



# User Manual

PCE-COG 10 Environmental Meter



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.

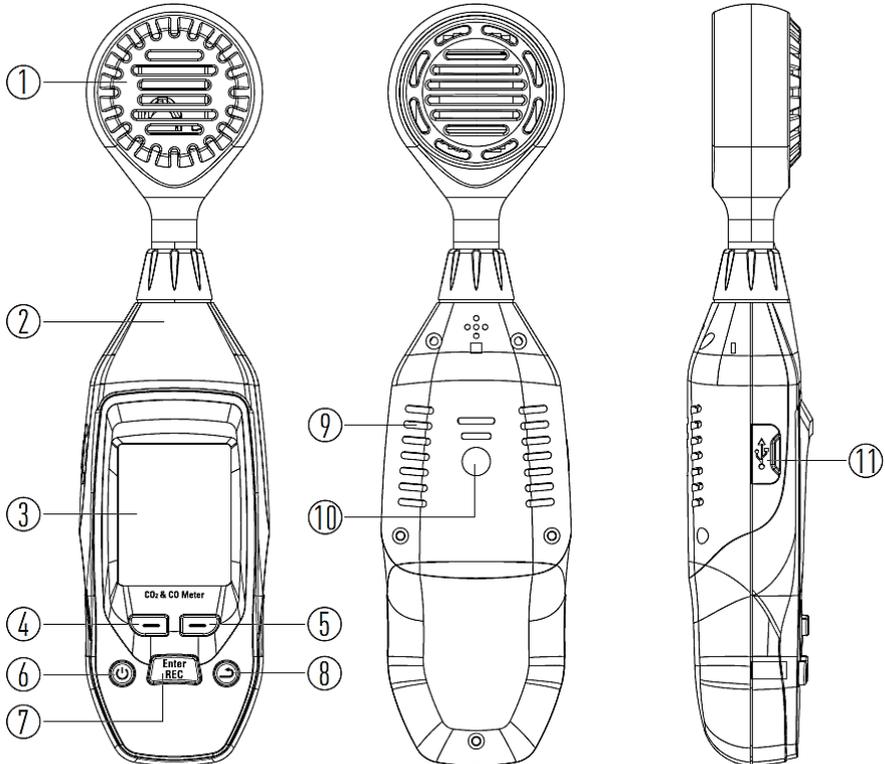
## 2 Specifications

<b>Carbon monoxide (CO)</b>	
Measurement range	0 ... 1000 ppm
Resolution	1 ppm
Accuracy*	±5 % of range
The CO measurement is based on an ambient condition of 0 ... 40 °C / 32 ... 104 °F, 15 ... 95 % RH, non-condensing.	
<b>Carbon dioxide (CO<sup>2</sup>)</b>	
Measurement range	0 ... 9999 ppm
Resolution	1 ppm
Accuracy*	±3 % of rdg. ±75 ppm
The CO <sup>2</sup> measurement is based on an ambient condition of 0 ... 50 °C / 32 ... 122 °F, 0 ... 85 % RH, non-condensing.	
<b>Temperature</b>	
Measurement range	0 ... 50 °C 32 ... 122 °F
Resolution	0.1 °C / °F
Accuracy*	±2 °C / ±4 °F
<b>Humidity</b>	
Measurement range	0 ... 100 % RH
Resolution	0.1 % RH
Accuracy	±5 % at 0 ... 20 % RH ±3.5 % at 20 ... 80 % RH ±5 % at 80 ... 100 % RH
The humidity values are based on a wind speed of 1 m/s. Accuracy is maintained after 30 minutes of acclimatisation.	
<b>Further specifications</b>	
Display	2" LC display
Measurement rate	1 Hz
Memory	for 5000 measuring points
Memory rate	1 minute, 15 minutes, 1 hour
Units	temperature: °C, °F CO / CO <sup>2</sup> : ppm
Alarm when limit value is exceeded	visual and audible
Data export	CSV
Connection	1/4 " tripod connection
Interface	micro USB for charging the battery and for data transfer
Power supply (rechargeable battery)	3.7 V, 1500 mAh
Power supply (mains adaptor)	primary: 100 ... 240 VAC, 50 / 60 Hz, 0.25 A secondary: 5 VDC, 1 A
Operating conditions	0 ... 45 °C / 32 ... 113 °F <95 % RH, non-condensing
Storage conditions	-10 ... 55 °C / 14 ... 131 °F <95 % RH, non-condensing
Dimensions	54 x 215 x 34 mm / 2.13 x 8.46 x 1.34"
Weight	154 g / 0.34 lbs

