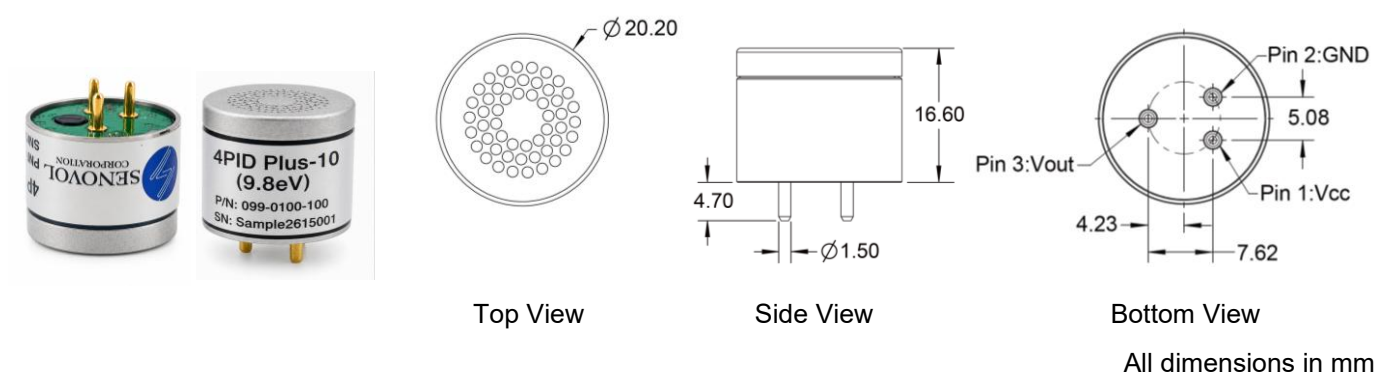


The 4PID Plus 9.8 eV is an upgraded version of the 4PID 9.8 eV, featuring a highly sensitive and stable 9.8 eV output capable of true 1 ppb benzene resolution. The design provides tool-free UV-lamp and electrode-stack cleaning, improved output linearity, a widened 3.0–5.5 VDC supply range, refined 4-series-compatible dimensions, and overall enhanced performance enabled by Senovol's long-life UV-lamp and electrode-stack technology.

Product Dimensions



Performance

Photon energy	9.8 eV
Measurement range	0 ~ 2,000 ppm benzene
Resolution	1 ~ 500 ppb benzene
Response time (T90)	< 5 seconds
Zero signal (20°C)	60 ± 30 mV
Linearity	linear from 0.05 ~ 2.85 V

Electrical

Supply voltage	3.0 ~ 5.5 V
Working current	< 40 mA at 5 V
Output signal	0.05 ~ 2.85 V

Mechanical

Enclosure Body	Stainless steel
Enclosure Cover	Aluminum alloy
Weight	14 grams

Environmental

Temperature range	-20°C ~ +55°C
Pressure range	1 atm ± 10%
Humidity range	0 % ~ 99 %RH Non-condensing

Life Time

Storage Temp	0 °C ~ 30 °C
Operating lifetime	5 years (excluding lamp and electrodes)
Typical lamp life	10,000 hours
Storage life	2 years in original packaging
Warranty	12 months

Approvals

CE
Note: IECEx and ATEX approvals on different 4-Series PID models.

Installation

The output signals from the sensor pins are different. Improper use of these pins in product design may affect sensor functionality. Exposure to high concentrations of solvent vapors should be avoided under all conditions. Mechanical overstress may deform the sensor enclosure and damage internal components, including the lamp. If the sensor is used in extreme environmental conditions, please contact us for more details.

Pin Out Details Pin 1 – Vcc Pin 2 – GND Pin 3 – Vout

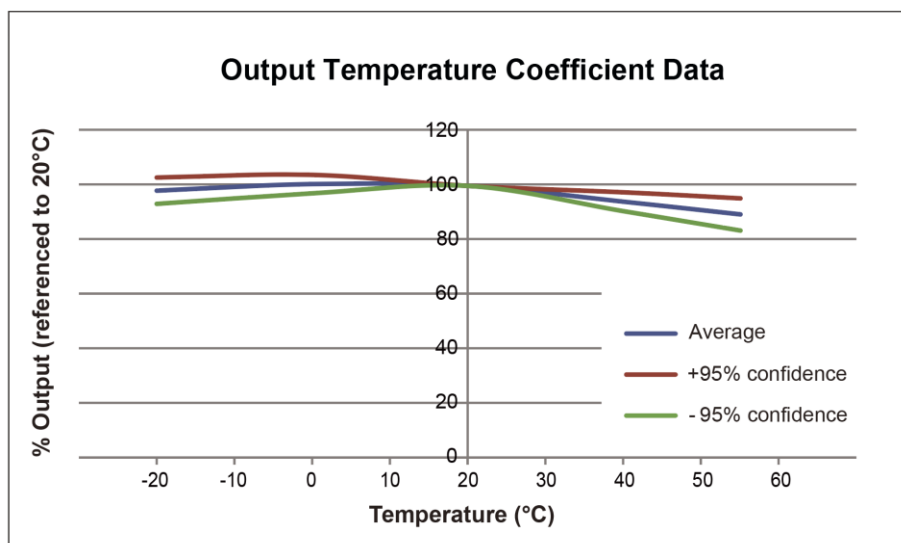
Product Selection

Product Name	Part Number	Measurement Range	Photon Energy	Resolution	Sensitivity	Response Time
4PID Plus-10 (9.8eV)	PID-098T-0100	0 - 10 ppm	9.8eV	1 ppb	> 80 mV/ppm	< 5 s
4PID Plus-50 (9.8eV)	PID-098T-0500	0 - 50 ppm		10 ppb	> 20 mV/ppm	
4PID Plus-100 (9.8eV)	PID-098T-1000	0 - 100 ppm		25 ppb	> 10 mV/ppm	
4PID Plus-200 (9.8eV)	PID-098T-2000	0 - 200 ppm		50 ppb	> 5 mV/ppm	
4PID Plus-2000 (9.8eV)	PID-098T-2001	0 - 2,000 ppm		500 ppb	> 0.5 mV/ppm	

Note

The performance data in this document was obtained by applying benzene to the PID sensor using Senovol's lab testers. The PID sensor may perform differently when gases other than benzene are used.

Sensitivity Temperature Data



Note

This sensor is used in gas detection instruments. The instrument's user guide must be read carefully, and all calibration procedures must be followed using certified target calibration gas before each use to ensure accuracy. Customers are strongly advised to validate sensor performance for their specific product designs or applications, using this document as a reference.