RC SYSTEMS
"The Art of Gas Detection"

SenSmart 3000 Series

"The Art of Gas Detection" - *Built with our Proven ST-48 Transmitter*

Aluminum "AL" XP model

Non-metallic Poly "PY" Div 2 model

The **SenSmart 3000** 3-wire gas detector is built with our reliable 'ST-48' smart transmitter, which provides the cutting-edge technology in toxic and combustible gas detection. It's a universal, easy to use detector that supports dual smart sensor with different types, including electrochemical, Catalytic Bead, Infrared and Photoionization sensors.

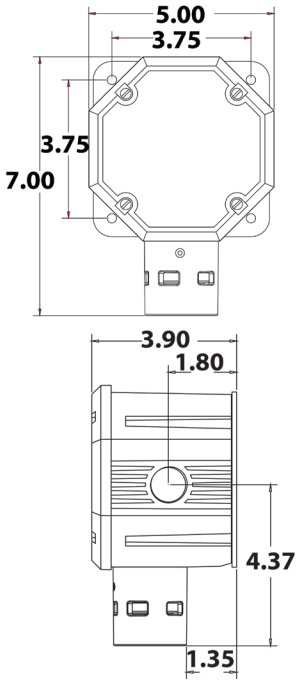
Aluminum "AL" XP model wtih Dual Sensor

FEATURES HIGHLIGHT

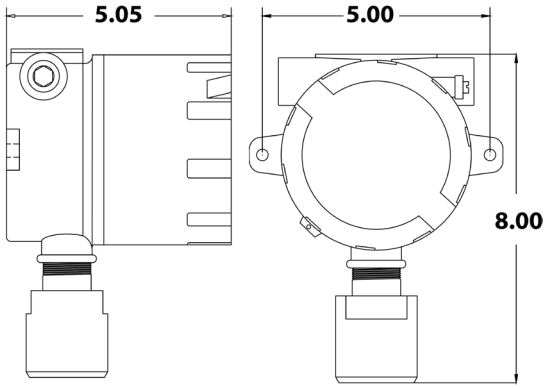
- CSA Certified for Class I, Div 1 Locations
- Graphic LCD display shows values, units, trend graph, alarm levels
- Backlit display for better visibility in low light conditions
- LED indication of alarm status
- Dual smart sensor capable
- Supports both local and remote sensors for easy installation
- Non-intrusive, prompted calibration with programmable cal-gas
- Power-up and post-calibration delays eliminate false alarms
- Options for 3x 5A alarm contacts, isolated 4-20mA and MODBUS®
- Auto-recognition of Smart Sensors uploads calibration data and more
- Real-time clock and calendar logs alarms, calibration and power-up events
- Security mode allows locking of critical parameters
- Fault supervision circuitry detects failed sensor and transmits warning
- Setup in hazardous area requires only simple magnetic wand
- Optional HART board available

Power Supply	Power Input 10-30VDC at < 6.5 watts with relay board (all relay energized)
Display	Backlit 64 x 128 pixel LCD with 30-minute trend, bar graph and engineering units display
Channel One Input	Electrochemical toxic and oxygen sensors / 4-20ma current input
Channel Two Input	Catalytic Bead, Infrared and Photoionization sensor / 4-20mA current input
Standard Output	Dual 3-wire 4-20mA current source. Max loop R is 750 ohms with nominal 24VDC power supply
Optional Outputs	Dual isolated 4-20mA current source. Max loop Resistance is 650 ohms with nominal 24VDC; (form C , rated 5 amp at 30 VDC or 240 ~VAC RESISTIVE) MODBUS slave ports; 3x programmable alarm relays with 5A capability
Temp	Electronics -40°C to +60°C
Housing	Aluminum with epoxy paint standard; Optional #316 stainless steel, Optional Ul94 Poly Black Plastic Enclosure
Dimensions	(Aluminum) Width 5.4" (137 mm), Height 8" (203 mm), Depth 5" (127 mm) Shipping weight 6.5 pounds (3 kg) (Poly) Width 5" (127 mm), Height 7" (178 mm), Depth 4" (101 mm) Shipping weight 3 pounds (2 kg)
CSA Approvals	**Cast Aluminum Enclosure:** Explosion-Proof Cl 1 Div 1 Gr ABCD with 10-0247 (includes sinter) Non-Incendive Cl 1 Div 2 Gr ABCD with 10-0247 or 10-0247IS **UL94 Poly Black Plastic Enclosure:** Non-Incendive Cl 1 Div 2 Gr ABCD
Warranty	5 year limited warranty For sensor warranty see sensor specifications sheet.