### 3 Delivery scope

- 1 x PCE-COG 10 environmental meter
- 1 x micro USB cable
- 1 x 5 VDC mains adaptor
- 1 x user manual

### 4 Device description



No.	Description
1	CO and CO <sup>2</sup> sensor
2	Temperature and humidity sensor (at the back)
3	Display
4	Left selection key (for pressing the left virtual key)
5	Right selection key (for pressing the right virtual key)
6	On and off key
7	Enter and REC key
8	Back key
9	Air slits
10	1/4 " tripod connection
11	Micro USB port

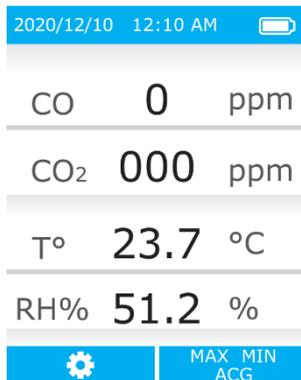
## 5 Switching the meter on and off

To switch on the meter, press and hold the on/off key for about two seconds. After switching on, the measurement starts immediately.

In addition to the measured values (CO, CO<sub>2</sub>, temperature and humidity), the date, time and current battery level are displayed.

To switch off the meter, press and hold the same key again for approx. 2 seconds.

**Note:** After switching on, the meter needs approx. 30 seconds to start measuring CO.



### 5.1 Lowest, highest and average measured value

To view the minimum, maximum and average readings of

the individual probes, press the virtual key .

To select between the individual sensors, press the virtual

key  repeatedly until the desired function is reached. To pause the current statistics for a short time,

press the virtual key . Press this key again to resume the measurement. If another sensor is selected, the measurement is also resumed. Press the back key to return to normal measurement mode.

**Note:** This function is only available if it has been opened. If the function is closed, all statistics are reset.



## 5.2 Settings

To access the settings, press the virtual key .

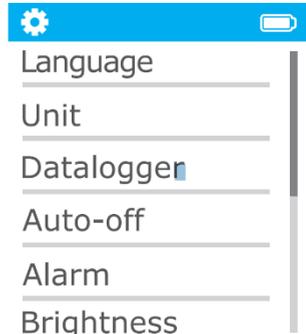
With the virtual keys  , you can select between the individual functions and change parameters. Press the enter key to open the setting option and accept the changes. Press the back key to go back one level and the settings are not adopted.

### 5.2.1 Set language

To set the language, go to the "Language" menu. Here, you can choose either English or Chinese.

### 5.2.2 Change temperature units

To set the temperature unit, go to the settings and select "Unit". You can set °C or °F as the temperature unit.



### 5.2.3 Set data logger

To set the data logger, go to the settings and select "Data logger".

**Note:** The data logger is always active.



#### 5.2.3.1 Setting the memory rate

To set the memory rate, select the item "Sampling rate". Here, the memory rate can be set to 1 minute, 15 minutes or 1 hour.

#### 5.2.3.2 Setting the recording duration

To set the recording time, select "Duration" in the data logger settings. You can select None, 1 hour, 24 hours or 7 days. If "None" is selected, recording will continue until the meter switches off automatically or the battery is discharged.

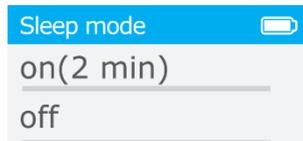
After the time has elapsed, the meter switches off.

**Note:** Make sure that the meter is connected to the mains adaptor during recording so that it does not switch off during the measurement.



