>&lt;0.9</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>1000</td>
<td>0</td>
</tr>
<tr>
<td>Ammonia</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>1000</td>
<td>0</td>
</tr>
<tr>
<td>Ethene</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

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.
TEMPERATURE DEPENDENCE

EC4-20-PH3 Graph of Zero vs Temperature

EC4-20-PH3 Graph of Sensitivity vs Temperature