Sensor Data Sheet

SENSALERT® PLUS

SENSIDYNE®

FM APPROVED

Hydrogen Fluoride
(0 – 10.0 ppm)
Part No. 823-0207-21
FM Performance Certified [1]

Minimum Indicated Concentration	0.3 ppm
Repeatability	± 5% of Reading
Accuracy[2]	± 10% of Reading
Span Drift[5]	< 10% change per 6 months (typical)
Response Time (Rise)[3]	T_{50}: < 15 seconds
	T_{90}: < 45 seconds, successive exposures
Recovery Time (Fall)[3]	T_{10}: < 90 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[4]	3 years from Shipping Date
Recommended Calibration Flow Rate	500 to 1000 cc/min
Oxygen Requirement	1% by volume, minimum
SensAlert 4-Channel Controller	Compatible

[1] For use in an FM Approved SensAlert Plus Transmitter.

[2] When unit is calibrated and serviced at recommended intervals.

[3] Room Temperature, seasoned system.

[4] Continuous or frequent exposure to target or interferent gases will shorten the life of the sensor.

[5] Baseline Drifts are typically ≤5%year

Cross-Interferences*

Gas	Gas Exposure	Sensor Output
Acetic Acid	100 ppm	Yes/No Data
Carbon Dioxide	5000 ppm	None
Carbon Monoxide	100 ppm	None
Chlorine	0.5 ppm	+1
Hydrocarbons	% Range	None
Hydrogen Chloride	1.4 ppm	+1 ppm
Sulfur Dioxide	1.4 ppm	+1 ppm

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

Special Calibration Considerations:
Hydrogen Fluoride (PN° 823-0207-21)

Zeroing The Sensor

There are no special zeroing considerations for 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 HF if possible. If accuracy is not an issue, HCl gas may be used as a span gas with a 70% cross-interference factor. It is recommended that the sensor undergo a 3 to 5 minute pre-calibration exposure in order to season the calibration system. This pre-exposure ensures that the gas reaches the sensor at full concentration. The use of Teflon™ tubing is recommended with this gas to prevent gas absorption into the tubing walls. Complete span calibration instructions are provided in the SensAlert*Plus* User Manual or SensAlert ASI User Manual.

Test-on-Demand Cell

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