

Portable PID

The Portable PID is a new generation of portable Photoionization Detectors to detect volatile organic compounds (VOCs) with an ionisation potential < 10.6 eV. (**New:** optional with 11,8eV lamp) It presents the known measuring properties from the PPM in an entirely revised, modern concept. The state-of-the-art PID technology in combination with the experience of two decades of instruments construction provides the professional user with an instrument for highest sensitivity and robustness. Designed for field use, the Portable PID can be used for person-related as well as stationary measuring tasks in which hazardous substance concentrations (gases, vapours) in air (working environment, inner rooms, soil air, and environment) must be monitored.

Extended measuring range

A new sensor unit allows an extended measuring range of up to 2 000 ppm (isobutene) with high resolution even at low concentrations.

Easy user interface

The high-contrast, graphical 3.5-inch colour TFT display with intuitive user guidance, clear text instructions and step-by-step configuration supports the ease of use even in bad lighting.

High performance PID lamp

The ionization source is a high stable hollow cathode lamp with an energy of 10.6 eV. With its ceramic discharge channel, the stability is improved and a longer service life of up to 15 000 hours and more will be achieved.

Temperature / humidity compensation

The integrated humidity / temperature sensor measures in addition to the sensor signal the physical environment data and compensates their influence on the measuring result.

Response factors

Response factors for more than 250 gases are stored in the device. Additionally, the user can expand them by up to 20 customer-specific response factors.

Easy calibration

The Portable PID is calibrated with 100 ppm Isobuten at delivery. Calibration can be adjusted or repeated when



Acoustic and visual warning functions

The Portable PID has an acoustic alarm and two ultra-bright LEDs that warn when adjustable concentration values are exceeded.

Large data memory

The data memory permits storage of more than 60 000 data records. Additionally, a separate storage is available for manually saved measuring data. A free PC software enables evaluation and logging of the saved data.

Diverse charging options

The Portable PID is equipped with a standard USB connection and can be charged with any common USB wall adapter or car charger.

Technical Data

Detector principle	VUV-Photoionization with 10.6 eV hollow cathode lamp with Ceramic Discharge Channel technology (optional with 11,8eV lamp)
Detection ranges	0 ... 2 000 ppm Isobutene *
Display range	0 ... 20 000 ppm, depending on response factor of detected substance
Lower detection limit	Typical 10 ppb *
Display resolution	Dynamic up to 0.01 ppm
Response time	T90 < 10 s *
Signal integrity	Up to 100 ppm typical > 98 % * Up to 2 000 ppm typical > 95 % *
Influence of humidity	Humidity and temperature compensation at 0 ... 50 °C and 0 ... 90 % rH residual effect less than < 10 % FS
Operating conditions	0 ... 50 °C 0 ... 95 % rH, non-condensing
Storage conditions	-20 ... 45 °C 0 ... 95 % rH, non-condensing
Gas sampling	Integrated diaphragm pump (about 300 ml/min), with function monitor Sample inlet with dust and water protection filter
PID lamp life time	10,6eV: Min. 8 000 hours, typical more than 15 000 h 11,8eV: 4 months from date of delivery
Signalisation	Visual: Ultra-bright LEDs (red), Acoustic: Alarm, at least 90 dB (A) in 30 cm
Alarm	Locked alarm, Self-triggering alarm, adjustable alarm levels
Display	Full graphic color display, 3.5 inch TFT with 320 x 240 pixel
Program functions	Continuous measurement with automatic and manual data storage, threshold monitoring, two-point calibration, self-test, fresh air compensation, graphical illustration of the measured data
Memory	60 000 measurement data with time, temperature and humidity
Power supply	Integrated lithium ion battery, Charging via USB connection at the PC or wall adapter
Runtime / Charging time	Up to 10 hours / < 5 hours with USB charger (100 ... 250 V AC / 1 A)
Response factors	More than 250 selectable response factors can be set for 10,6eV lamp Input of user-specific response factors possible for 10,6eV and 11,8eV lamp
Dimension, weight	176.5 mm x 102 mm 39.5 / 49 mm (L x W x H), weight: 550 g
Ingress Protection	IP54
Warranty	2 years, except for components in gas path and wearing parts
Approvals	EMC directive 2014/30/EU
Scope of delivery	Portable PID, USB-charger, USB-cable, USB stick with Windows Software, Carrying case, User Manual

* The indicated values were obtained under standardized conditions with 10,6eV lamp. Test gas was isobutene in synthetic air.

Contact

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