SENSALERT® ASI

Advanced Safety Integrity:
The best solution for fixed gas detection with critical safety applications.

SENSALERT ASI
0 PPM
H2S 100
03/08/18 08:10:21

SENSALERT ASI
0 %LEL
IR CMB 100
02/10/18 07:42:30

SIL2 CERTIFIED

SENSALERT® ASI

Advanced Safety Integrity – The best solution for gas detection in critical safety applications.

SensAlert ASI provides enhanced protection and dependability for critical safety applications where personnel, processes, and facilities are at risk. The third-party certified SIL-2 SensAlert ASI offers dependability and versatility while remaining the easiest to install, commission, operate, and maintain.

Critical Protection with Global Approval

SensAlert ASI is third-party certified to IEC61508 Level 2 (SIL-2) for both hardware and software with certification to global hazardous area and performance standards. The Test-on-Demand feature with on-board gas generator provides remote functionality checks with generated gas while Predictive Sensor End-of-Life Indication provides advanced warning of impending sensor failure.

Unmatched Application Versatility

SensAlert ASI is a universal instrument platform for toxic & combustible gas detection and oxygen monitoring. Intrinsically safe or explosion proof installation configurations for remote sensors and gassing, duct mount, and sample-draw maximize application versatility. The sensor head accepts all Plus Series sensor technologies – infrared, catalytic bead, and electro-chemical. Assignable and configurable relays together with communication options provide broad flexibility. The SensAlert ASI I.S. sensor head can be remote mounted up to 100 feet (30m) from the transmitter providing a useful option to position the transmitter in a personnel-accessible location while positioning the sensor closer to potential hazards.

Easy to Install, Commission, Operate, and Maintain

SensAlert ASI is engineered to overcome the challenges users face with traditional gas detectors. The universal instrument platform for all gas and sensor types provides common installation for each point with vertical or horizontal installation options and removable plug-type terminal blocks to simplify wiring and commissioning. Transportable calibration enables sensor calibration and alarm set-up in a safe location, then installing sensors into the intrinsically safe sensor head without declassifying the area or removing power from the instrument. Plug-n-play capability automatically uploads operating parameters and diagnostics from the sensors upon sensor installation. A Sensor Calibration & Exchange Program schedules delivery of factory calibrated sensors to the user's plant or facility for a savings on maintenance and supply costs.

+ Detection at Every Point.

Non-intrusive User Interface

SensAlert ASI transmitters have a non-intrusive menu driven interface designed for effortless set-up and maintenance. The menu is free from complex icons and symbols and does not require use of remotes or connectors to interface with the transmitter. Below are actual menus and system displays.

```
     SENSALERT ASI


        0.0 PPM
   C12              10
   04/08/18      07:21:09
```
Main Display

```
         Main Menu
  >Calibration Mode
   Maintenance Mode
   Data Review
   Test-On-Demand
   System Configuration
   Lost Password
```
Main Menu
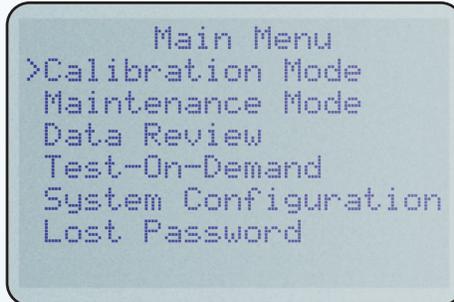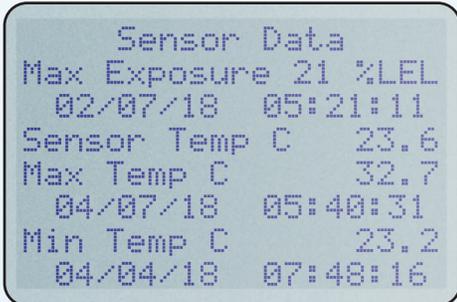
```
        Sensor Data
   Max Exposure 21 %LEL
     02/07/18   05:21:11
   Sensor Temp C    23.6
   Max Temp C       32.7
     04/07/18   05:40:31
   Min Temp C       23.2
     04/04/18   07:48:16
```
**Sensor Data Review**

```
   System Configuration
  >Self Test
   Alarm Settings
   4/20mA Adjustment
   Adjust Date/Time
   Communication Setup
   TOD Mode Adjustment
   --more--
```
System Configuration Menu

```
       Sensor Status

   Gas Name   CB CMB 100
   TWA Conc        0%LEL
   Sensor Life Remaining
          100%
     K Factor Is: 1.00
```
Predictive Sensor Life
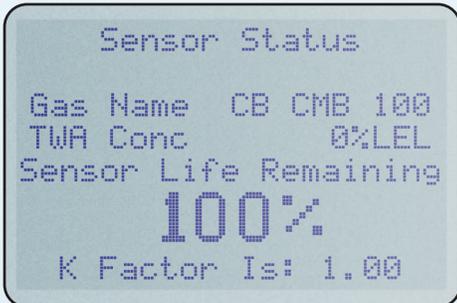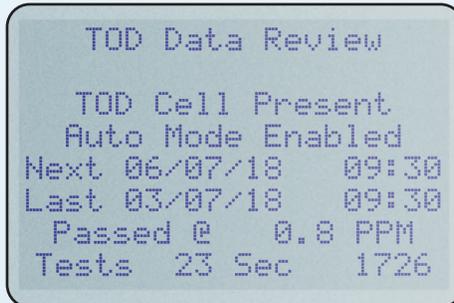
```
       TOD Data Review

      TOD Cell Present
      Auto Mode Enabled
   Next 06/07/18    09:30
   Last 03/07/18    09:30
      Passed @   0.8 PPM
   Tests  23 Sec    1726
```
Test-on-Demand Data Review
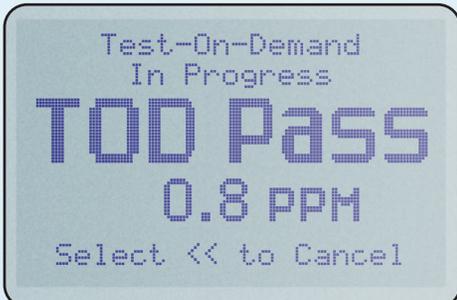
```
      Test-On-Demand
        In Progress
     TOD Pass
        0.8 PPM
    Select << to Cancel
```
Live Test-on-Demand Sensor Verification
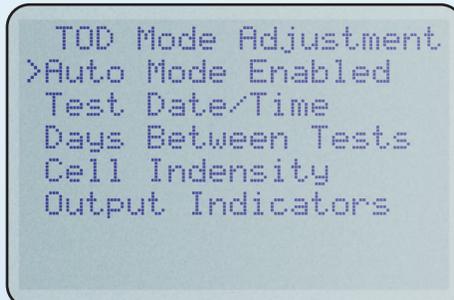
```
    TOD Mode Adjustment
   >Auto Mode Enabled
    Test Date/Time
    Days Between Tests
    Cell Indensity
    Output Indicators
```
Test-on-Demand Adjustment Menu

