



# User Manual

PCE-CMM 5 CO<sub>2</sub> analyser



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.
- Do not cover the back of the meter as this may cause malfunction.

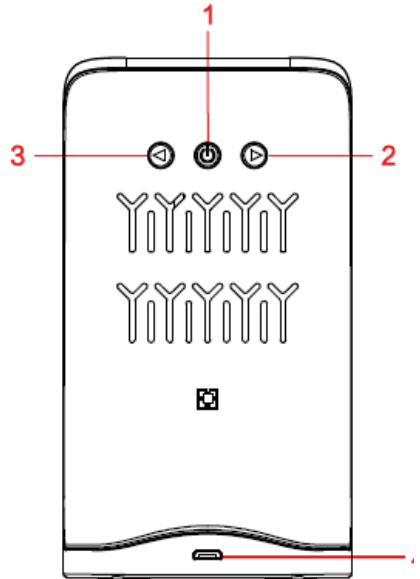
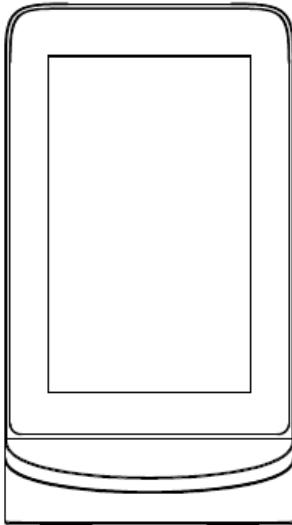
We do not assume liability for printing errors or any other mistakes in this manual.

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 Device description

### 2.1 Front and back



1. On/off key
2. Right key
3. Left key
4. Micro USB charging socket

## 2.2 Display



Figure 1 Standard view

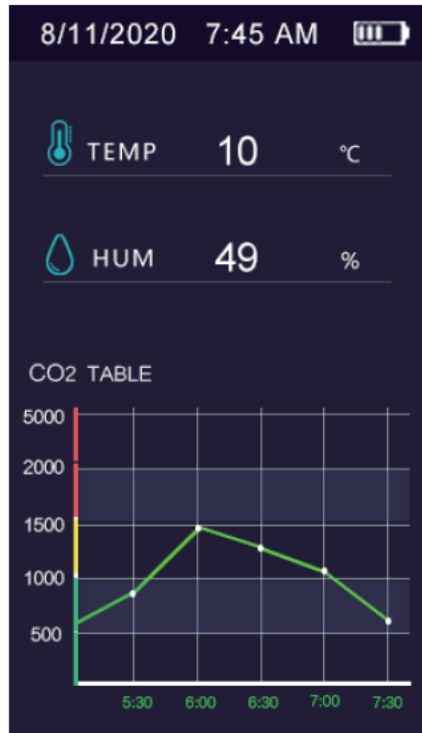


Figure 2 Graph view

### 3 Technical specifications

<b>Measurement range CO<sub>2</sub></b>	400 ... 5000 ppm CO <sub>2</sub>
<b>Accuracy</b>	±75 ppm or ±5 % of rdg. (the higher value applies)
<b>Resolution</b>	1 ppm
<b>CO<sub>2</sub> sensor</b>	NDIR
<b>Measurement range humidity</b>	20 ... 95 % RH
<b>Accuracy</b>	±4 % RH
<b>Resolution</b>	1 % RH
<b>Display</b>	4.3" LC display
<b>Sampling rate</b>	1.5 s
<b>Environmental conditions</b>	-10 ... 50 °C / 20 ... 85 % RH
<b>Power supply</b>	3.7 V Li-Ion battery 3000 mAh 5 V micro USB
<b>Battery life</b>	6 h
<b>Charging time</b>	2 h
<b>Dimensions</b>	145 x 78 x 97.2 mm
<b>Weight</b>	210 g

### 4 Delivery scope

- 1 x CO<sub>2</sub> analyser PCE-CMM 5
- 1 x USB charging cable 5 V / 2 A
- 1 x user manual

### 5 Operating instructions

#### 5.1 Switch on the device

When the CO<sub>2</sub> monitor is off, press and hold the on/off key for 3 seconds to turn on the meter.

#### 5.2 Switch off the device

When the power is on, press the on/off key for 3 seconds to switch off the meter.

#### 5.3 Toggle view

When the unit is switched on, all measured values are displayed as numerical values. Furthermore, the CO<sub>2</sub> meter shows the air quality status in a green-yellow-red status lamp. Use the arrow keys (left / right) to switch to the graph. The graph shows the course of the CO<sub>2</sub> content of the last 5 h after switching on.

#### 5.4 CO<sub>2</sub> traffic light function

The CO<sub>2</sub> monitor has a status lamp display (CO<sub>2</sub> traffic light). The limit values for colour changes are as follows:

Air quality	CO <sub>2</sub> content	Colour
Good	400 ... 800 ppm	Green
OK	800 ... 1200 ppm	Yellow
Poor	1200 ... 5000 ppm	Red

## 5.5 Settings

Press the on/off key twice in quick succession to open the settings menu .

### 5.5.1 Setting the date (DATE)

Use the left and right keys to change the highlighted value for day, month, year. Confirm the setting with the on/off key.

### 5.5.2 Setting the time (TIME)

Use the left and right keys to change the highlighted numeric value for hour and minute. Confirm the setting with the on/off key.

### 5.5.3 Select unit (UNIT)

You can switch between °C and °F using the left and right keys. Confirm the setting with the on/off key.

### 5.5.4 Set temperature offset (TEMP)

To set an offset for the measured temperature value, use the left and right keys to change the numerical value. Confirm the setting with the on/off key.

## 5.6 Automatic calibration

The PCE-CMM 5 has the integrated self-correcting ABC algorithm (Automatic Baseline Correction) for automatic adjustment of the baseline value. This calibration is performed once a day.

For this, the PCE-CMM 5 requires a regular supply of fresh air. The measured value is adjusted automatically.

The ABC function is permanently switched on (cannot be switched off) and adjusts the baseline value at regular intervals when the CO<sub>2</sub> level is low. Do not use this meter in a closed environment where the CO<sub>2</sub> concentration remains relatively high. This would adversely affect the self-correction of the meter.

## 5.7 Charge the meter

When the battery icon on the display indicates that the battery is discharged, the PCE-CMM 5 must be charged via the micro USB port. To do this, use the supplied USB charging cable or a USB power supply with 5 V / 1000 mA. Please note that it may take at least 2 hours to recharge the battery to 100 %.

**Note:** Charging via a 500 mA port on the computer is not possible.



## 6 Contact

If you have any questions, suggestions or technical problems, please do not hesitate to contact us. You will find the relevant contact information at the end of this user manual.

## 7 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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