

Sensor Data Sheet

SENSALERT PLUS

SENSIDYNE®



Nitric Oxide (0 - 100 ppm) Part No. 823-0242-21

Minimum Indicated Concentration	3 ppm
Repeatability	± 2% of Reading
Accuracy ¹	± 5% of Reading
Span Drift	< 12% change per year (typical)
Response Time (Rise) ²	T ₅₀ : < 5 seconds
	T ₉₀ : < 15 seconds, successive exposures
Recovery Time (Fall) ²	T ₁₀ : < 60 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	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 When unit is calibrated and serviced at recommended intervals.

² Room Temperature.

³ Continuous or frequent exposure to target or interferent gases will shorten the life of the sensor.

Cross-Interferences*

Gas	Gas Exposure	Sensor Output
Carbon Monoxide	300 ppm	None
Chlorine	1 ppm	None
Hydrogen	100 ppm	None
Hydrogen Chloride	5 ppm	<1 ppm
Hydrogen Sulfide	3 ppm	1 ppm
Nitrogen Dioxide	3.3 ppm	<1 ppm

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

Special Calibration Considerations:

Nitric Oxide (PN° 823-0242-21)

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 50 ppm. 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

The Type S ToD cell, p/n 820-0204-06, may be used with this sensor.

Biased Sensor Note

This sensor has a +300 mV bias applied between its reference and sensing electrodes. For this reason, this sensor is shipped on a (non-intrinsically safe) battery bias board. If the sensor is unplugged from the bias board or the transmitter (or the transmitter loses power) this bias is lost and the sensor will produce an elevated baseline. The time needed for the baseline to fall to zero depends on how long the sensor was without a bias voltage. A loss of bias voltage for 1 minute could result in up to 15 minutes or more of elevated baseline while a 24 hour loss of bias could take over 72 hours for the baseline to recover to zero.

Bias Battery Board Note

The battery on the bias board contains approximately 0.5 g of lithium metal. A risk of fire or explosion exists if this battery is improperly handled. Do not puncture or force open. Do not heat or dispose of in fire. Do not attempt to recharge this battery.