A new level of photoionization technology

New piD-TECH eVx photoionization detector (PID) with improved performance capabilities

Introducing the new piD-TECH eVx sensors. Incorporating state of the art technology and upgrades that cannot be matched in the marketplace.

New attributes are included without compromising the outstanding and award-winning features that make the piD-TECH line of sensors the right choice for OEM manufacturers.

The piD-TECH eVx's new features offer better value and design flexibility for OEM markets. Providing new and powerful gas detection capabilities while reducing the high cost and time in the product development process.

Upgrades include:
- Minimum detection limits down to 0.5 ppb
- Negligible temperature response
- Minimal humidity response
- Integral shielding
- Reduced dead volume
- Reduced and improved response time
- Lower pricing

Intrinsically safe design and 4P platform make installation in portable or stationary gas monitors a snap.

With over four decades of experience, Baseline® provides an award winning sensor that is utilized in a wide variety of VOC (volatile organic compounds) monitoring applications.

Features and Benefits
- Intrinsically safe
- Saves time and money in R&D and product design
- 4P cell platform compatible
- Variety of ranges and lamp energies
- Quick start lamp ignition circuit
- Long lamp life
- Input voltage regulation for greater stability
- Easily cleaned and field serviced
- Out of warranty Sensor Exchange Program

Applications
- Industrial Hygiene & Safety Monitoring
- Confined Space Entry
- Soil Contamination and Remediation
- Hazmat Sites & Spills
- Low Concentration Leak Detection
- Indoor Air Quality
- EPA Method 21

Five (5) different detection levels with two lamp energies offer a broad range of detection capabilities

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Range *</th>
<th>MDQ *</th>
</tr>
</thead>
<tbody>
<tr>
<td>045-010</td>
<td>10,000 ppm</td>
<td>1,000 ppb</td>
</tr>
<tr>
<td>045-011</td>
<td>2,000 ppm</td>
<td>500 ppb</td>
</tr>
<tr>
<td>045-012</td>
<td>200 ppm</td>
<td>50 ppb</td>
</tr>
<tr>
<td>045-013</td>
<td>20 ppm</td>
<td>5 ppb</td>
</tr>
<tr>
<td>045-014</td>
<td>2 ppm</td>
<td>0.5 ppb</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Range *</th>
<th>MDQ *</th>
</tr>
</thead>
<tbody>
<tr>
<td>045-017</td>
<td>6,000 ppm</td>
<td>1500 ppb</td>
</tr>
<tr>
<td>045-015</td>
<td>600 ppm</td>
<td>150 ppb</td>
</tr>
<tr>
<td>045-018</td>
<td>60 ppm</td>
<td>15 ppb</td>
</tr>
</tbody>
</table>

* Range and MDQ (Minimum Detectable Quantity) are based on Isobutylene.
Physical Characteristics
Complete sensing unit includes detector cell, UV lamp, lamp driver, amplifier and sample filter

<table>
<thead>
<tr>
<th>Weight</th>
<th>&lt; 8 gr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package Type</td>
<td>4P cell dimensional profile</td>
</tr>
<tr>
<td>Serviceable Parts</td>
<td>lamp, detector cell, filters (2), cap, spacer</td>
</tr>
<tr>
<td>Lamp Life</td>
<td>Guaranteed 6000 hours - Typical life significantly longer</td>
</tr>
<tr>
<td>Onboard Filters</td>
<td>Removes liquids / particles</td>
</tr>
</tbody>
</table>

All sensors calibrated with isobutylene

Warranty Period: 1st of 18 months from ship date or 12 months from install date

Electrical Characteristics

<table>
<thead>
<tr>
<th>Supply Voltage</th>
<th>3.2V-5.5V (input voltage regulator included)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>24mA - 36mA</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>80 mW - 200 mW - Dependent upon supply voltage</td>
</tr>
<tr>
<td>Output Signal</td>
<td>0.045V - 2.5V</td>
</tr>
</tbody>
</table>

Operating Conditions

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>-20°C to 60°C (-4°F to 104°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Humidity Range</td>
<td>0 to 90% non-condensing</td>
</tr>
<tr>
<td>Humidity Response</td>
<td>≤ 1% @ 90% relative humidity</td>
</tr>
<tr>
<td>Humidity Quenching Effect</td>
<td>≤ 15% @ 90% relative humidity</td>
</tr>
</tbody>
</table>

Certifications & Approvals*

piD-TECH eVx is a UL certified component. Intrinsically safe - no external components required.

USA
UL 913 (Eighth Edition), For use in Class I, Division 1, Groups A, B, C, D Locations.

Europe

Other
IECEx Standards, EN60079-0, 6th Edition; EN60079-11, 6th Edition; and EN60079-26, 2nd Edition ©1GExiaIICGaExiaIICGaIEExUL 13.0050U Tamb = -20°C to +60°C

Patents
US Pat 6,646,444, Japan Pat 3,793,757

*Detailed documentation for specific certification is available upon request. Above certifications are issued for piD-TECH eVx sensor only and are not applicable to the equipment in which it is incorporated.

Mechanical Specifications

Top View
Diam. 4.83
Diam. 20.4

Side View
Diam. 4.83
Diam. 20.4

Bottom View
Diam. 4.83
Diam. 20.4

Use of socketed connection is required. Soldering or cutting the connection pins may permanently damage the sensor and void the warranty.

Temperature & Humidity Effects

Temperature Response (10 ppm isobutylene)

RH Conditioning (90% RH at 40°C)

Contact Baseline for a complete ionization potential list.

Copyright © 2014 Baseline-MOCON, Inc.

MOCON, Baseline and piD-TECH are registered trademarks of MOCON, Inc. Other trademarks are those of their respective holders.

Brochure # D039.2