

# SenSmart 1300M/3300M/ 5300M 6300M

"The Art of Gas Detection" - Built with our Proven Millenium Gas Monitor

**BESTOBELL**  
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SenSmart 3300M



SenSmart 5300M



SenSmart 6300M

The microprocessor based intelligent **SenSmart 1300M** infrared gas detector is ideally suited for use in harsh environments and where conventional catalytic detectors is prohibitive. These infrared gas detectors perform reliably in the presence of silicone and other catalyst poisoning agents and operate in oxygen free environments or where high background gas levels are present.

The **SenSmart 1300M** can directly connect to **SenSmart 3000**, **SenSmart 5000** or **SenSmart 6000** transmitters to have local display and other advanced functions from those transmitters. Please refer to **SenSmart 3000**, **SenSmart 5000** or **SenSmart 6000** brochures for more details.



Diffusion "Smart" Sensor with  
Splash Guard and Cal Port

## FEATURES HIGHLIGHT

- Virtually maintenance free infrared sensing technology
- Low long term cost of ownership, long operating life with 5 year warranty on transmitter
- Rugged stainless steel construction with fast response time
- Requires no routine calibration to ensure proper operation
- Fault indications for all failure states
- Patented self-compensating optics with no moving parts
- Heated optical chamber prevents condensation
- A multi-layered filtering system protects optics from dirt and water ingress
- Straight optical path eliminates the need for reflective surfaces, such as mirrors or beam splitters
- Performs well in the presence of high concentrations or constant background levels of hydrocarbons and in oxygen depleted atmospheres
- Highly resistant to poisoning and etching
- Standard 4-20 mA output (source)

## SPECIFICATIONS

|                                     |                                                                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Detection Method</b>             | Diffusion – Optional sample draw (requires a minimum of 1 liter per minute flow rate)<br>Output (analog): 4-20mA (Source Type), max 1000 Ohm |
| <b>Response Time</b>                | T50 < 5 seconds, T90 < 10 seconds                                                                                                            |
| <b>Construction</b>                 | 316 Stainless Steel                                                                                                                          |
| <b>Accuracy</b>                     | +/- 3% LEL, 0 to 50% LEL (Lower Explosive Limit)                                                                                             |
| <b>Operating Temperature Rating</b> | -40° to + 70° C at 0 to 99% RH (non-condensing)                                                                                              |
| <b>Operating Range</b>              | 18 to 32 VDC measured at the detector head                                                                                                   |
| <b>Max Current Draw</b>             | (at 24VDC): Average: 210mA Peak: 400mA                                                                                                       |
| <b>Dimensions</b>                   | 5 lbs (2.3 Kg.)                                                                                                                              |
| <b>Approvals</b>                    | C22.2 No. 152-M1984 (R1997)<br>CSA Certified Class 1, Division 1, Groups B, C and D                                                          |
| <b>Warranty</b>                     | 5 year limited warranty<br>For sensor warranty see sensor specifications sheet.                                                              |

## ORDERING INFORMATION

### Unit Status Chart

|            |                          |
|------------|--------------------------|
| 4-20 mA    | Normal measuring mode    |
| 0.0 mA     | Unit Fault               |
| 0.2 mA     | Reference Channel Fault  |
| 0.4 mA     | Analytical Channel Fault |
| 0.8 mA     | Unit Warm up             |
| 1.0 mA     | Optics Fault             |
| 1.2 mA     | Zero drift fault         |
| 1.6 mA     | Calibration fault        |
| 2.0 mA     | Unit spanning            |
| 2.2 mA     | Unit zeroing             |
| 4.0 mA     | Zero gas level           |
| 5.6 mA     | 10% LEL                  |
| 8.0 mA     | 25% LEL                  |
| 12 mA      | 50% LEL                  |
| 16 mA      | 75% LEL                  |
| 20 mA      | 100% LEL                 |
| 20.1-23 mA | Over range (> 100 %)     |

### Available Gases

|                |                                |
|----------------|--------------------------------|
| Acetone        | Iso-Butane                     |
| Acetylene      | Isopropyl Alcohol (IPA)        |
| Butyl Acetate  | Jet Fuel                       |
| Carbon Dioxide | JP4                            |
| Cyclopentane   | JP5                            |
| DF 2000        | JP8                            |
| Diesel         | Methane                        |
| Dimethyl Ether | Methanol                       |
| Ethane         | Methyl Amyl Ketone             |
| Ethanol        | n-Butane                       |
| Ethylene       | Pentane                        |
| Gasoline       | Propane                        |
| Green Earth    | Propane with Methane rejection |
| Hexane         | Propylene                      |
| Kerosene       | Toluene                        |



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