

# Sensor Data Sheet

# SENSALERT PLUS

## SENSIDYNE



**Hydrogen Fluoride**  
**(0 – 10.0 ppm)**  
**Part No. 823-0207-21**  
**FM Performance Certified <sup>1</sup>**

Minimum Indicated Concentration .....	0.3 ppm
Repeatability .....	± 5% of Reading
Accuracy <sup>2</sup> .....	± 10% of Reading
Span Drift .....	< 10% change per 6 months (typical)
Response Time (Rise) <sup>3</sup> .....	T <sub>50</sub> : < 15 seconds
	T <sub>90</sub> : < 45 seconds, successive exposures
Recovery Time (Fall) <sup>3</sup> .....	T <sub>10</sub> : < 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 <sup>4</sup> .....	18 months from Shipping Date
Recommended Calibration Flow Rate .....	500 to 1000 cc/min
Oxygen Requirement .....	1% by volume, minimum
SensAlert 4-Channel Controller.....	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, seasoned system.

<sup>4</sup> Continuous or frequent exposure to target or interferent gases will shorten the life of the sensor.

### 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.

### 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.

### Test-on-Demand Cell

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