# Premier Standard Power Sensors

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|---|---|---|
| Non dispersive infrared (NDIR) gas sensor, provides compensated and linearized output. Available as single and dual gas types. Ex'd and SIL1 available. | | |

| Feature | Item | Description |
|---|---|---|
| **Product Ordering Code {Feature 1}+{Feature 2}+{Feature 3}+{Feature 4}+...+{Feature 11}** | | |
| **Type** | | |
| Feature 1 | G- | Gold (Legacy Support) |
| | P- | Platinum |
| **Gas Type** | | |
| Feature 2 | CH4_ | Methane |
| | C3H8 | Propane |
| | CO2_ | Carbon Dioxide |
| | N2O_ | Nitrous Oxide (Platinum Only) |
| | DUAL | Dual Hydrocarbon and Carbon Dioxide (Platinum Only) |
| | R32_ | R32 (Platinum Only) |
| | 454B | R454b (Platinum Only) |
| | R744 | R744 (Platinum Only) |
| | R290 | R290 (Platinum Only) |
| | HC__ | Hydrocarbon |
| **Range** | | |
| Feature 3 | 1K | 0-1000ppm (N2O, CO2) |
| | 5K | 0-5000ppm (CO2) |
| | 1P | 0-1%vol (N2O) |
| | 5P | 0-5%vol (CH4, CO2) |
| | 2P | 0-2%vol (C3H8) |
| | 10 | 0-10%vol (CO2) |
| | 1H | 0-100%vol (CH4, CO2, C3H8) |
| | DL | 0-5-100%vol Methane / 0-2%Propane and 0-5%CO2 (Dual Only) |
| | DH | 0-5-100%vol Methane / 0-2%Propane and 0-100%CO2 (Dual Only) |
| | HR | 0-5-100% Methane |
| | HC | All HC |
| | CA | All CO2 |
| **Power** | | |
| Feature 4 | L2 | 8mA (24mW) - Low power 2 (LP2) - (Compatible with Feature 3, **5K, 5P & 2P Only**) |
| | LP | 15mA (45mW) - Low power (LP) |
| | RP | 80mA (240mW) - Regular power |
| | HP | 140mA (420mW) - High power (HP) |
| **Certification** | | |
| Feature 5 | NE | Non-Ex'd |
| | SN | SIL1, Non-Ex'd |
| | ED | Ex'd |
| | SE | SIL1, Ex'd |
| | ME | Mining Ex'd |
| | SM | SIL1, Mining Ex'd |
| **Pins** | | |
| Feature 6 | 3 | 3-pin (analogue only, not available for Dual Gas) |
| | 4 | 4-pin (digital only) |
| | 5 | 5-pin (analogue & digital, not available for Dual Gas) |
| **Output** | | |
| Feature 7 | B | Bridge output |
| | V | Voltage output |
| | 0 | No analogue output (4-pin only) |
| **Polarity** | | |
| Feature 8 | P | Positive polarity |
| | N | Negative polarity |
| **Filter** | | |
| Feature 9 | F | PTFE Filter Fitted |
| | 0 | No Filter Fitted |
| **Temperature** | | |
| Feature 10 | S | Standard temperature |
| | X | Extended temperature (XTR only available on non-Ex'd) |
| **Special Request** | | |
| Feature 11 | 0 | No Special Request |

| | Q | Special request - Include on PO |
|---|---|---|

## Accessories

| | | |
|---|---|---|
| | P-INT | Premier 4-20mA converter. Only suitable for use with single range sensors. |
| | P-CONFIG-POS | Premier configuration unit - positive polarity sensors |
| | P-CONFIG-NEG | Premier configuration unit - negative polarity sensors |
| | P-PCB | Premier PCB with 150mm leads |
| | P-PCB-NL | Premier PCB without leads |
| | SENSOR SOCKET | Reccomended pin socket |
| | OEM-1-MTG | Sensor mounting |
| | OEM-1-ADTR | Gas flow adaptor for OEM-1-MTG |
| | GAS SAMP. CAP | Gas sampling cap |
| | PTFE FILTER | 14µm pore PTFE filter |

