

# SENSALERT PLUS<sup>®</sup>



**Advanced Point Gas  
Detector for Critical  
Safety Applications.**

**+ Detection at every point.**

**SENSIDYNE<sup>®</sup>**  
Industrial Health & Safety Instrumentation

# SENSALERT PLUS

Universal Point Gas Detector Accepting Combustible  
(Infrared or Catalytic), Toxic, and Oxygen Gas Sensors



## Highest Reliability and Function

- Predictive Sensor End-of-Life Indication
- Missing or Non-functional Sensor Indication
- Sensor Test-On-Demand, with On-board Gas Generator

## Intrinsically Safe Sensor Head

- Shop Calibrate and Hot-swap Gas Sensors in Classified Areas
- Mount Sensor up to 100 ft./30 m. Away Without Rigid Conduit

## Intelligent SensAlert Plus Sensors

- Auto-recognition and Set-up from Sensor Memory Provides Operating Parameters and Diagnostics for All Plus Transmitters

## International Performance Approvals

- Performance Tested and Certified to FM and ATEX Standards
- Unrestricted Hazardous Classified Area Installation and Operation

## Flexible Installation or Retrofit

- 2-Wire and 3-Wire Transmitters with Enclosure Options
- Non-intrusive Configuration and Maintenance Interface
- Remote Sensor / Gassing, Duct Mount and Sample Draw
- Configurable Alarms: Fault Conditions and Test-on-Demand

### Increased Reliability

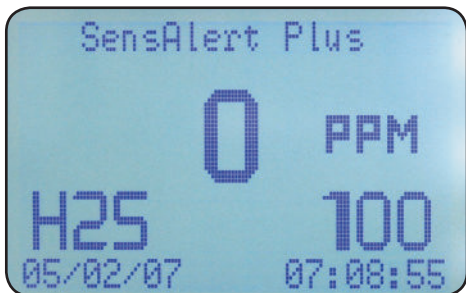
Intelligent and dependable firmware monitors the intelligent Plus sensor for changes that could effect performance. Sensor condition and maintenance notifications are displayed locally and can be sent to a controller or facility monitoring system via on-board relays, a virtual relay (assignable to a fault current), RS-485 Modbus, or HART. This thorough monitoring provides increased reliability.

### Simple to Install & Maintain

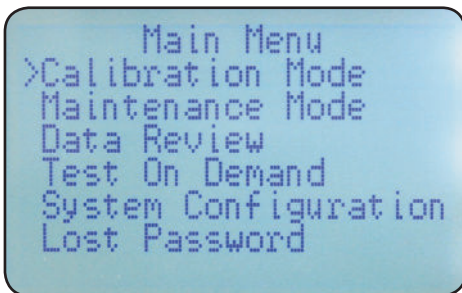
The SensAlert Plus Intrinsically Safe sensor head can be remote mounted up to 100 feet (30m) from the transmitter providing greater flexibility to position the transmitter in an personnel-accessible location while positioning the sensor closer to potential hazards. A wide range of sensors, accessories and remote gassing/sampling systems further simplify maintenance and provide installation flexibility.

### Reduced Cost of Ownership

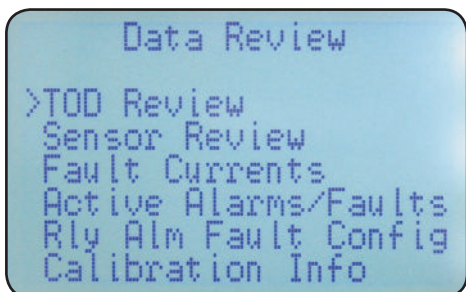
Shop or field calibrate, then swap sensors under power to minimize maintenance and calibration time. A large backlit alphanumeric display with a non-intrusive user interface allows for configuration, setup, and data review without declassifying a hazardous area. SensAlert Plus is a universal transmitter allowing facility standardization across gas types, sensor technologies, and sensor ranges.



