MiniPID 2 HS

OEM Gas Sensor with State-of-the-Art Sensing Technology



MiniPID 2 HS is designed to detect VOCs at sub ppb concentrations. Detection at these levels can be compromised by contamination from moisture, dust and aerosols. To overcome this, we have developed a world leading, patent pending, filter to protect the ionisation chamber.

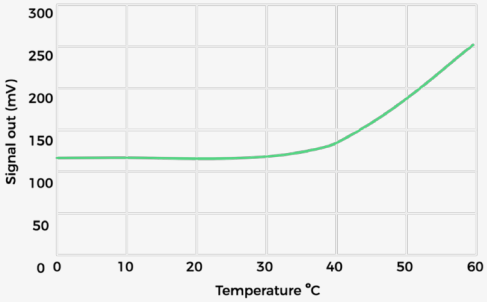
Key Features

- 0.5 ppb sensitivity
- 10,000 hours continuous lamp life
- Anti-contamination design
- Humidity resistant
- Patent pending filter
- Serviceable electrode stack and lamp
- Intrinsically safe

Typical Applications

- Air quality monitoring
- Semiconductor fabrication
- HVAC
- Cleanroom
- Fertility labs
- Glove boxes

Performance	
Electrode stack colour	Red
Minimum detection limit	0.5 ppb
Range	>3 ppm
T90 response time	<12 seconds
Sensitivity	>600 mV/ppm



Power & Signal	
Supply voltage (using internal regulator)	3.6—18 V (non-intrinsically safe 10—18 V)
Supply voltage (using a regulated power supply)	3—3.6 V
Current	20—32 mA (130 for 100 ms at start up)
Power consumption	100 mW at 3.3 V
Output signal (using a regulated power supply)	0 — rail voltage — 0.1 V

Environmental	
Temperature range	0—40 °C
Relative humidity range	0—99% RH (non-condensing)

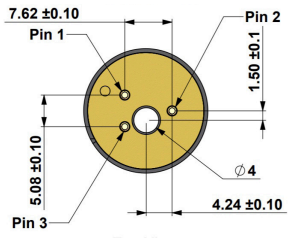
Lifetime & Warranty	
Sensor life	>5 years
Lamp life	10,000 hours
Warranty	10.6 eV lamp and MiniPID 2 body = 12 months

Order Code	Intrinsically Safe	Supply Voltage
MP3SHLHSAU2	✓	3—3.2 V
MP3SHLHSBU2	✓	3.2—3.6 V
MP3SHLHSCU2	✓	3.6—10 V
MP3SHLHSNU2	✗	3.6—18 V

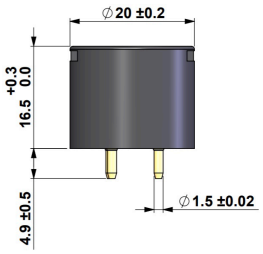
Approvals	
Patents	US 7.046.012 EC 1474681
Europe	ATEX II 1G Ex ia IIC Ga (-40 °C ≤ Ta ≤ +55 °C) @ 1.1 W
Worldwide	IECEx II 1G Ex ia IIC Ga (-40 °C ≤ Ta ≤ +55 °C) @ 1.1 W
North America	UL913 (8th) Edition Class I, II, III, Division 1 CSA-C22.2 No157-92
Eurasian Customs Union	№ EAЭC RU C-GB.HA65.B.00635/20

Drawings

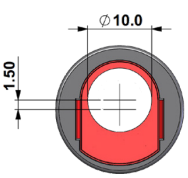
BOTTOM VIEW



SIDE VIEW



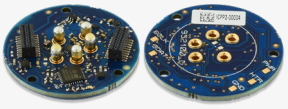
TOP VIEW



ION CONNECT Kit

ION CONNECT supports both UART and I2C communication protocols, allowing flexible integration into a wide range of applications. Associated ION PC software allows you to easily calibrate, set alarm thresholds, set response factors and more.

Optimised for both diffused and impressed flow sampling methods. ION CONNECT Kit is compatible with a dedicated ION GAS HOOD accessory, designed to deliver precise impressed flow to MiniPID 2 and ION SENSE® PID sensors.



ION TRANSMIT Kit

ION TRANSMIT Kit enables long-range communication via RS-485 using Modbus RTU and 4—20 mA allowing connectivity to a wide range of applications. Designed to pair seamlessly with ION CONNECT, this 32 mm PCB transmits all available sensor data over robust, industry-standard protocols.

With its compact form factor and versatile output options, ION TRANSMIT brings enhanced flexibility to your gas sensing setup, making it easy to integrate ION SENSE® sensors even into the most demanding monitoring systems.

