The Sensepoint range of flammable, toxic and Oxygen gas detectors offer users a high quality, low cost solution to their industrial gas monitoring needs.
The Sensepoint range of flammable, toxic and Oxygen gas detectors offer users a high quality, low cost solution to their industrial gas monitoring needs. Installation in potentially explosive atmospheres is made by the use of a suitable Ex d or Ex e approved junction box. The industry standard outputs from Sensepoint are connected to either a choice of Honeywell Analytics’ controllers or 3rd party DCS/PLC systems. Both flammable and toxic versions are certified to the latest ATEX/IECEX safety and performance standards.

Fit For Purpose
- Flammable, toxic and Oxygen versions available
- High performance, low cost
- Suitable for new and retro fit applications

Proven Sensor Technology
- Surecell™ electrochemical sensors
- Poison resistant catalytic bead
- Fast and reliable
- Typical 2 to 5 years operational life

ATEX/IECEX Certified
- Complies with the latest standards
- Hazardous area approval and performance
- IP65/67 for use in harsh environments

Easy to Use
- Factory set operation
- Simple to replace
- Minimal training required

Range of Accessories
- Weatherproof cap
- Flow adaptor
- Duct mounting kit
- Collecting cone

The flammable detector is available in either % LEL or PPM detection range versions and provides an industry standard mV bridge output. Typical life expectancy is greater than 5 years, after which the detector is simply replaced with a new one.

The toxic detectors are supplied pre calibrated for easy installation and provide an industry standard 2 wire 4-20mA loop output. User connections are Ex d, while front end Intrinsic Safety (IS) design allows for easy exchange of the replaceable sensor while powered. IS design also removes the need for a sinter enabling very fast speed of response and detection of ‘sticky’ gases such as Chlorine and Ammonia.

Sensepoint has proven its suitability across a wide range of demanding applications by delivering high performance and reliability at an affordable cost.
### Installation Details

#### Dimensions

<table>
<thead>
<tr>
<th>Flammable % LEL or PPM Version</th>
<th>Toxic or Oxygen Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensepoint flammable and toxic gas detectors are installed using suitable Ex d or Ex e junction boxes. The standard junction box available from Honeywell Analytics includes an earth continuity plate for added RFI protection. The detectors have a choice of mounting thread size to match local preferences.</td>
<td></td>
</tr>
<tr>
<td>The Sensepoint range of flammable and toxic detectors are designed for use with a wide range of controllers available from Honeywell Analytics or with 3rd party control equipment accepting their industry standard output signals.</td>
<td></td>
</tr>
</tbody>
</table>
Installation Details

### Electrical Connections

#### Flammable % LEL Version

Controller → Sensepoint Detector

- **Controller**
  - Blue (NS)
  - Brown (S)
  - White (01)

- **Sensepoint Detector**
  - Brown (S)
  - White (01)

