



User Manual

PCE-RCM 10 Particle Counter



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

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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 Description

PCE-RCM 10 is a sort of exquisite concise and efficient detector launched by PCE Instruments recently, which is integrated with PM2.5, PM10, temperature and humidity detection function. This device has adopted laser scattering weight test method, professional structure design, good fan and advanced particulate matter algorithm, which can detect the PM2.5&PM10 accurately and sensitively. The device is equipped with an accurate sensor that can detect the temperature and humidity in the current environment. The operation is very simple. There is a high-capacity rechargeable lithium battery inside, it is very convenient to carry, so that you can check air quality from time to time. In order to save electricity, the device powers off automatically when no button is pressed for 15 minutes.

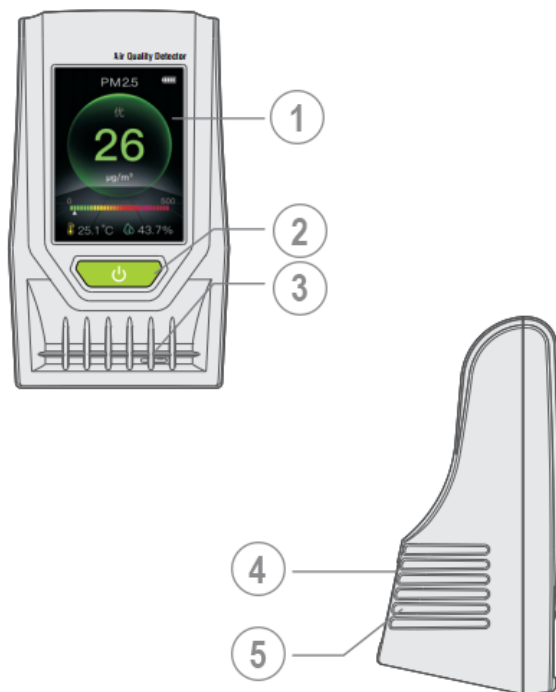
3 Characteristics

- 2.4 inch TFT colour LCD display
- 240*320 pixels
- Detecting the particulate matter PM2.5/PM10
- Air temperature and humidity
- Auto Power Off
- Easy to carry

4 Specifications

Particulate matter detection	
Size channels	PM2.5/PM10
Mass concentration range	0 ... 2000ug/m ³
Resolution	1ug/m ³
Temperature and humidity detection	
Temperature range	-20 ... 70 °C
Temperature accuracy	±1 °C
Temperature resolution	0.1 °C
Humidity range	0 ... 100 % RH
Humidity accuracy	±3.5 % RH (20 ... 80 % RH) ±5 % RH (0 ... 20 % RH / 80 ... 100 % RH)
Humidity resolution	0.1 % RH
Power	
Battery	1000 mAh rechargeable lithium battery
Discharge time	continuous use: 5 hours
Charging	USB 5 V charging
Charging time	2 hours power off charging
Other	
Display	2.4 inch TFT colour display 240 x 320 resolution
Working temperature	0 ... 50 °C
Storage temperature	-10 ... 60 °C

5 Function description



- 1 Colour LCD
- 2 Power button
- 3 Sensor air inlet
- 4 Sensor outlet
- 5 USB connector

6 Power ON/OFF

Switch on:

When meter is off, press and hold power button for a few seconds until you hear a beep tone.

Switch off:

When meter is on, press and hold power button for a few seconds until you hear a beep tone.



7 Detection Mode

When the device is started, the display shows the current value of PM 2.5 in the middle. The evaluation of the measured value is shown by the colour in which it is shown. Green means good, yellow means neither good neither bad, red means bad. The quality of PM 2.5 is also displayed in a colour scale. In the lower area of the display on the left-hand side, the current temperature is displayed. The current air humidity is shown on the right-hand side. In the upper part of the display, you can see the battery status.



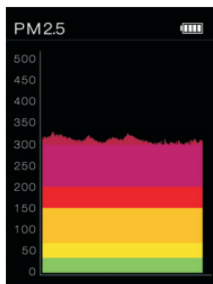
Pic 1

By pushing and releasing the power button, you can enter the next interface where you can see the temperature, air humidity, PM 2.5 and PM 10.



