

# User Manual

PCE-VOC 1 Gas Detector



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski, русский, 中文) can be found by using our product search on: [www.pce-instruments.com](http://www.pce-instruments.com)

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## 1 Safety notes

Please read this manual carefully and completely before you use the device for the first time. The device may only be used by qualified personnel and repaired by PCE Instruments personnel. Damage or injuries caused by non-observance of the manual are excluded from our liability and not covered by our warranty.

- The device must only be used as described in this instruction manual. If used otherwise, this can cause dangerous situations for the user and damage to the meter.
- The instrument may only be used if the environmental conditions (temperature, relative humidity, ...) are within the ranges stated in the technical specifications. Do not expose the device to extreme temperatures, direct sunlight, extreme humidity or moisture.
- Do not expose the device to shocks or strong vibrations.
- The case should only be opened by qualified PCE Instruments personnel.
- Never use the instrument when your hands are wet.
- You must not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth. Use only pH-neutral cleaner, no abrasives or solvents.
- The device must only be used with accessories from PCE Instruments or equivalent.
- Before each use, inspect the case for visible damage. If any damage is visible, do not use the device.
- Do not use the instrument in explosive atmospheres.
- The measurement range as stated in the specifications must not be exceeded under any circumstances.
- Non-observance of the safety notes can cause damage to the device and injuries to the user.

We do not assume liability for printing errors or any other mistakes in this manual.

We expressly point to our general guarantee terms which can be found in our general terms of business.

If you have any questions please contact PCE Instruments. The contact details can be found at the end of this manual.



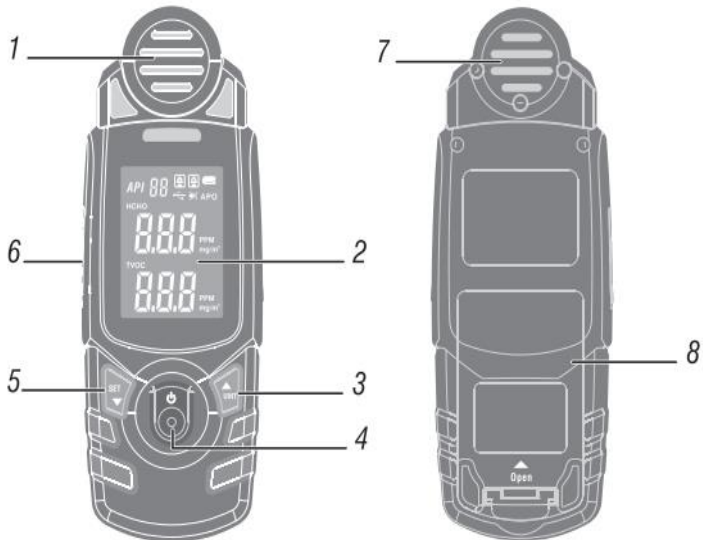
## 2 Introduction

The PCE-VOC 1 is a meter for indicative measurement of HCHO and TVOC. Its professional sensor technology recognizes gases within seconds and shows their concentrations. The meter is very user-friendly and can be used at home, in the office, at the production plant, in hotels, schools, etc.

## 3 Features

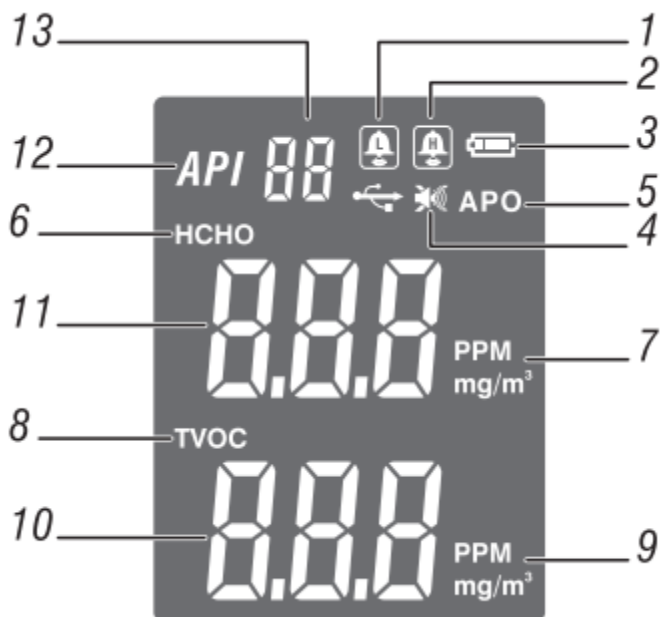
- Measures total volatile organic compound (TVOC) and formaldehyde (HCHO) levels
- Displays units in parts per million (ppm) or milligrams per cubic meter ( $\text{mg}/\text{m}^3$ )
- Long-lasting rechargeable lithium-polymer (LiPo) battery
- Audible and visual alarms
- Large, easy-to-read LCD screen
- User-friendly three-button operation
- Compact and lightweight yet heavy-duty design

## 4 Front Panel Description



1. HCHO detector mouth
2. LCD
3. Up / unit key
4. ON/OFF key
5. Down / set key
6. DC 9 V input
7. TVOC detector
8. Battery compartment cover

## 5 Display



1. Lower alarm level (low)
2. Upper alarm level (high)
3. Battery indication
4. Alarm on / off
5. Auto Power Off indication
6. HCHO
7. HCHO unit
8. TVOC
9. TVOC unit
10. TVOC reading
11. HCHO reading
12. Air pollution index (API)
13. API reading



## 6 Specifications

<b>HCHO</b>	0.00... 5.00 ppm or mg/m <sup>3</sup>
Resolution	0.01 ppm or mg/m <sup>3</sup>
Accuracy	± 5% of measured value
<b>Measuring range</b>	
<b>TVOC</b>	0.00... 9.99 ppm or mg/m <sup>3</sup>
Resolution	0.01 ppm or mg/m <sup>3</sup>
Accuracy	± 5% of measured value
Response time	< 2 seconds
Operating temperature	32... 104 °F / 0... 40 °C
Storage temperature	14... 140 °F / -10... 60 °C
Power supply	7.4 V / 1200 mAh LiPo battery
Power adapter/charger	9 V / 1 A
Charging time	Approx. 2 hours
Weight	Approx. 1.3 lbs / 584 g
Dimensions	6.5 x 2.4 x 1.0 in / 165 x 60 x 25 mm

## 7 On / Off

Press the ON/OFF key to switch on the meter.

The battery icon shows the battery level. Depending on the battery level, charge the battery or connect the meter to the power supply.

To switch off the meter, press and hold the ON/OFF key for 3 seconds.

## 8 Auto power off

The meter enters sleep mode after 30 minutes of inactivity to save energy.

## 9 Operation

When the meter is switched on, it shows the HCHO value. In the lower part of the display, you can see the TVOC reading. The meter required a warm-up phase of up to 90 seconds to show stable readings.

## 10 Alarm

Press and hold the Down / set key for 3 seconds. You can now set the lower alarm limit using the arrow keys and confirm with the ON/OFF key. The upper alarm limit can then be set in the same way.

## 11 Set / Unit keys

With the Up / unit key, you can switch between the measuring units. With the Down / set key, you can activate or deactivate the alarm function.

## 12 Warranty

You can read our warranty terms in our General Business Terms which you can find here: <https://www.pce-instruments.com/english/terms>.

## 13 Disposal

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose.

In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law.

For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations.

If you have any questions, please contact PCE Instruments.





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