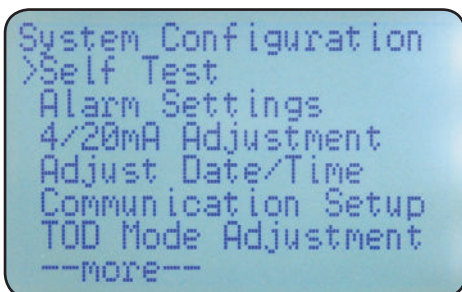
Main Display



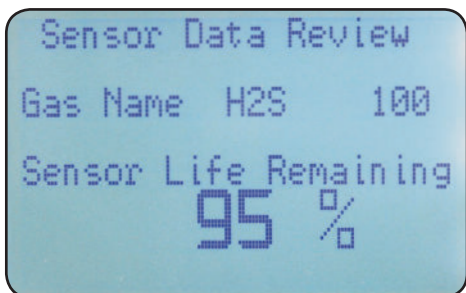
Main Menu



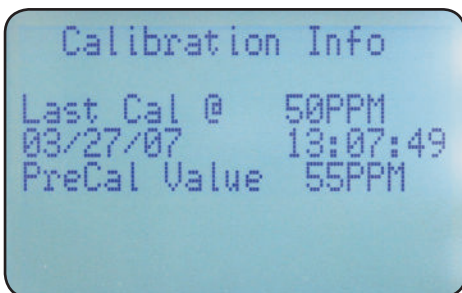
Data Review Menu



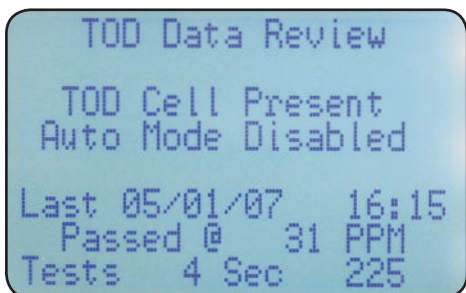
System Configuration Menu



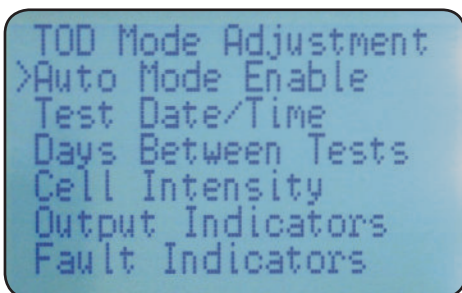
Sensor Data Review



Calibration Information Screen



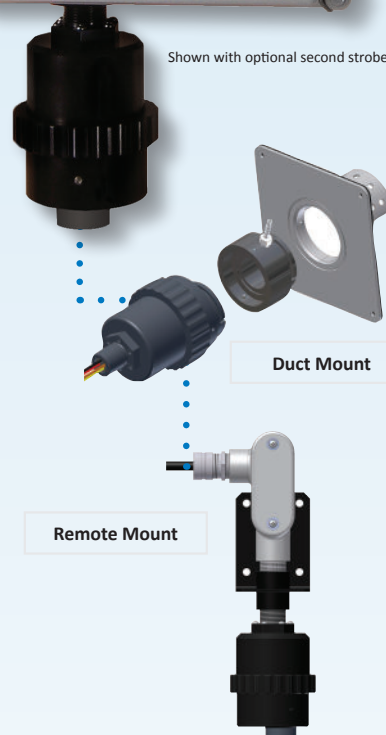
Test-on-Demand™ Data Review



TOD Mode Adjustment



Shown with optional second strobe.