**Signal**

- +VE
- -VE

3 Wire mV Bridge Circuit

#### Toxic or Oxygen Version

Controller → Sensepoint Detector

- **Controller**
  - Blue (NS)
  - Red (S)
  - Screen

- **Sensepoint Detector**
  - Red (S)
  - Screen

**Signal**

- +VE
- -VE

2 Wire 4-20mA (Sink)

#### Flammable PPM Version

Controller → Sensepoint Detector

- **Controller**
  - Blue (NS)
  - Red (S)
  - Screen

- **Sensepoint Detector**
  - Red (S)
  - Screen

**Signal**

- +VE
- -VE

3 Wire mV Bridge Circuit
Technical Specification

<table>
<thead>
<tr>
<th>Gas &amp; Range</th>
<th>Flammable PPM (Typically 0-10% LEL)</th>
<th>Flammable PPM (Typically 0-10% LEL)</th>
<th>Hydrogen (H₂) 20/50/100ppm</th>
<th>Carbon Monoxide (CO) 100/200/500ppm</th>
<th>Ammonia (NH₃) 50/1000ppm</th>
<th>Chlorine (Cl₂) 5/15ppm</th>
<th>Oxygen (O₂) 1000/10000ppm</th>
<th>Hydrogen Sulfide (SO₂) 15/50ppm</th>
<th>Nitrogen Dioxide (NO₂) 100ppm</th>
<th>Nitrogen Dioxide (NO₂) 100ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temp</td>
<td>-40 to +80°C</td>
<td>30 to +65°C</td>
<td>-25 to +50°C</td>
<td>-20 to +50°C</td>
<td>-20 to +40°C</td>
<td>-20 to +40°C</td>
<td>-15 to +40°C</td>
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<tr>
<td>Operating Humidity</td>
<td>Continuous: 20 to 90% RH (non-condensing). Intermittent: 10 to 99% RH (non-condensing)</td>
<td>0 to 25°C, 30 to 70% RH</td>
<td>0 to 25°C, 30 to 70% RH</td>
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<tr>
<td>Operating Pressure</td>
<td>90 to 110kPa</td>
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<tr>
<td>Warm-up Time</td>
<td>&lt; 10 minutes</td>
<td>&lt; 20 minutes</td>
<td>&lt; 3 minutes</td>
<td>&lt; 5 minutes</td>
<td>&lt; 3 minutes</td>
<td>12 hours</td>
<td>1 hour</td>
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<tr>
<td>Response Time</td>
<td>T20</td>
<td>&lt; 6 secs</td>
<td>&lt; 5 secs</td>
<td>–</td>
<td>&lt; 10 secs</td>
<td>&lt; 3 secs</td>
<td>–</td>
<td>–</td>
<td>&lt; 3 secs</td>
<td>&lt; 15 secs</td>
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<tr>
<td></td>
<td>T50</td>
<td>&lt; 5 secs</td>
<td>&lt; 15 secs</td>
<td>&lt; 12 secs</td>
<td>&lt; 10 secs</td>
<td>&lt; 20 secs</td>
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<td>&lt; 10 secs</td>
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<tr>
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<td>T90</td>
<td>&lt; 10 secs</td>
<td>&lt; 40 secs</td>
<td>&lt; 30 secs</td>
<td>&lt; 65 secs</td>
<td>&lt; 105 secs</td>
<td>&lt; 10 secs</td>
<td>&lt; 45 secs</td>
<td>&lt; 90 secs</td>
<td>&lt; 30 secs</td>
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<tr>
<td>Supply</td>
<td>200mA, 0.7W maximum</td>
<td>18 to 30VDC, 0.9W maximum</td>
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<tr>
<td>Signal Output</td>
<td>mV bridge</td>
<td>Loop powered 4-20mA</td>
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<tr>
<td>Linearity</td>
<td>with time*</td>
<td>&lt; ±3% fsd / yr</td>
<td>&lt; ±2% fsd / yr</td>
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<tr>
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<td>with temperature***</td>
<td>&lt; ±1% fsd</td>
<td>&lt; ±3% fsd</td>
<td>&lt; ±5% fsd</td>
<td>&lt; ±6% fsd</td>
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<tr>
<td></td>
<td>with humidity***</td>
<td>&lt; ±1% fsd</td>
<td>&lt; ±10% fsd</td>
<td>&lt; ±2% fsd</td>
<td>&lt; ±10% fsd</td>
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<td>Stability (zero)</td>
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<td>&lt; ±3% fsd / yr</td>
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<td>&lt; ±4% fsd / yr</td>
<td>&lt; ±20% fsd / yr</td>
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<td>&lt; ±20% fsd / yr</td>
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<tr>
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<td>with temperature***</td>
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<td>&lt; ±8% fsd</td>
<td>&lt; ±25% fsd</td>
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<tr>
<td></td>
<td>with humidity***</td>
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<td>Construc. Materials</td>
<td>Polyphenylene Sulphide (PPS)</td>
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<td>I.P. (NEMA) Rating</td>
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<td>T₂ₐₘₐₜ -40°C to +75°C</td>
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<td>Other Certifications</td>
<td>Russian: GOST</td>
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<tr>
<td>Applicable Standards</td>
<td>This product complies with the relevant CE standards including: EMC to EN50270, Flammable sensor to EN60079-29-1</td>
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</tbody>
</table>

