



Toxic/Oxygen Gas Detectors

"The Art of Gas Detection"



* SenSmart 7100

- 2.4GHZ/900MHZ wireless with integral battery
- Local calibration and real time event log
- 15' remote sensor option
(backlight available on local powered version)



* SenSmart 3100

- 3-Wire 4-20mA [source] with local backlit LCD graphic display
- Local Calibration and real time event log
- Single Port Modbus RTU/relays option



SenSmart 1100

- Low Cost, 2-Wire 4-20mA [sink]

SenSmart 6100*

- QVGA LCD with stunning color graphics
- Ethernet: Modbus TCP with web server
- RS-485 remote sensor option
- Dual Port Modbus RTU/relays option



SenSmart 2100*

- 2-Wire 4-20mA [sink] with local LCD graphic display
- Local calibration and real time event log



* 2100-7100 models also available in "PY" Poly Enclosure



Dual Sensor models are also available for:
SenSmart 3000, 6000 and 7000 series gas detectors

Models are available in Aluminum, Stainless Steel and Poly enclosure options. For features, please see the table below, and as always, contact R.C. Systems for solutions to your gas detection needs.

	2-Wire		3-Wire		Wireless
Toxic/Oxygen Detectors	SenSmart 1100	SenSmart 2100	SenSmart 3100	SenSmart 6100	SenSmart 7100
Display	None	LCD	Backlit LCD	Color Backlit LCD	LCD
Power Supply	10-30VDC 4-20mA Loop	10-30VDC 4-20mA Loop	10-30 VDC	10-30 VDC	10-30 VDC or 3.6V Battery
Modbus RTU (RS-485)			Yes	Yes	
Modbus TCP/IP				Yes	
Alarm Relays			Yes	Yes	
4-20 mA Output	Sink	Sink	Source ¹	Source	
Local Alarm Indication		LEDs	LEDs	LCD Display Color	LEDs
Real Time Clock		Yes	Yes	Yes	Yes
Event Log		Yes	Yes	Yes	In WLR Controller
Temperature compensation		Yes	Yes	Yes	Yes
Local Calibration		Yes	Yes	Yes	Yes
Magnetic Keypad		Yes	Yes	Yes	Yes
Arctic Sensor Available			Yes	Yes	
Enclosure Heater Available			Yes		
Embedded Webpage				Yes	
Password Protected		Yes	Yes	Yes	Yes
Sensor Life		Local Display and Transmit	Local Display and Transmit	Local Display and Transmit	Local Display
Remote Sensor			4-20mA	Up to 4000'	Up to 15'
Area Classification Guide					
<div>Gas</div> <div>Gas Detector</div>	SenSmart 1100	SenSmart 2100	SenSmart 3100	SenSmart 6100	SenSmart 7100
Arsine (ASH3) Carbon Monoxide (CO) Ethylene Oxide (C2H4O) Hydrogen (H2) Hydrogen Cyanide (HCN) Hydrogen Sulfide (H2S) Nitric Oxide (NO) Nitrogen Dioxide (NO2) Oxygen (O2) Sulfur Dioxide (SO2)	CI 1 Div. 1 ² Explosion Proof or Intrinsically Safe	CI 1 Div. 1 ² Explosion Proof or Intrinsically Safe CI 1 Div. 2 Non-Incendive	CI 1 Div. 1 ² Explosion Proof CI 1 Div. 2 Non-Incendive		
Ammonia (NH3) Chlorine (Cl2) Chlorine Dioxide (ClO2) Fluorine (F2) Hydrogen Chloride (HCl) Hydrogen Fluoride (HF) Ozone (O3)	CI 1 Div. 1 ² Intrinsically Safe	CI 1 Div. 1 ² Intrinsically Safe CI 1 Div. 2 Non-Incendive	CI 1 Div. 2 Non-Incendive		

1 Isolated 4-20mA Output Option Available

2 Not available for Poly Enclosure. Poly Enclosure only certified for Class 1 Division 2 applications.



SenSmart 1300M/3300M/6300M/7300M

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



SenSmart 3300M



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** or **SenSmart 6000** transmitters to have local display and other advanced functions from those transmitters. Please refer to **SenSmart 3000** and **SenSmart 6000** brochures for more details.



Diffusion "Smart" Sensor with Splash Guard and Cal Port

FEATURES HIGHLIGHT

- Virtually maintenance free infrared sensing technology
- Low cost of ownership with over five years operating life
- 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

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

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	