SENSAIR Sensor Data Sheet

Nitric Oxide, NO, 100ppm

(823-1027-11-R)

Minimum Indicated Concentration ..... 3 ppm
Repeatability ..... 5%, Successive exposure
Accuracy ..... 10% of Indication
Span Drift ..... < 2% change/month (typical)
PolyScreen[1] Response Time (Rise) ..... T_{90} < 7 sec, T_{50} < 4 sec
PolyScreen[1] Recovery Time (Fall) ..... T_{10} < 70 sec
SMD[1] Response Time (Rise) ..... T90 < 115 sec, T50 < 30 sec
SMD[1] Recovery Time (Fall) ..... T10 < 120 sec
Operating Temperature Range ..... -20 to 50°C (-4 to 122°F)
Storage Temperature Range ..... 3 to 20°C (37 to 68°F)
Operating Humidity Range* ..... 0 - 95% RH, non-condensing
Operating Pressure Range ..... Ambient Atmospheric ±1.5psi
Sensor Life (Expected) ..... Standard: 3 years, normal service
Calibration Frequency ..... Monthly (recommended)
Calibration Concentration ..... 30 - 80 % of full scale
Calibration Flowrate ..... 0.5 LPM (recommended)
Oxygen Requirement ..... 1% by volume, minimum

Bias Voltage ..... +300mV
Warm-Up/Stabilization Time ..... 1 to 6 hours, depending on bias condition

[1] Polymer Screen on sensor holder, large mesh, SMD = Sintered Metal Disk flame arrester on sensor holder.

Cross-Interferences*

Gas	Gas Exposure	Sensor Output
Carbon Monoxide	300 ppm	None
Chlorine	1 ppm	None
Hydrogen Cyanide	10 ppm	None
Hydrogen Sulfide	~3 ppm	+1 ppm
Nitric Oxide	1 ppm	+1 ppm
Nitrogen Dioxide	3.3 ppm	+1 ppm
Sulfur Dioxide	20 ppm	+1 ppm

* Interference factors may differ from sensor to sensor, it is not advisable to calibrate with interferent gases. None of the interferents listed will poison or inhibit the sensor.

Special Calibration Considerations:

- **Zeroing The Sensor**
  There are no special zeroing considerations for this sensor.
- **Span Calibration**
  It is recommended that this sensor be calibrated at the half-scale concentration of 50 ppm NO. A two to three minute pre-calibration exposure is recommended to ensure the gas is stable for calibration. Teflon or HDPE tubing (30”/76cm max. length) must be used to deliver the gas.