**Notes:**
1. High temp range version available -55 to +190°C – See separate datasheet DS0303
2. Over temp range -20 to +55°C
3. % of range (fsd) per year
4. Over operating temperature range
5. % of applied concentration
Ordering Information

Accessories
00780-A-0100 Term Hng – Bartec DE1155 With Continuity Plate
1 x 25mm – 3 x 20mm Entries – ATEX Approved
00780-A-0160 Right Angle Mounting Bracket For Ceiling Mounting
02000-A-1635 Series 2000 Weather Housing Use With Toxic Sensor
02000-A-1640 Series 2000 Weather Housing Use With Flammable Sensor
02000-A-1642 Series 2000 Collecting Cone Use With Flammable Sensor
02000-A-1645 Series 2000 Calibration Flow Housing Assembly (Flam and Toxic)
02000-A-3120 Series 2000 Flow Housing Assembly Plastic
2106B1110 Catalytic Bridge To 4-20mA Converter
2106B2114 Toxic Calibration Kit including Calibration Cover, Removal Tool, Potentiometer Adjustment Tool
2106B2055 M36 / M40 Thread Adaptor
225-262-138 Cable Gland And Caps, 20mm, Nylon

Spare
2106B1545 O₂ Electrochemical Cell Exchange Kit
2106B1546 CO₂ Electrochemical Cell Exchange Kit
2106B1547 Ė₂O₂ Electrochemical Cell Exchange Kit
2106B1548 CO Electrochemical Cell Exchange Kit
2106B1549 H₂S Electrochemical Cell Exchange Kit
2106B1594 NO Electrochemical Cell Exchange Kit
2106B1595 NH₃, 0-1000ppm Electrochemical Cell Exchange Kit
2106B1596 NH₃, 0-500ppm Electrochemical Cell Exchange Kit
2106B1597 H₂, 0-1000ppm Electrochemical Cell Exchange Kit
2106B1598 H₂, 0-1000ppm Electrochemical Cell Exchange Kit
2106B1599 NO₂, 0-10ppm Electrochemical Exchange Kit

Calibration Equipment
Contact your local Honeywell Analytics representative for details of suitable calibration equipment

Find out more
www.honeywellanalytics.com

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analytics.ap@honeywell.com

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US: ha.us.service@honeywell.com
AP: ha.ap.service@honeywell.com

Honeywell Analytics
2106B1201 Sensepoint 0-100% LEL Flammable Sensor M25
2106B1200 Sensepoint 0-100% LEL Flammable Sensor M20
2106B1203 Sensepoint 0-100% LEL Flammable Sensor M26 (VQ1AB pellistor)
2106B1204 Sensepoint 0-100% LEL Flammable Sensor ¼”NPT
2106B1205 Sensepoint ppm (0-10% LEL) Flammable Sensor M20
2106B1209 Sensepoint ppm (0-10% LEL) Flammable Sensor ¼”NPT

