



User Manual

PCE-HT 300 Thermo Hygrometer



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 Device description

The PCE-HT 300 is a data logger for temperature, humidity and dew point temperature. It can record, display and store ambient temperature and humidity. Readings are displayed as a curve and as a digital value. The data are stored directly to the device to enable continuous recording of temperature and humidity.

3 Delivery contents

1 x temperature and humidity data logger

1 x wall mounting frame

1 x USB cable

1 x extension cable for the probe

1 x temperature and humidity probe

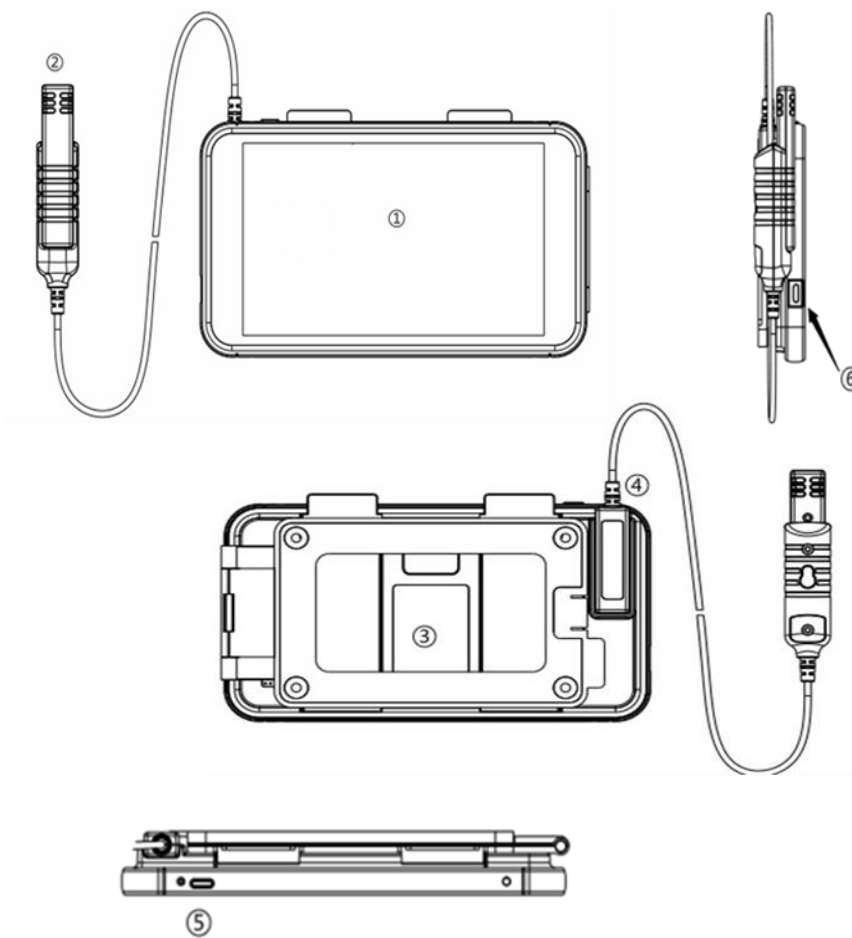
1 x mains adaptor 5V/2A



4 Specifications

| Measurement function | Measurement range | Resolution | Accuracy |
|----------------------|--|------------|------------------------------------|
| Temperature | -10 ... 80 °C | 0.1 °C | ±0.5 °C |
| Dew point | -10 ... 80 °C | 0.1 °C | ±0.5 °C |
| Air humidity | 0 ... 100 % RH | 0.1 % RH | <80 % RH: ±2 % >80 % RH: ±2.5 % |
| Display | 7" touch screen | | |
| Memory | 16 GB | | |
| Memory format | CSV | | |
| Power supply | 3000 mAh Li-Ion battery 5 V / 2 A mains adaptor | | |
| Battery life | approx. 5 years | | |
| Dimensions | 180 x 115 x 18 mm | | |
| Weight | approx. 450 g | | |

5 Device overview



- ① Touch screen
- ② Probe (shown with extension cable)
- ③ Table stand (built-in) and wall mounting frame
- ④ Slot (socket) for the probe or extension cable
- ⑤ ON/OFF switch
- ⑥ USB interface for charging and data transfer to the PC

NOTE: Before using the instrument, insert the probe ② into the slot ④ on the back side. Then press the ON/OFF switch ⑤ to turn on the unit.

