

Sensor Data Sheet

SENSALERT PLUS

SENSIDYNE®



**Bromine
(Moisture Tolerant)
(0 – 1.00 ppm)
Part No. 823-0222-22**

Minimum Indicated Concentration 0.03 ppm
 Repeatability ± 5% of Reading
 Accuracy¹ ± 10% of Reading
 Span Drift < 10% change per 6 months (typical)
 Response Time (Rise)² T₉₀: < 80 sec, successive exposures
 Recovery Time (Fall)² T₉₀: < 90 sec
 Temperature Range -20° to 50°C (-4° to 122°F)
 Humidity Range (continuous)³ 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 When unit is calibrated and serviced at recommended intervals.
² Room Temperature, repeats exposures
³ High humidity can result in Bromine gas absorption and adsorption.

Cross-Interferences¹

Gas	Gas Exposure	Sensor Output
Carbon Monoxide	100 ppm	none
Chlorine	0.65 ppm	+1 ppm
Hydrogen	10,000 ppm	None
Hydrogen Chloride	100 ppm	+1 ppm
Hydrogen Cyanide	100 ppm	-1 ppm
Hydrogen Sulfide	20 ppm	None ²
Nitric Oxide	500 ppm	+1 ppm
Nitrogen Dioxide	5 ppm	+1 ppm

¹ Interference factors may differ from sensor to sensor, it is not advisable to calibrate with interferent gases.
² Prolonged exposure to H₂S can kill the sensor

Special Calibration Considerations:

Bromine Sensor (PN° 823-0222-22)

Zeroing The Sensor

If possible, the sensor should be zeroed in clean ambient air. If Zero Air is used, a 2 to 5 minute exposure is recommended to ensure the sensor is clear of gas. Complete zeroing instructions are provided in Section 3.1 of the SensAlert^{Plus} User Manual or SensAlert ASI User Manual.

Span Calibration

It is recommended that this sensor be calibrated with 1 ppm bromine gas. A 2 to 5 minute pre-exposure is recommended prior to calibration. This pre-exposure helps to "season-in" the calibration equipment so that gas reaches the sensor at full concentration. Complete span calibration instructions are provided in Section 3.2 of the SensAlert^{Plus} User Manual or SensAlert ASI User Manual. The sensor may be bump tested with 2, 5, or 10 ppm chlorine gas (standard disposable cylinder mixtures). Although chlorine at these levels will drive the sensor off scale, neither the sensor nor its calibration will be harmed by these overexposures. Regular routine bump testing is recommended for this sensor since such exposures will "clean" the sensor electrolyte and result in better long term performance.

Test-on-Demand Cell

Test-On-Demand cell available for this sensor: 821-0204-02 (Type C).