# 1,2-trans-DCE 1000 Satellix Senso



Electrochemical Gas Sensor for trans-1,2-Dichloroethylene Only with Pyrolyzer unit

3-electrode sensor with EPROM for industrial safety applications
Class leading stability | Highly selective | Fast response | Very stable baseline

Performance Characteristics / PSDS		
Periorinance Characteristics / PSDS		
Measurement Range	0 – 1000 ppm	
Maximum Range	1000 ppm	
Sensitivity	40 ± 20 nA/ppm	
Response Time (T <sub>90</sub> )	≤ 120 s at 3 min gas exposure	
Baseline (in clean air)	< ± 100 nA	
Baseline (in clean air) (at midpoint sensitivity)	< ± 2.5 ppm	
Lower Detectable Limit (LDL)	10 ppm	
Alarm 1	200 ppm	
Linearity	< 5% of full scale	
Repeatability	< 3%	
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	190 mV
Sensor warm-up time (of sensors with short circuit plug)	10 min
Recommended Orientation	sensor front pointing downwards or sidewards

Sensorix PN: AN123S11 Compatible to OEM PN: 9602-9600		
	Dimensions	
Compatible with Satellite XT transmit- ters according to the "Satellix Compatibility Declaration"	Sensor Label (15x10mm)	
Insert short circuit plug (jumper) in S and R (Remove before installation)	Female Socket IEC 60130-9 7 POL (KV 71) TEMP SND NC DATA	
IMPORTANT NOTE: 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)  Weight: ~7.0 g	Ø18.1 incl. label	

Lifetime	
Long Term Output Drift	< 3% per months
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  $20^{\circ}$ C,  $40 \dots 60 \%$  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 & Filter	
Gas concentration	Reading after 5 min
Ammonia 100 ppm	0 ppm
Carbon Dioxide 5000 ppm	0 ppm
Carbon Monoxide 100 ppm	0 ppm
Chlorine 5 ppm	0 ppm
Hydrocarbons (saturated) 1%	0 ppm
Hydrocarbons (unsaturated) 1%	0 ppm
Hydrogen Bromide 5 ppm	15 ppm
Nitrogen Dioxide 8 ppm	12 ppm
Sulphur Dioxide 20 ppm	25 ppm
Chemical Filter	None

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.

