LEL Satellix

Catalytic Gas Sensor for Methane & Flammable Gases

sensorix
sensors made in germany

Pellistor with EPROM for industrial safety applications including semiconductor

Class leading stability | Fast response | Stable baseline

Performance Characteristics	
Measurement Range	0 – 100 % LEL
Maximum Range	100 % LEL
Sensitivity	2000 ± 500 µV/%LEL
Response Time (T_{90})	≤ 20 s at 1 min gas exposure
Baseline (in clean air)	< 5 % LEL
Lower Detectable Limit (LDL)	5 % LEL
Alarm 1	20 % LEL
Linearity	< 3% of full scale
Repeatability	< 5%

Operating Conditions	
Temperature Range	-20°C to +40°C
Humidity Range	0% to 90% r.h. non-condensing
Pressure Range	800 – 1200 hPa
Operating Voltage	4,25 V
Sensor warm-up time	5 s

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

Sensorix PN: AN281S11
Compatible to OEM PN: 9602-9900

Compatible with Satellite XT transmitters according to the "Satellix Compatibility Declaration"

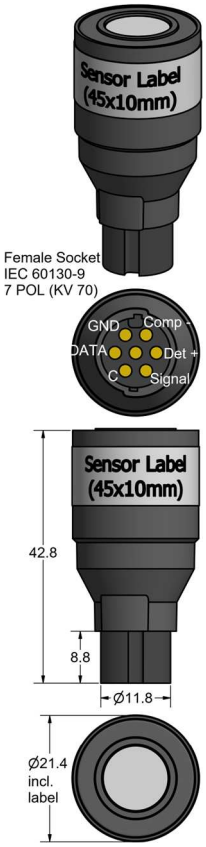
No short circuit plug (!)

IMPORTANT NOTE:
Connection should be made via PCB sockets only. Soldering to pins will render your warranty void.

All dimensions in mm (± 0.2 mm)

Weight: ~30 g

Dimensions



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. 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 = 50 LEL	K-Factor	Reading in %LEL*
Acetic acid	3.00	17
Ammonia	0.70	71
Acetone	1.67	30
Carbon Monoxide	1.26	40
Hydrogen	0.81	62
Isopropanol	2.30	22

*Reading in % LEL for a test gas concentration of 50% LEL for a sensor calibrated with Methane

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

IMPORTANT NOTE:

Relative responses of the CH4 sensor are calculated from standard heats of formation and diffusion coefficients. This table does not claim to be complete. The sensor is also sensitive to other combustible gases. More extensive lists can be obtained via sales@sensorix.com. Please note the poisoning will affect relative responses (see note below).

Temperature performance

Temperature dependence is compensated with microprocessor.

Poisoning

The CH4 Satellix is based upon a poison resistant pellistor technology. Still larger concentrations of silicones or H_2S may poison the sensor. Please note partially poisoned sensors will have changed relative responses, as the CH4 response will be more affected than the response to other gases.

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.