Duct Mount

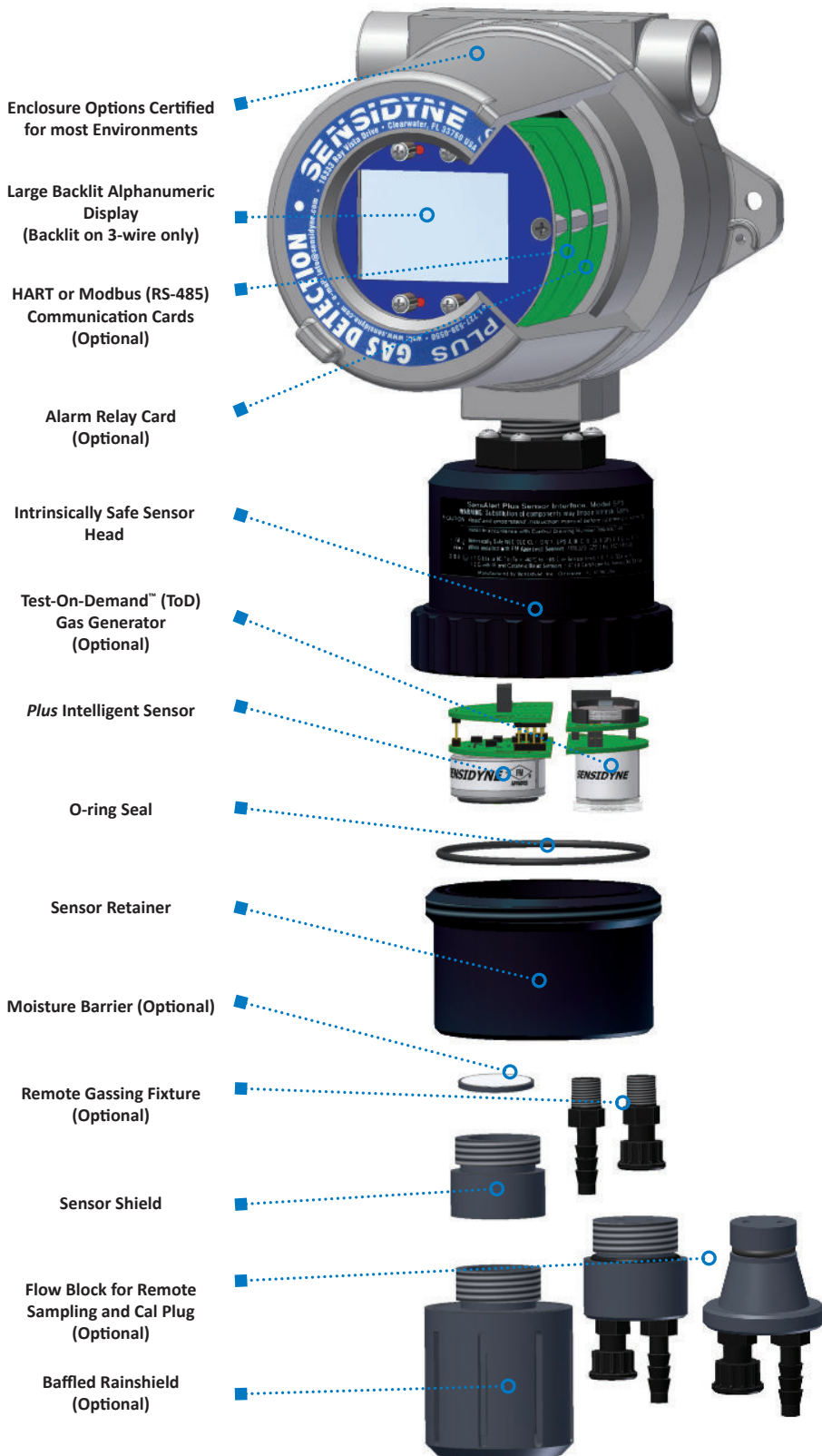
Remote Mount

## SENSALARM PLUS

SensAlarm Plus is a complete single point gas detection system comprised of a gas detection transmitter, sensor, power supply, outputs, and annunciation. This system is extremely cost-effective and easy to install. SensAlarm Plus is compatible with all SensAlert Plus sensors and accessories.

