

# Sensor Data Sheet

# SENSALERT PLUS

## SENSIDYNE



**Hydrogen Sulfide  
(0 – 10.0 ppm)  
Part No. 823-0206-23  
FM Performance Certified <sup>1</sup>**

Minimum Indicated Concentration .....	0.3 ppm
Repeatability .....	± 2% of Reading
Accuracy <sup>2</sup> .....	± 10% of Reading
Span Drift .....	< 10% change per year (typical)
Response Time (Rise) <sup>3</sup> .....	T <sub>50</sub> : < 10 seconds
	T <sub>90</sub> : < 30 seconds, successive exposures
Recovery Time (Fall) <sup>3</sup> .....	T <sub>10</sub> : < 45 seconds
Temperature Range .....	-20° to 50°C (-4° to 122°F)
Humidity Range (continuous) .....	15–90 %RH, non-condensing
Humidity Range (intermittent).....	0–99 %RH, non-condensing
Pressure Range .....	Ambient atmospheric, ± 1 psi
Expected Sensor Life .....	2 years from Shipping Date
Recommended Calibration Flow Rate .....	500 to 1000 cc/min
Oxygen Requirement .....	1% by volume, minimum
SensAlert 4-Channel Controller.....	Not Compatible

<sup>1</sup> For use in an FM Approved SensAlert Plus Transmitter.  
<sup>2</sup> When unit is calibrated and serviced at recommended intervals.  
<sup>3</sup> Room Temperature.

**Cross-Interferences\***

Gas	Gas Exposure	Sensor Output
Ammonia	100 ppm	None
Carbon Monoxide	50 ppm	+1 ppm
Chlorine	10 ppm	-1 ppm
Ethylene	100 ppm	None
Hydrogen	700 ppm	+1 ppm
Hydrogen Chloride	5 ppm	None
Hydrogen Cyanide	10 ppm	None
Nitric Oxide	35 ppm	None
Nitrogen Dioxide	5 ppm	-1 ppm
Sulfur Dioxide	5 ppm	+1 ppm

\* Interference factors may differ from sensor to sensor, it is not advisable to calibrate with interferent gases.

## Special Calibration Considerations: **Hydrogen Sulfide Sensor (P/N 823-0206-23)**

### Zeroing The Sensor

The sensor should be zeroed in clean ambient air or bottled Zero Air. If bottled air is used, the sensor should undergo a 3 to 5 minute pre-zeroing exposure to pass through minor moisture transients observed in this sensor. Complete zeroing instructions are provided in the SensAlert Plus User Manual.

### Span Calibration

It is recommended that this sensor be calibrated at the half-scale concentration of 5 ppm H<sub>2</sub>S. Teflon tubing is recommended for gas delivery. It is recommended that the sensor undergo a 3 to 5 minute pre-calibration exposure in order to season the gas delivery system and provide for a full calibration concentration. There are no special calibration considerations for this sensor. Complete span calibration instructions are provided in the SensAlert Plus User Manual.

### Test-on-Demand Cell

This sensor uses a Type S TOD Cell, p/n 821-0204-06.

### Moisture Considerations

This sensor exhibits a minor moisture transient on sudden changes in moisture (typically less than the zero suppression). The sensor will undergo a negative transient when going from ambient (moist) air to completely dry air and a positive transient going from dry air to moist air. This sensor is compatible with the SensAlert<sup>Plus</sup> moisture barrier provided the sensor is calibrated with the barrier in place.