

Nano Environmental Lechnology

# **Premium Line NT-H2S-PL100 Electrochemical Hydrogen Sulfide Sensor**

## **Description**

The NT-H2S-PL100 is a new Premium Line electrochemical gas sensor with 3 electrodes for the detection of Hydrogen Sulfide in a variety of gas detection applications. Exhibiting high performance with excellent selectivity, this compact sensor (20.4 mm diameter) is suitable both for portable and fixed gas detection instruments.

The porous electrode technology enables accurate gas detection with high sensitivity. The mechanical design of the sensor gives optimum gas diffusion characteristics, and the hermetically sealed enclosure prevents costly electrolyte leakage.

#### **Technical Specifications**

reennear opeenneariono		
Detectable Gas:	Hydrogen Sulfide	
Detection Range:	0 – 100 ppm	
Maximum Overload:	500 ppm	
Output Signal:	700± 150 nA/ppm	
Resolution:	0.1 ppm	
Repeatability:	± 2 %	
Typical Baseline Range: (pure air)	-0.1 ppm to +0.4 ppm	
Typical Response Time $(t_{90})$ :	< 30 sec	
Baseline Shift: (- 20 ~ 40 degree C)	< 0.5 ppm	
Long Term Output Drift:	< 2%/month	
Expected Life Time:	>2 years	
Weight:	Approximately 4.5 g	

#### **Operating conditions**

Operating Temperature:	-40°C to + 50°C
Operating Humidity:	15 to 90 % RH
Operating Pressure Range:	1atm± 10 %
Recommended Load Resistor:	10 Ohm
Bias Voltage:	Not required
Position Sensitivity:	None
Recommended Storage Temp.:	0-20°C
Storage Life:	Less than 6 months

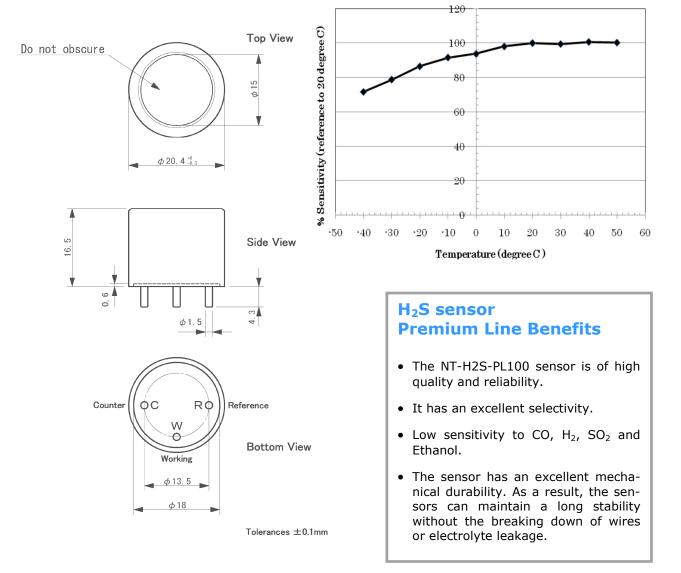
Performance data conditions: 20°C, 50%RH and 1013mBar

N.E.T. S.r.l. - 20010 Cornaredo (MI) ITALY Via Legnano, 2 - Tel.+39.02.93544190 - Fax +39 .02. 93540347 C.F. e P. IVA (VAT) 03231490966 - CAPITAL . 36.000 EU - Website: www.nenvitech.com - E-mail: info@nenvitech.com

## **Typical cross sensitivities**

Gas	Test Gas Concentration (ppm)	Typical Hydrogen Sulfide Concentration Equivalent (ppm)
Hydrogen Sulfide	10	10
Carbon Monoxide	300	<2
Carbon Dioxide	5000	0
Hydrogen	1000	<3
Sulphur Dioxide	5	0.5
Nitric Oxide	30	0.3
Nitrogen Dioxide	5	-1
Ammonia	100	0
Ethanol	1000	<2

## **Dimensions**



**Temperature Dependency** 

*N.E.T.* has a policy of continuous development and improvement of its products. As such the specification for the device outlined in the data sheet may be changed without notice.

**N.E.T.** S.r.I. – 20010 Cornaredo (MI) ITALY Via Legnano, 2 – Tel.+39.02.93544190 – Fax +39 .02. 93540347 C.F. e P. IVA (VAT) 03231490966 – CAPITAL . 36.000 EU – Website: <u>www.nenvitech.com</u> – E-mail: <u>info@nenvitech.com</u>