Duct Mount
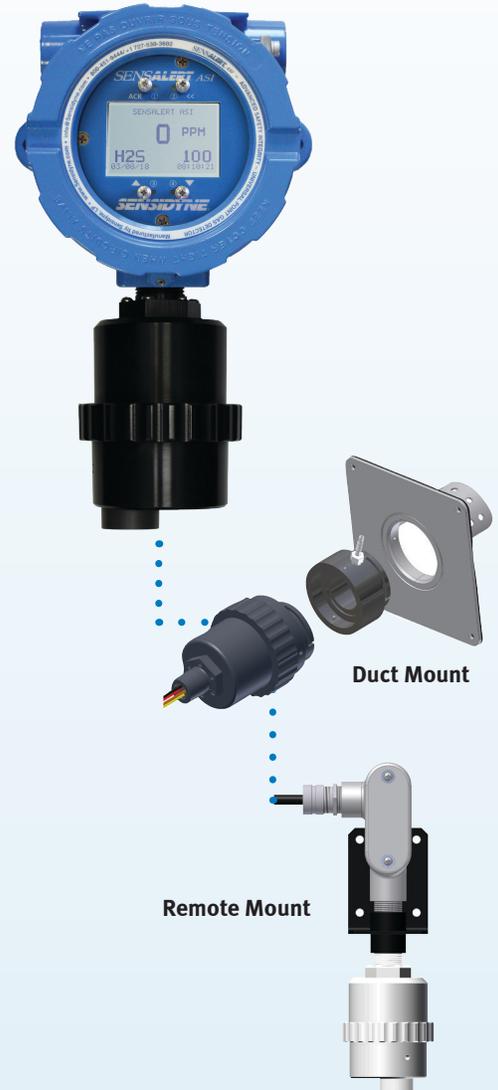
Remote Mount

SensAlert ASI provides true installation and application flexibility for local or remote mount sensors to place the sensor closer to potential gas sources.

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Advanced Safety Integrity – The best solution for gas detection in critical safety applications.

