# NO 250 Satellix

## Electrochemical Gas Sensor for Nitric Oxide



3-electrode sensor with EPROM for industrial safety applications High stability | Fast response

Performance Characteristics / PSDS		
Measurement Range	0 – 250 ppm	
Maximum Range	1000 ppm	
Sensitivity	400 ± 100 nA/ppm	
Response Time (T <sub>90</sub> )	≤ 40 s at 2 min gas exposure	
Baseline (in clean air)	< ± 1200 nA	
Baseline (in clean air) (at midpoint sensitivity)	< ± 3 ppm	
Lower Detectable Limit (LDL)	5 ppm	
Alarm 1	25 ppm	
Repeatability	< 2%	
Product Safety Datasheet (PSDS)	acid electrolyte	

Operating Conditions	
Temperature Range	-20°C to +40°C
Humidity Range	15% to 90% r.h. non-condensing
Pressure Range	800 - 1200 hPa
Bias Voltage	+300 mV
Sensor warm-up time	30 min
Recommended Orientation	sensor front pointing downwards or sidewards

Compatible to OEM PN	Dimensions
Compatible with Satellite XT transmit- ters according to the "Satellix Compatibility Declaration"	Sensor Label (45x10mm)
No short circuit plug (!)	Female Socket IEC 60130-9 7 POL (KV 71)
IMPORTANT NOTE:	GND NC DATA
Connection should be made via PCB sockets only. Soldering to pins will render your warranty void.	Sensor Label (45x10mm)
All dimensions in mm (± 0.2 mm)	Ø21.4 (incl. label
Weight: ~7.0 g	label

Lifetime	
Long Term Output Drift	< 2% per month
Expected Operating Life	> 24 months in air
Recommended Storage conditions	5 – 20°C in sealed container

Performance and lifetime data are based on conditions at 20°C, 40 ... 60 % r.h. and ambient pressure.

### SAFETY NOTE

This sensor is designed to be used in safety critical applications. The sensor is compatible with the self-test functionality of the Satellite XT Gas Detector Transmitter. In addition to this electrical diagnostic, Sensorix recommends that the function of the sensor is confirmed by exposure to a suitable test gas (bump check) regularly according to national and local regulations. Failure to carry out such tests may jeopardize the safety of people and property.



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Cross Sensitivity		
Gas concentration	Reading after 5 min	
Carbon Monoxide 100 ppm	0 ppm	
Hydrogen 3000 ppm	0 ppm	
Hydrogen Sulfide 20 ppm	0 ppm	
Nitrogen Dioxide 10 ppm	0 ppm	
Sulphur Dioxide 2 ppm	0 ppm	

Signals below LDL as well as negative readings will be displayed as zero.

### **IMPORTANT NOTE:**

Interference factors may differ from sensor to sensor, with changing ambient conditions and with lifetime. It is not advisable to calibrate with interference gases. This table does not claim to be complete. The sensor may also be sensitive to other gases.

## Temperature performance

Temperature dependence is compensated with microprocessor.

#### **Poisoning**

Sensorix cells are designed for operation in a wide range of environments and harsh conditions. However, it is important that exposure to high concentrations of solvent vapors is avoided, both during storage, fitting into instruments, and operation. When using sensors with printed circuit boards (PCBs), degreasing agents should be used before the sensor is fitted.

## Recycling

At the end of the product's life, do not dispose of any electronic sensor, component, or instrument in the domestic waste, but contact the vendor or Sensorix for disposal instructions. Sensorix will take back sensors for professional recycling.

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Characteristics on this data sheet outline the performance of newly supplied sensors.

