

Sensor Data Sheet

SENSALERT PLUS



Hydrogen Sulfide (0 – 10.0 ppm) Part No. 823-0206-23 FM Performance Certified ¹



- Minimum Indicated Concentration 0.3 ppm
- Repeatability ± 2% of Reading
- Accuracy² ± 10% of Reading
- Span Drift < 10% change per year (typical)
- Response Time (Rise)³ T₅₀: < 10 seconds
T₉₀: < 30 seconds, successive exposures
- Recovery Time (Fall)³ T₁₀: < 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 3 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

¹ For use in an FM Approved SensAlert Plus Transmitter.
² When unit is calibrated and serviced at recommended intervals.
³ 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 (PN° 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 or SensAlert ASI User Manual.

Span Calibration

It is recommended that this sensor be calibrated at the half-scale concentration of 5 ppm H₂S. 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 or SensAlert ASI 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^{Plus} moisture barrier provided the sensor is calibrated with the barrier in place.