Sensepoint Combustible
2106B1400 Sensepoint H₂S 0-20 ppm Toxic Sensor M20
2106B1401 Sensepoint H₂S 0-50 ppm Toxic Sensor M20
2106B1402 Sensepoint H₂S 0-100 ppm Toxic Sensor M20
2106B1500 Sensepoint H₂S 0-20 ppm Toxic Sensor M25
2106B1501 Sensepoint H₂S 0-50 ppm Toxic Sensor M25
2106B1502 Sensepoint H₂S 0-100 ppm Toxic Sensor M25
2106B1700 Sensepoint NO 0-20 ppm Toxic Sensor ¼”NPT
2106B1701 Sensepoint NO 0-50 ppm Toxic Sensor ¼”NPT
2106B1702 Sensepoint NO 0-100 ppm Toxic Sensor ¼”NPT
2106B1405 Sensepoint CO 0-100 ppm Toxic Sensor M20
2106B1406 Sensepoint CO 0-200 ppm Toxic Sensor M20
2106B1407 Sensepoint CO 0-500 ppm Toxic Sensor M20
2106B1505 Sensepoint CO 0-1000 ppm Toxic Sensor M25
2106B1506 Sensepoint CO 0-2000 ppm Toxic Sensor M25
2106B1507 Sensepoint CO 0-5000 ppm Toxic Sensor M25
2106B1705 Sensepoint CO 0-100 ppm Toxic Sensor ¼”NPT
2106B1706 Sensepoint CO 0-200 ppm Toxic Sensor ¼”NPT
2106B1707 Sensepoint CO 0-500 ppm Toxic Sensor ¼”NPT
2106B1410 Sensepoint Cl₂ 0-5 ppm Toxic Sensor M20
2106B1411 Sensepoint Cl₂ 0-15 ppm Toxic Sensor M20
2106B1510 Sensepoint Cl₂ 0-5 ppm Toxic Sensor M25
2106B1511 Sensepoint Cl₂ 0-15 ppm Toxic Sensor M25
2106B1711 Sensepoint Cl₂ 0-25 ppm Toxic Sensor ¼”NPT
2106B1413 Sensepoint NH₃, 0-50 ppm Toxic Sensor M20
2106B1414 Sensepoint NH₃, 0-1000 ppm Toxic Sensor M20
2106B1415 Sensepoint NH₃, 0-100 ppm Toxic Sensor M20
2106B1513 Sensepoint NH₃, 0-50 ppm Toxic Sensor M25
2106B1514 Sensepoint NH₃, 0-1000 ppm Toxic Sensor M25
2106B1515 Sensepoint NH₃, 0-100 ppm Toxic Sensor M25
2106B1713 Sensepoint NH₃, 0-50 ppm Toxic Sensor ¼”NPT
2106B1714 Sensepoint NH₃, 0-100 ppm Toxic Sensor ¼”NPT
2106B1715 Sensepoint NH₃, 0-1000 ppm Toxic Sensor ¼”NPT
2106B1416 Sensepoint H₂ 0-1000 ppm Toxic Sensor M20
2106B1417 Sensepoint H₂ 0-10000 ppm Toxic Sensor M20
2106B1516 Sensepoint H₂ 0-1000 ppm Toxic Sensor M25
2106B1517 Sensepoint H₂ 0-10000 ppm Toxic Sensor M25
2106B1716 Sensepoint H₂ 0-1000 ppm Toxic Sensor ¼”NPT
2106B1717 Sensepoint H₂ 0-10000 ppm Toxic Sensor ¼”NPT
2106B1418 Sensepoint NO 0-100 ppm Toxic Sensor M20
2106B1518 Sensepoint NO 0-100 ppm Toxic Sensor M25
2106B1718 Sensepoint NO 0-1000 ppm Toxic Sensor ¼”NPT
2106B1420 Sensepoint SO₂ 0-15 ppm Toxic Sensor M20
2106B1421 Sensepoint SO₂ 0-50 ppm Toxic Sensor M20
2106B1520 Sensepoint SO₂ 0-15 ppm Toxic Sensor M25
2106B1521 Sensepoint SO₂ 0-50 ppm Toxic Sensor M25
2106B1720 Sensepoint SO₂ 0-150 ppm Toxic Sensor ¼”NPT
2106B1721 Sensepoint SO₂ 0-50 ppm Toxic Sensor ¼”NPT
2106B1422 Sensepoint NO₂ 0-10 ppm Toxic Sensor M20
2106B1522 Sensepoint NO₂ 0-100 ppm Toxic Sensor M20
2106B1722 Sensepoint NO₂ 0-1000 ppm Toxic Sensor ¼”NPT
2106B1430 Sensepoint Cl₂ 25% V/V Toxic Sensor M20
2106B1530 Sensepoint Cl₂ 25% V/V Toxic Sensor M25
2106B1730 Sensepoint Cl₂ 25% V/V Toxic Sensor ¼”NPT

Please note: While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions.

H_Sensepoint_D01095_V5.EMEA/
09/12
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