Poly Housing



Single Sensor Aluminum Housing



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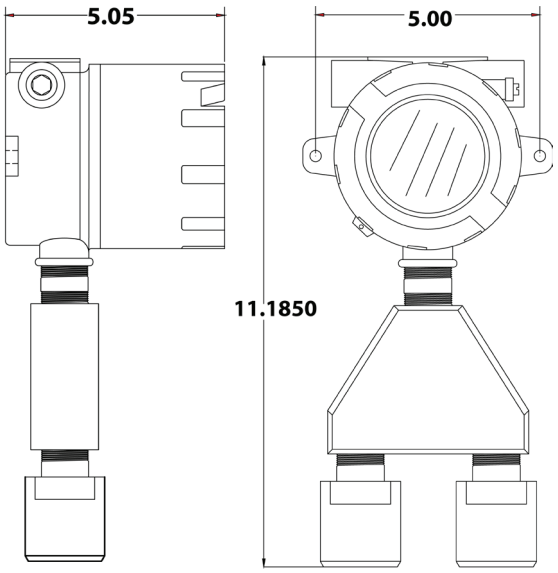
Dual Sensor Aluminum Housing



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SenSmart 5000 Series

"The Art of Gas Detection"

Non-metallic Poly "PY" Div 2 model

Aluminum "AL" XP model

The state-of-the-art **SenSmart 5000** gas detector is R.C. Systems' newest release to the gas detection industry. No competitive product offers as many features or better performance to cost ratio. With a bright, vivid backlit color display, Modbus and programmable relays, it will satisfy the most demanding application's requirements. The high performance, universal gas detector supports all temperature compensated smart sensor types including Electrochemical, Catalytic Bead, Infrared and Photoionization sensors. It even has Arctic options available for extreme low temperature installations.

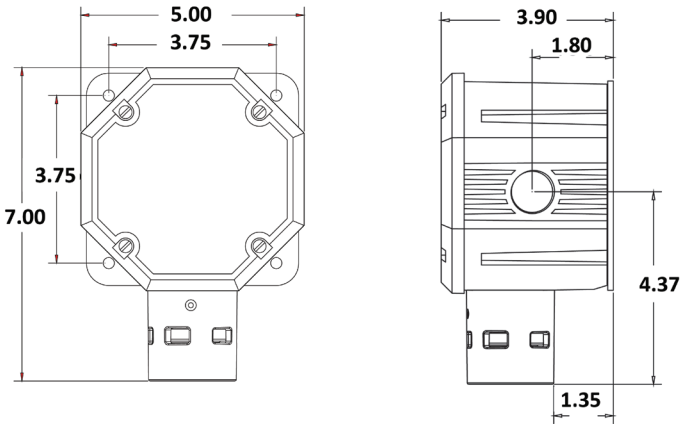
FEATURES HIGHLIGHT:

- CSA Certification for Class 1, Div 1 and Class 1 Div 2 locations
- Color backlit LCD Display
- Display Color Changes with Alarm Status
- Generation 2 Smart Sensor Compatible for increased signal stability
- Sensor Life Indication
- Remote Sensor Mount up to 4000'
- Non-intrusive One-Man Calibration
- Temperature Compensation
- Two RS-485 Ports for Modbus
- 2 Programmable Relays and Fault Relay Available
- Heated elements available for low temperature
- Remote SmartCal feature allows user to initiate calibrations from connected RCS controller via Modbus connection