## Ordering Examples

| | |
|---|---|
| P-CO2_5PRPNE5VP0S0 | Platinum, Carbon Dioxide, 0-5%vol (CH4, CO2), 80mA (240mW) - Regular power, Non-Ex'd, 5-pin (analogue & digital, not available for Dual Gas), Voltage output, Positive polarity, No Filter Fitted, Standard temperature, No Special Request |
| G-CH4_5PRPED5VP0S0 | Gold (Legacy Support), Methane, 0-5%vol (CH4, CO2), 80mA (240mW) - Regular power, Ex'd, 5-pin (analogue & digital, not available for Dual Gas), Voltage output, Positive polarity, No Filter Fitted, Standard temperature, No Special Request |
| P-DUALDLRPSE40PFS0 | Platinum, Dual Hydrocarbon and Carbon Dioxide (Platinum Only), 0-5-100%vol Methane / 0-2%Propane and 0-5%CO2 (Dual Only), 80mA (240mW) - Regular power, SIL1, Ex'd , 4-pin (digital only), No analogue output (4-pin only), Positive polarity, PTFE Filter Fitted, Standard temperature, No Special Request |
| P-CH4_1HRPNE5VP0S0 | Platinum, Methane, 0-100%vol (CH4, CO2, C3H8), 80mA (240mW) - Regular power, Non-Ex'd, 5-pin (analogue & digital, not available for Dual Gas), Voltage output, Positive polarity, No Filter Fitted, Standard temperature, No Special Request |

# Standard Series Sensors

| Non dispersive infrared (NDIR) gas sensor, provides raw output. User must provide temperature compensation, signal processing, linearisation and electronic drive. Ex'd available. |
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| Product Ordering Code {Feature 1}+{Feature 2}+{Feature 3}+{Feature 4}+…+{Feature 6} | | |
|:---|:---|:---|
| **Feature** | **Item** | **Description** |
| **Feature 1** | **Product Variant** | |
| | STD- | Standard Series Sensor |
| **Feature 2** | **Gas Type** | |
| | HC__ | Hydrocarbon |
| | CO2_ | Carbon Dioxide |
| | HHC_ | Propane (10-100% vol. range) |
| | HCO2 | Carbon Dioxide (10-100% vol. range) |
| | N2O_ | Nitrous oxide (0-1% vol. only) |
| **Feature 3** | **Certification** | |
| | NE | Non-Ex'd |
| | ED | Ex'd |
| **Feature 4** | **Heater** | |
| | 0 | None |
| | L | Heater on lamp supply |
| | P | Heater on pyro supply |
| **Feature 5** | **Isolation** | |
| | I | 0V pin isolated from housing |
| | 0 | 0V pin connected to housing |
| **Feature 6** | **Filter** | |
| | F | PTFE Filter Fitted |
| | 0 | No Filter Fitted |
| **Feature 7** | **Plastic Insert** | |
| | P | 45 micron plastic insert (Non-certified only) |
| | 0 | No plastic insert |

| Accessories | |
|:---|:---|
| OEM-1 | Standard sensor interface |
| OEM-1-KIT | Standard sensor OEM development kit |
| OEM-1-LEAD | RS232 cable, male - female D-connectors |
| OEM-1-CABLE | Standard PCB with 150mm leads, for connection to OEM-1 |
| OEM-1-SPCB | Standard PCB without leads |
| OEM-1-COMMLEAD | RS232 cable for interface with OEM-1 |
| OEM-1-MTG | Sensor mounting |
| OEM-1-ADTR | Gas flow adaptor for OEM-1-MTG |
| OEM-1-SOFTWARE | User interface software for OEM-1 |
| PTFE FILTER | 14μm pore PTFE filter |
| SENSOR SOCKET | Reccomended pin socket |

| Ordering Examples | |
|:---|:---|
| **HC__NE00FP** | **Hydrocarbon, Non-Ex'd, None, 0V pin connected to housing, PTFE Filter Fitted, 45 micron plastic insert (Non-certified only)** |
| **N2O_EDPIF0** | **Nitrous oxide (0-1% vol. only), Ex'd, Heater on pyro supply, 0V pin isolated from housing, PTFE Filter Fitted, No plastic insert,** |
| **CO2_0L00P** | **Carbon Dioxide, Non-Ex'd, Heater on lamp supply, 0V pin connected to housing, No Filter Fitted, 45 micron plastic insert (Non-certified only)** |

