Hydrazine
(0 – 1.00 ppm)
Part No. 823-0248-21

Minimum Indicated Concentration .............. 0.03 ppm
Repeatability2 ............................................ ± 5% of Reading
Accuracy1 .................................................... ± 10% of Reading
Span Drift .................................................... < 10% change per 6 months (typical)
Response Time (Rise)2 ................................... T90: < 120 seconds
Recovery Time (Fall)2 .................................... T10: < 60 seconds
Temperature Range ...................................... -20° to 50°C (-4° to 113°F)
Humidity Range (continuous)3 .................... 10–95 %RH, non-condensing
Humidity Range (intermittent)3 ................. 0–99 %RH, non-condensing
Pressure Range ........................................... Ambient atmospheric, ± 1 psi
Expected Sensor Life .................................... 24 months from Shipping Date
Recommended Calibration Flow Rate .......... 500 to 1000 cc/min
Oxygen Requirement ................................. 1% by volume, minimum
SensAlert 4-Channel Controller ............... Not Compatible

1 When unit is calibrated and serviced at recommended intervals.
2 Room Temperature, seasoned system.
3 Sensor is subject to minor moisture transients on sudden changes in moisture level. Note that transients are positive for decreasing moisture and vice versa.

Cross-Interferences*

<table>
<thead>
<tr>
<th>Gas</th>
<th>Gas Exposure</th>
<th>Sensor Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia</td>
<td>TBD</td>
<td>No Data</td>
</tr>
<tr>
<td>Arsine</td>
<td>0.8 ppm</td>
<td>+1 ppm</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>100 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Chlorine</td>
<td>1.3 ppm</td>
<td>-1 ppm</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>10,000 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>5 ppm</td>
<td>+1 ppm</td>
</tr>
<tr>
<td>Phosphine</td>
<td>0.53 ppm</td>
<td>+1 ppm</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>3.2 ppm</td>
<td>+1 ppm</td>
</tr>
</tbody>
</table>

* Interference factors may differ from sensor to sensor. Other than PH3, it is not advisable to calibrate with interferent gases.
**Special Calibration Considerations:**

**Hydrazine (PN 823-0248-21)**

**Zeroing the Sensor**

It is recommended that the sensors be zeroed in clean ambient air or bottled Zero Air. If zero air is used, a pre-zeroing exposure of 2 to 5 minutes is recommended to overcome possible moisture transients. Note that the sensor may exhibit a transient spike up to 0.2ppm when suddenly exposed to dry Zero Air. Complete zeroing instructions are provided in the SensAlert<sup>Plus</sup> User Manual or SensAlert ASI User Manual.

**Span Calibration**

It is recommended that this sensor be calibrated at 0.5 ppm N₂H₄ if possible. It is recognized that low-ppm hydrazine is difficult to generate, in this case PH₃ gas may be used as a span gas with a 188% cross-interference factor (apply 0.5 ppm PH₃ and span to 0.94 ppm N₂H₄). The use of Teflon™ tubing is recommended with this gas to prevent gas absorption into the tubing walls. Complete span calibration instructions are provided in the SensAlert<sup>Plus</sup> User Manual or SensAlert ASI User Manual.

**Test-on-Demand Cell**

There is no Test-On-Demand cell available for this sensor:

**Moisture Effects**

These sensors exhibit a short positive moisture transient when exposed to a rapid decrease in ambient moisture. The sensors underwent a slight negative transient when suddenly exposed to moist air (23°C, 40 to 60%RH) after long exposure to dry air/gas. These transients took from 2 to 5 seconds to fall below zero suppression. The magnitude of these transients (+0.2ppm, -.05ppm) could throw the sensor into alarm or sensor fail conditions.