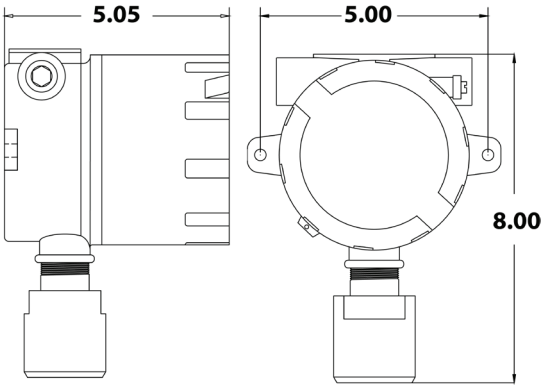
SPECIFICATIONS

Power Supply	10-30VDC at < 6.5 watts with relay board (all relays energized)
Display	128x64 pixel color backlit LCD display
Sensor Input	Electrochemical, Catalytic Bead, Infrared, Photoionization Detector sensor, Modbus 4-20mA
Standard Output	3-wire 4-20mA current source. Max loop Resistance 600 ohms @ 24VDC
Optional Outputs	Two programmable relays plus dedicated FAULT relay (form C , rated 5 amp at 30 VDC or 240 ~VAC RESISTIVE) Dual master / slave MODBUS RS-485 serial interfaces
Environmental	Operating range -40°C to +60°C Sensors include sensor heater for low temperature operation Relative humidity to 95% for IR; to 85% noncondensing when using electrochemical sensors
Housing	Aluminum with epoxy paint standard; Optional #316 stainless steel, Optional UI94 Poly Black Plastic Enclosure
Dimensions	(Aluminum) Width 5.4" (137 mm), Height 8" (203 mm), Depth 5" (127 mm) Shipping weight 6.5 pounds (3 kg) (Poly) Width 5" (127 mm), Height 7" (178 mm), Depth 4" (101 mm) Shipping weight 3 pounds (2 kg)
Approvals	CSA Certification for: Cast Aluminum Enclosure: IP65 or IP66 with Splashguard Class I, Div1, Group A, B, C, D , Class I, Zone 1, Group IIC, T4 Class I, Div 2 Groups A, B, C, D, Class I, Zone 2, Group IIC, T4, Both with 3/4" NPT entries
Warranty	5 year limited warranty For sensor warranty see sensor specifications sheet.

Poly Housing



Single Sensor Aluminum Housing



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SenSmart 6000 Series

"The Art of Gas Detection" - *Built with our Proven ST-44 Transmitter*

Aluminum "AL" XP model

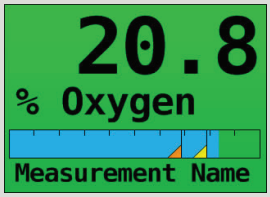
Non-metallic Poly "PY" model

Aluminum "AL" XP model wtih Dual Sensor

The State-of-the-art **SenSmart 6000** gas detector is built with our proven 'ST-44' transmitter. This versatile unit has a bright, vivid color display and embedded Ethernet with Webserver and Modbus TCP. The high performance, universal gas detector supports dual smart sensors with different type like Electrochemical, Catalytic Bead, Infrared and Photoionization sensors.

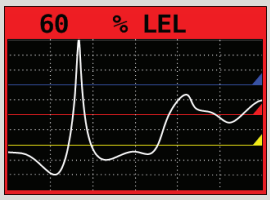
FEATURES HIGHLIGHT:

- CSA Certified for Class 1, Div 1 locations
- Vivid QVGA Backlit Color TFT Display
- Display Color Changes with Alarm Status
- Standard Ethernet Port with Web Server and Modbus TCP
- Dual Smart Sensor Capable
- Sensor Life Indication
- Remote Sensor Mount up to 4000'
- Non-intrusive One-Man Calibration
- Temperature Compensation
- Two RS-485 Ports for Modbus
- 3 Programmable Relays and Fault Relay Available
- Heated elements available for low temperature



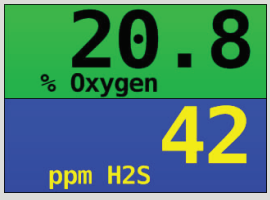
Bar Graph Screen

Displays channel's current value as bar graph and numerical value. Includes channel ID, and engineering units. Background changes color and flash on alarm. Flashing color becomes steady after Acknowledge.



30-Minute Trend Screen

View channels most recent 30-minute trend. Top data fields include current reading,and engineering units. Background changes color and flashs on alarm. Flashing color becomes steady after Acknowledge.