# GSH HOUSING

Flameproof and non-certified sensor housings - can be fitted with a range of different sensor technologies (infrared, pellistor, electrochemical) for detection of a wide variety of gasses, depending on the sensor fitted.

| Feature | Item | Description |
|---|---|---|
| | **Product Ordering Code {GSH-}+{Feature 1}+{Feature 2}+{Feature 3}+{Feature 4}** | |
| **Feature 1** | **Type** | |
| | GSH- | Sensor Housing |
| **Feature 2** | **Sensor Type** | |
| | PRM | PCB to fit Premier sensor |
| | STD | PCB to fit Standard sensor |
| | 4-S | PCB to fit 4-Series sensor |
| | 7-S | PCB to fit 7-Series sensor |
| | PID | PCB to fit PID sensor (Designed for Ion Science PID sensor) |
| | H2- | PCB to fit Hydrogen sensor (Designed for FES Sensor Tech Sensors) |
| **Feature 3** | **Certification** | |
| | ATEX | Stainless steel construction with ATEX and IECEx flameproof certification for use in hazardous area zones 1 & 2. |
| | SAFE | Nylon construction for use in safe areas |
| **Feature 4** | **Threads** | |
| | M20 | M20 Thread |
| | N34 | 3/4" NPT Thread |
| | N12 | 1/2" NPT Thread |
| **Feature 5** | **Temperature** | |
| | S | Standard temperature range (-20...+60C) |
| | X | Extended temperature range (-40...+75C) |

| | Accessories | |
|---|---|---|
| | GSH4-GUARD | Rain Guard (not suitable for -40...+75C version) |
| | GSH-FLOW | Stainless steel flow through calibration adaptor 1/8" BSP threads |
| | GSH-FLOW-6MM | Stainless steel flow through adaptor with 6mm push-fit connectors |
| | GSH-ADTR | Nickel plated brass calibration adaptor with hose-tail fittings for 4mm ID pipe |

## Ordering Examples

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|---|---|
| GSH-PRMATEXM20 | PCB to fit Premier sensor, Stainless steel construction with ATEX and IECEx flameproof certification for use in hazardous area zones 1 & 2., M20 Thread |
| GSH-7-SSAFEN34 | PCB to fit 7-Series sensor, Nylon construction for use in safe areas, 3/4" NPT Thread |
| GSH-STDATEXN12 | PCB to fit Standard sensor, Stainless steel construction with ATEX and IECEx flameproof certification for use in hazardous area zones 1 & 2., 1/2" NPT Thread |

# Axiom A2L Detector

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|---|---|---|
| | **A2L detector. Certified to UL60335-2-4 4th edition, annex LL.** | |

| | | |
|---|---|---|
| | **Product Ordering Code {AX-}+{Feature 1}+{Feature 2}+{Feature 3}** | |
| **Feature** | **Item** | **Description** |
| **Feature 1** | **Type** | |
| | AX- | Axiom A2L Detector |
| **Feature 2** | **Gas Type** | |
| | 454B | R454B |
| | R290 | R290 (Propane) |
| | R32- | R32 |
| | 454C | R454C |
| | R744 | R744 (Carbon Dioxide) |
| **Feature 3** | **Range** | |
| | LFL | 0-100% LFL |
| | PPM | 0-500PPM (R744 only) |
| | VOL | 0-5% volume (R744 only) |
| **Feature 4** | **Output Type** | |
| | A | Analogue |
| | D | Digital |
| **Feature 5** | **Output Option** | |
| | MA_ | 4-20mA (analogue only) |
| | VO_ | 0.2-4.0V (analogue only) |
| | OC_ | Open Collector (analogue only) |
| | 232 | RS232 UART (digital only) |
| | 485 | RS485 Modbus (digital only) |
| | USB | USB 2.0 (digital only) |

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|---|---|
| **Ordering Examples** | |
| **AX-454BLFLAMA_** | **R454B,, Analogue, 4-20mA (analogue only)** |
| **AX-R290LFLAUSB** | **R290 (Propane), Analogue, USB 2.0 (digital only)** |