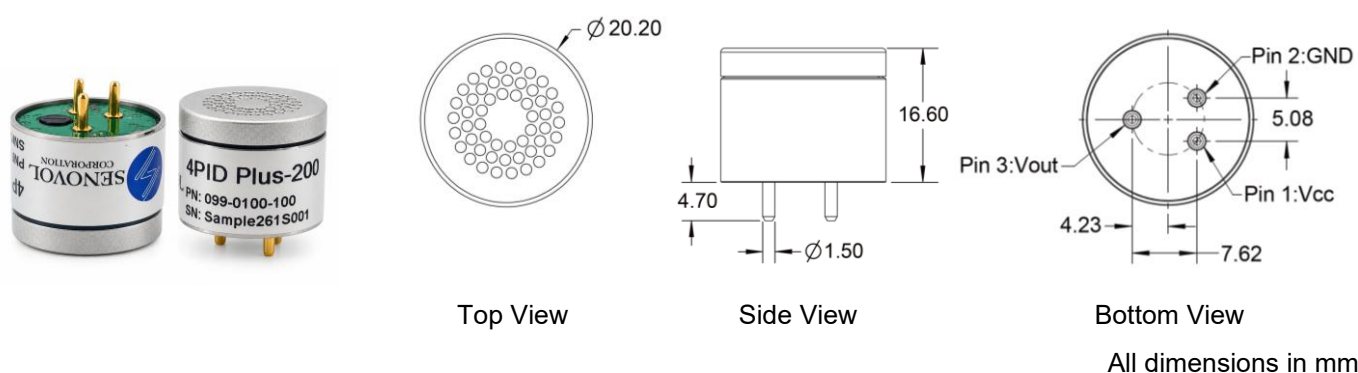


The 4PID Plus is an upgraded 4-series PID sensor for detecting volatile organic compounds (VOCs). This new design provides tool-free UV lamp and electrode-stack cleaning, improved output linearity, a widened supply-voltage range of 3.0–5.5 VDC, refined dimensions for full 4-series compatibility, and overall enhanced performance enabled by Senovol's proprietary, highly sensitive, long-life UV lamp and electrode-stack technology.

Product Dimensions



Performance

Photon energy	10.6 eV
Measurement range	0 ~ 10,000 ppm isobutylene
Resolution	0.5 ~ 2,000 ppb isobutylene
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

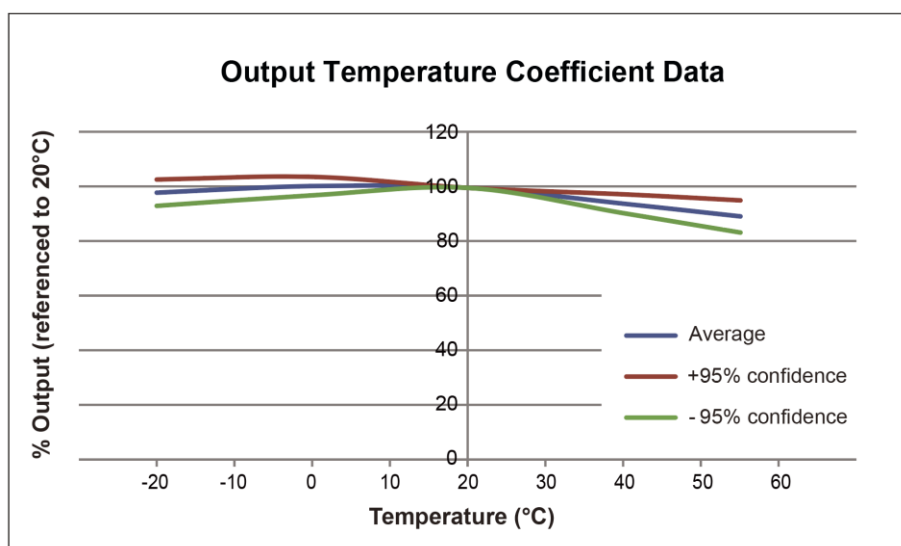
Product Selection

Product Name	Part Number	Measurement Range	Photon Energy	Resolution	Sensitivity	Response Time
4PID Plus-5	PID-106T-0050	0 ~5 ppm	10.6 eV	0.5 ppb	> 200 mV/ppm	< 5 s
4PID Plus-10	PID-106T-0100	0 ~10 ppm		1 ppb	> 100 mV/ppm	
4PID Plus-50	PID-106T-0500	0 ~ 50 ppm		10 ppb	> 20 mV/ppm	
4PID Plus-100	PID-106T-1000	0 ~100 ppm		25 ppb	> 10 mV/ppm	
4PID Plus-200	PID-106T-2000	0 ~ 200 ppm		50 ppb	> 5 mV/ppm	
4PID Plus-1000	PID-106T-1001	0 ~ 1000 ppm		250 ppb	> 1 mV/ppm	
4PID Plus-2000	PID-106T-2001	0 ~ 2,000 ppm		500 ppb	> 0.5 mV/ppm	
4PID Plus-5000	PID-106T-5001	0 ~ 5,000 ppm		1,000 ppb	> 0.2 mV/ppm	
4PID Plus-10000	PID-106T-1002	0 ~ 10,000 ppm		2,000 ppb	> 0.1 mV/ppm	

Note

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