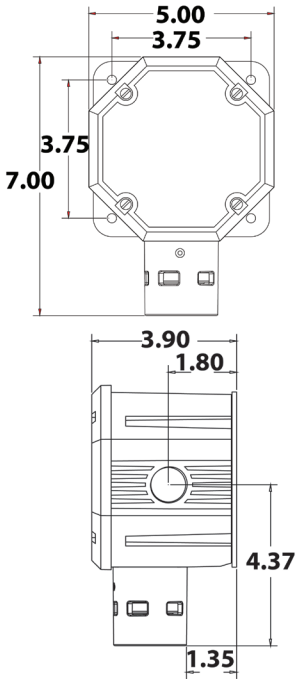
Dual Channel Split Screen

In two channel mode, view both channels,current reading and engineering units simultaneously. Background changes color and flashes on alarm. Flashing color becomes steady after Acknowledge.

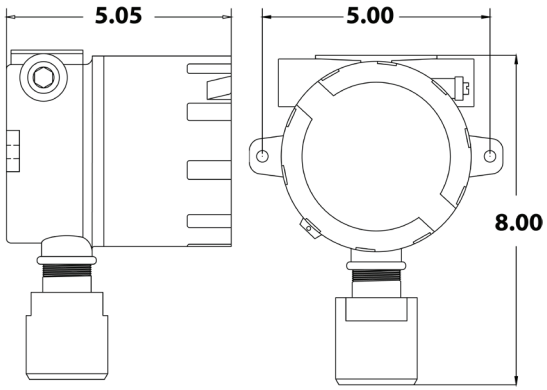
SPECIFICATIONS

Power Supply	10-30VDC at < 10 watts with relay board (all relays energized)
Display	QVGA backlit color TFT 320x240
Channel One Input	Electrochemical, Catalytic Bead, Infrared, Photoionization Detector sensor
Channel Two Input (Model 6900 Only)	Electrochemical, Infrared , sensor
Standard Output	Dual 3-wire 4-20mA current source. Max loop Resistance 600 ohms @ 24VDC, Ethernet RJ-45 with built-in web Server, Modbus/TCP
Optional Outputs	Three programmable relays plus dedicated FAULT relay (form C , rated 5 amp at 30 VDC or 240 ~VAC RESISTIVE) Dual programmable master / slave MODBUS RS-485 serial interfaces
Environmental	Operating range -40°C to +60°C Sensors include sensor heater for low temperature operation Relative humidity to 95% for IR; to 85% noncondensing when using electrochemical sensors
Housing	Aluminum with epoxy paint standard; Optional #316 stainless steel, Optional UI94 Poly Black Plastic Enclosure
Dimensions	(Aluminum) Width 5.4" (137 mm), Height 8" (203 mm), Depth 5" (127 mm) Shipping weight 6.5 pounds (3 kg) (Poly) Width 5" (127 mm), Height 7" (178 mm), Depth 4" (101 mm) Shipping weight 3 pounds (2 kg)
Approvals	**Cast Aluminum Enclosure:** Explosion-Proof Cl 1 Div 1 Gr ABCD with 10-0247 (includes sinter) Non-Incendive Cl 1 Div 2 Gr ABCD with 10-0247 or 10-0247IS **UL94 Poly Black Plastic Enclosure:** Non-Incendive Cl 1 Div 2 Gr ABCD IP66
Warranty	5 year limited warranty For sensor warranty see sensor specifications sheet. .

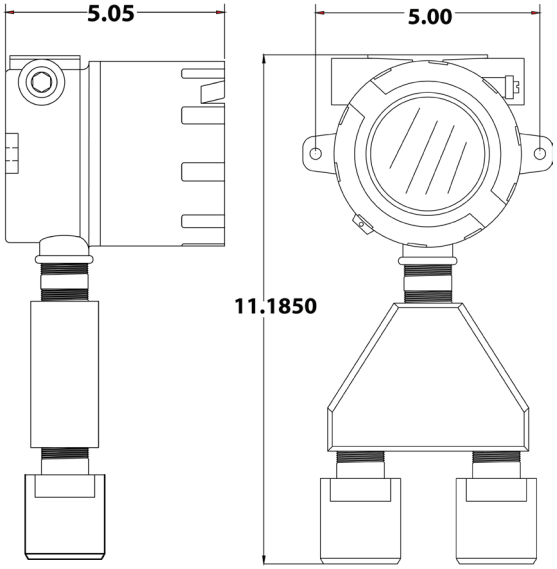
Poly Housing



Single Sensor Aluminum Housing



Dual Sensor Aluminum Housing



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