- Enclosure Options Certified for most Environments
- Large Backlit Alphanumeric Display (Backlit on 3-wire only)
- Intrinsically Safe Sensor Head
- Test-On-Demand™ (ToD) Gas Generator (Optional)
- *Plus* Intelligent Sensor
- O-ring Seal
- Sensor Retainer
- Sensor Shield
- Baffled Rainshield (Optional)
- Calibration Plug
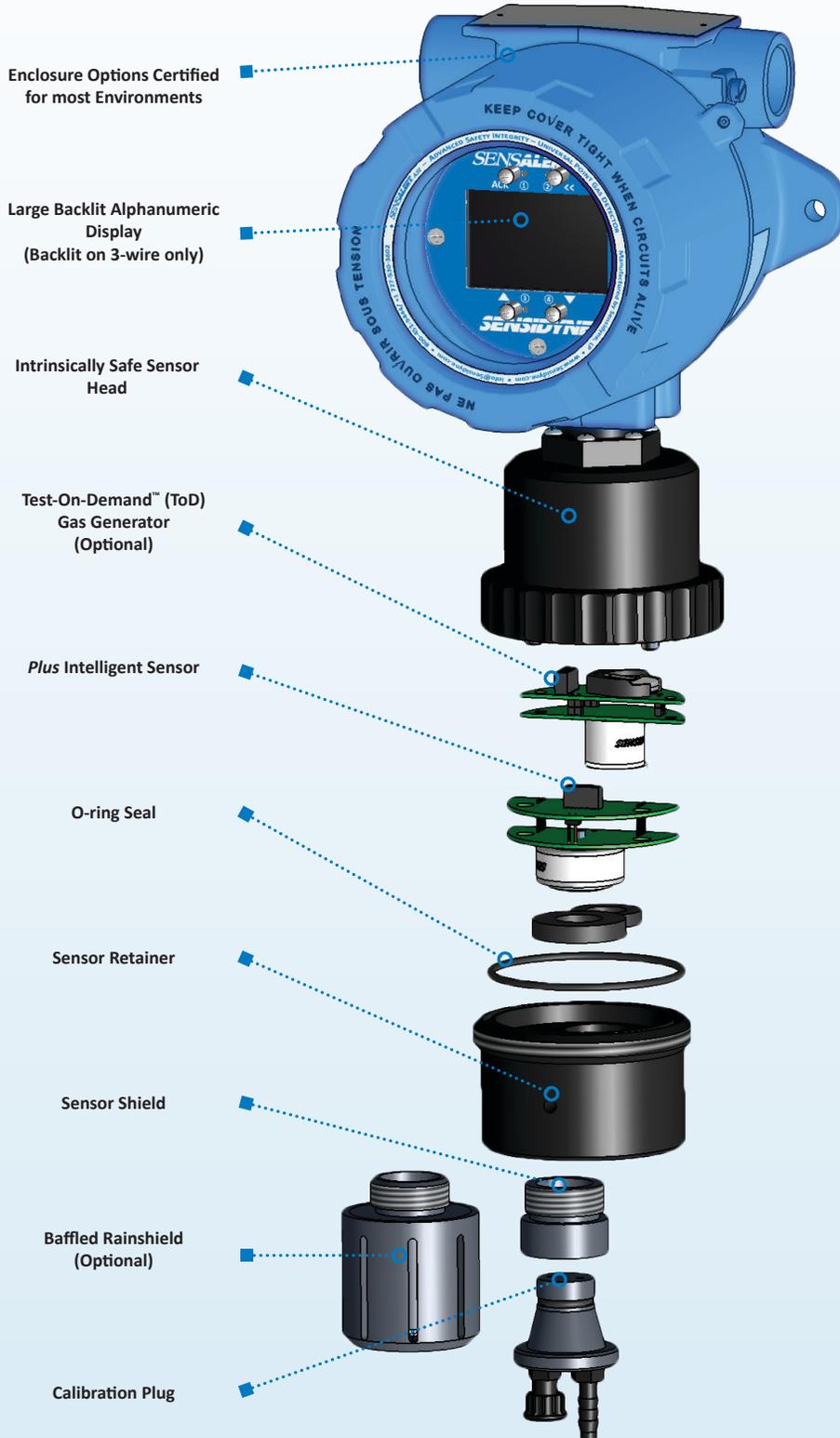
Technical Specifications

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 maximum
  2-wire 4-20 mA: .... 350 Ω maximum
  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 4-wire options, RS-485 (Modbus), HART

Controls
Magnetic Keypad:.................................... ACK, << (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
Standard:................................... Blue, Copper-free Cast Aluminum
  Dimensions: .... 6.7" W x 12.2" H x 6.5" D
                                                  170 mm W x 308 mm H x 165 mm D
  Weight Range:..6-8 lbs /2.7-3.6 kg
Stainless Steel:..Silver, 316 Stainless Steel
  Dimensions: .... 6.7" W x 12.2" H x 6.5" D
                                                  170 mm W x 308 mm H x 165 mm D
  Weight Range:...13-16 lbs /5.9-7.3 kg
Long-dome .... Gray, Copper-free Cast Aluminum
  Dimensions: .... 6.3" W x 11.7" H x 7.1" D
                                                  160 mm W x 297 mm H x 180 mm D
  Weight Range:...7-8.7 lbs / 3.2-4.0 kg

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,
  (Enclosed Break)   Groups 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
IECEx.............. Zone 0: Display Ex d [ia] IIC T4 / Sensor Ex ia IIC T4;
                          Zone 1: Ex d [ai] IIC T4; Zone 2: EXnC [ia] IIC T4
UL / IEC.............................. IEC 60079-0:2006, IEC 60079-11:1999,
                                                        IEC 60079-15:2007
SIL-2 Certified ....IEC 61508 SIL-2 Parts 1,2, & 3 Hardware
                                          & Software. Fit for use in SIL-2 applications.

CE — FM APPROVED — Ex