# SENSALERT PLUS

Universal Point Gas Detector Accepting Combustible (Infrared or Catalytic), Toxic, and Oxygen Gas Sensors



Enclosure Options Certified for most Environments

Large Backlit Alphanumeric Display (Backlit on 3-wire only)

HART or Modbus (RS-485) Communication Cards (Optional)

Alarm Relay Card (Optional)

Intrinsically Safe Sensor Head

Test-On-Demand™ (ToD) Gas Generator (Optional)

Plus Intelligent Sensor

O-ring Seal

Sensor Retainer

Moisture Barrier (Optional)

Remote Gassing Fixture (Optional)

Sensor Shield

Flow Block for Remote Sampling and Cal Plug (Optional)

Baffled Rainshield (Optional)

## Technical Specifications

### Sensors

Gas Sensors: ..... Electrochemical, Infrared, Catalytic Bead  
 Test-On-Demand Modules: ..... Type C and Type S

### Electrical

Voltage/Power:

2-Wire 24 VDC (18-30 VDC): ..... 20 mA  
 3-Wire 24 VDC (12-30 VDC): ..... 90 mA  
 With Opt. Relay Card and  
 combustible sensors: ..... 300 mA

Output and load resistance with 24 VDC at transmitter terminals:

3 wire 4-20 mA: ..... 600 Ω minimum  
 2-wire 4-20 mA: ..... 350 Ω minimum  
 Relay: ..... 3-Wire Only - One SPDT Configurable Relay  
 Optional Card: ..... Three (3) SPDT Configurable Relays  
 Contact Ratings: ..... 5 Amps at 115 VAC or  
 30 VDC Resistive

Communication Link ..... 4-20mA current, non-isolated  
 2 or 3-wire options, RS-485 (Modbus), HART

### Controls

Magnetic Keypad: ..... OK, << (Go Back), ▲, ▼  
 Security: ..... Password Protected Configuration Menu

### Displays

LEDs: ..... Four (4) Red, corresponding to magnetic keypad, and Alarm Relays when equipped.  
 Graphic LCD: ..... 128 by 64 pixel screen (backlight on 3-wire transmitters); displays Concentration and Measuring Units, Gas Name or Type, Sensor Span, Date and Time, Tag Number and System messages or Warnings

### Environmental

Temperature (Transmitter): ..... -40°F to 158°F / -40°C to 70°C  
 Humidity (Transmitter) ..... 0-90% RH, non-condensing  
 Temperature (Sensor): ..... See Sensor Data Sheets  
 Humidity (Sensor): ..... See Sensor Data Sheets  
 Moisture Resistance ..... IP54; IP56 with optional rainshield

### Enclosure Options

NEMA 4X: ..... Polycarbonate  
 Dimensions: ..... 7.5" W x 12.6" H x 6.2" D  
 190 mm W x 320 mm H x 157 mm D  
 Weight Range: ..... 5.5-7.2 lbs / 2.5-3.3 kg  
 Explosion-proof ..... Copper-free, Cast Aluminum  
 Physical: ..... 5.5" W x 12.3" H x 4.6" [6.4"] D  
 Weight Range: ..... 6.1-8.7 lbs / 2.8-4.0 kg  
 Note: Brackets indicate large dome depth.

### Approval Ratings

Explosion Proof ..... NEC and CEC Class I Div 1, Grps A, B, C, D;  
 Class II Grps E, F, G; Class III T4  
 Flame proof ..... ATEX EEx d[ia] IIC T4 II 2 [1] G  
 Non-Incendive ..... NEC and CEC Class I Div 2, Grps A, B, C, D;  
 Class II Grps E, F, G; Class III T4  
 ATEX EEx nC [ia] IIC T4 II 3 [1] G  
 Intrinsic Safety ..... NEC and CEC Class I Div 1, Grps A, B, C, D;  
 Class II Grps E, F, G; Class III T4  
 ATEX EEx ia IIC T4 II 1 G  
 CE Mark ..... ATEX Directive 94/9/EC  
 IMETRO ..... IEC 60079-0:2006, IEC 60079-11:1999,  
 IEC 60079-15:2007



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