#### 5.2.3.3 Display sleep mode

To switch off the display automatically, select "Sleep mode" in the data logger settings. If this function is active, the display switches off within 2 minutes.



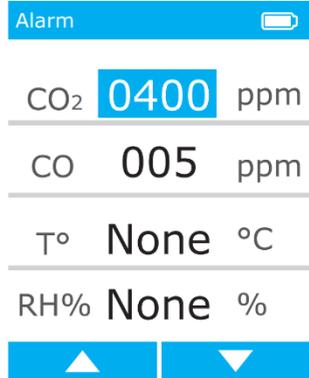
#### 5.2.4 Automatic power off

To set the automatic power off function, go to "Auto-off" in the settings. Here, you can choose between "None", 2 and 10 minutes or one hour. If "None" is selected, the automatic power off is permanently deactivated.



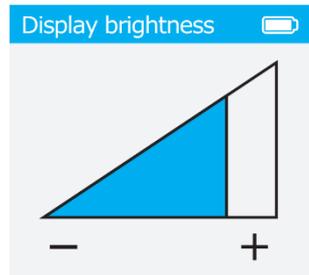
### 5.2.5 Set alarm limits

To set the alarm limit values, go to the settings and select the item "Alarm". Here, an alarm limit value can be set for each measurement function. To change the parameter, use the virtual keys. To move to the next measurement function, press the enter key repeatedly until you reach the desired measurement function. If an alarm limit value is exceeded, there will be an audible and visual alarm.



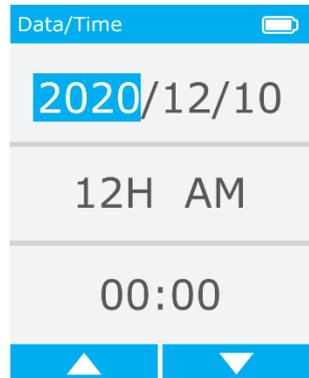
### 5.2.6 Set brightness

To adjust the display brightness, go to "Brightness" in the settings where you can set the brightness of your display according to your needs.



### 5.2.7 Set date and time

To set the date and time, go to the "Data / Time" item in the settings. Here, the date and time can be set with the virtual keys. With the enter key, you can jump to the next item.



### 5.3 View measured values

To view the measured values, press and hold the REC key in measuring mode. Now all saved files are displayed. The file name is named and sorted according to the storage date. Select the desired file with the virtual keys and open it with the enter key.

Now select the desired measuring function from the file. The measured values are then displayed directly.

With the virtual keys, each individual measured value can then be selected and read. In addition, the lowest, the highest and the average measured value are displayed.

**Note:** The saved measured values can only be deleted via the PC.



## 6 Export of the measurement data

To export the measurement data to a PC, first switch off the meter and then connect it to a PC. The PC recognises the meter as a mass data storage device. From the PC, the measurement data is saved as a CSV file. Measurement data can be deleted here.

	A
1	Data, CO2, CO1, Temperature, Humidity
2	MAX, 2380, 0000, +24.1, 57.2
3	MIN, 1125, 0000, +20.6, 42.7
4	AVG, 1725, 0000, +21.5, 46.8
5	15:12, 1163, 0000, +21.0, 49.6
6	15:13, 1132, 0000, +21.2, 47.5
7	15:14, 1125, 0000, +21.3, 47.0
8	15:15, 1180, 0000, +21.3, 46.9
9	15:17, 1143, 0000, +21.3, 46.7
10	15:18, 1133, 0000, +21.4, 47.6
11	15:19, 1132, 0000, +21.5, 46.4
12	15:20, 1134, 0000, +21.6, 46.1
13	15:21, 1136, 0000, +21.7, 46.0
14	15:22, 1142, 0000, +21.7, 45.9
15	15:23, 1179, 0000, +21.8, 46.1
16	15:24, 1188, 0000, +21.8, 45.6
17	15:25, 1339, 0000, +21.9, 46.1

## 7 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.

## 8 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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