Pic 2

By pushing the power button again, you can enter the area for the graphical representation. The graphics show the values measured during the last 3 minutes.



8 Attachment

Pic 2

Air quality level	The alarm thresholds indicated here are based on an average value of the particle concentration PM2.5 over a time period of 24 h and are inspired by the global regulations of the WHO (World Trade Organization) for air quality. These are not binding and only meant for orientation.		Corresponding colors
	PM 2.5 (ug/m ²)	PM 10 (ug/m ²)	
Best	0~35ug/m ³	0~70ug/m ³	Green
Good	35~75ug/m ³	70~150ug/m ³	Yellow
Slight pollution	75~115ug/m ³	150~250ug/m ³	Orange
Medium pollution	115~150ug/m ³	250~300ug/m ³	Red
Heavy pollution	150~250ug/m ³	300~500ug/m ³	Purple
Serious pollution	Above 250ug/m ³	Above 500ug/m ³	Dark Purple



9 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.

10 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.



PCE Instruments contact information

Germany

PCE Deutschland GmbH
Im Langel 4
D-59872 Meschede
Deutschland
Tel.: +49 (0) 2903 976 99 0
Fax: +49 (0) 2903 976 99 29
info@pce-instruments.com
www.pce-instruments.com/deutsch

France

PCE Instruments France EURL
23, rue de Strasbourg
67250 SOULTZ-SOUS-FORETS
France
Téléphone: +33 (0) 972 3537 17
Numéro de fax: +33 (0) 972 3537 18
info@pce-france.fr
www.pce-instruments.com/french

Spain

PCE Ibérica S.L.
Calle Mayor, 53
02500 Tobarra (Albacete)
España
Tel. : +34 967 543 548
Fax: +34 967 543 542
info@pce-iberica.es
www.pce-instruments.com/espanol

United States of America

PCE Americas Inc.
711 Commerce Way suite 8
Jupiter / Palm Beach
33458 FL
USA
Tel: +1 (561) 320-9162
Fax: +1 (561) 320-9176
info@pce-americas.com
www.pce-instruments.com/us

United Kingdom

PCE Instruments UK Ltd
Units 12/13 Southpoint Business Park
Ensign Way, Southampton
Hampshire
United Kingdom, SO31 4RF
Tel: +44 (0) 2380 98703 0
Fax: +44 (0) 2380 98703 9
info@industrial-needs.com
www.pce-instruments.com/english

Italy

PCE Italia s.r.l.
Via Pesciatina 878 / B-Interno 6
55010 LOC. GRAGNANO
CAPANNORI (LUCCA)
Italia
Telefono: +39 0583 975 114
Fax: +39 0583 974 824
info@pce-italia.it
www.pce-instruments.com/italiano

The Netherlands

PCE Brookhuis B.V.
Institutenweg 15
7521 PH Enschede
Nederland
Telefoon: +31 (0) 900 1200 003
Fax: +31 53 430 36 46
info@pcebenelux.nl
www.pce-instruments.com/dutch

Chile

PCE Instruments Chile S.A.
RUT: 76.154.057-2
Santos Dumont 738, local 4
Comuna de Recoleta, Santiago, Chile
Tel. : +56 2 24053238
Fax: +56 2 2873 3777
info@pce-instruments.cl
www.pce-instruments.com/chile

Hong Kong

PCE Instruments HK Ltd.
Unit J, 21/F., COS Centre
56 Tsun Yip Street
Kwun Tong
Kowloon, Hong Kong
Tel: +852-301-84912
jji@pce-instruments.com
www.pce-instruments.cn

China

PCE (Beijing) Technology Co.,Ltd
1519 Room, 6 Building
Men Tou Gou Xin Cheng,
Men Tou Gou District
102300 Beijing
China
Tel: +86 (10) 8893 9660
info@pce-instruments.cn
www.pce-instruments.cn

Turkey

PCE Teknik Cihazları Ltd.Şti.
Halkalı Merkez Mah.
Pehlivan Sok. No.6/C
34303 Küçükçekmece - İstanbul
Türkiye
Tel: 0212 471 11 47
Faks: 0212 705 53 93
info@pce-cihazlari.com.tr
www.pce-instruments.com/turkish