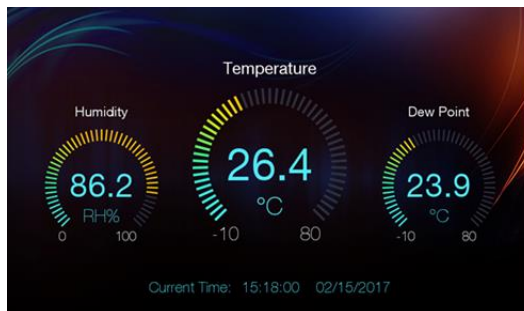
6 Operation

6.1 Main surface

1. Memory usage, "Free" shows the remaining memory space
2. Date (month/day/year) and time
3. Battery level
4. Menu function
5. Vertical axis - scale for temperature
(in the diagram on the right for relative humidity)
6. Curves with the time course of temperature, humidity and dew point
7. Horizontal axis - scale for date and time
8. Max/Min
9. Current value for temperature (temperature), humidity and dew point



If no entry is made, the data logger automatically switches to the large display of the current values after 1 minute. This display shows:
Humidity, temperature and dew point.



You can return to the main interface by touching the screen.

6.1.1 Graphical part of the main interface



- The red curve shows the temperature curve.
- The green curve shows the temporal course of the air humidity.
- The yellow curve shows the course of the dew point temperature.
- The vertical axes show the values for temperature and relative humidity.
- The horizontal axes show the value for date and time.
- The vertical yellow line marks the value at a certain time. It appears when you tap a part of the curve. The line can be moved with "<<" or ">>".

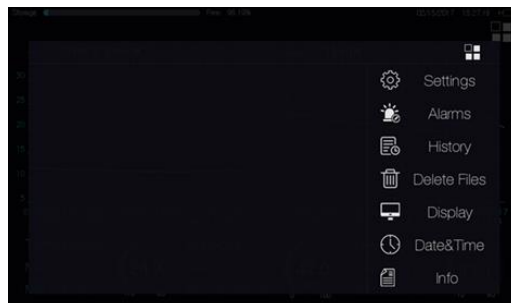
6.1.2 Digital part of the main interface



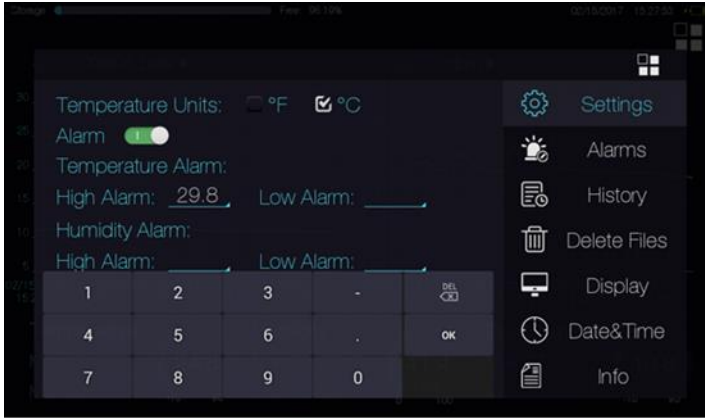
- "Temperature" shows the value of the temperature.
- "Humidity" shows the value of the air humidity.
- "Dew Point" shows the value of the dew point temperature.
- By touching one of the three circles, you can access the large display of the current values.

6.2 Main menu

By clicking on the menu icon (top right in the main interface), you can access the menu interface.



6.2.1 Settings



You can make the following settings

(a) Unit of temperature

Unit degrees Fahrenheit °F or degrees Celsius °C

b) Alarm

Touch the display field to switch the alarm on or off

(c) Maximum and minimum temperature and humidity

The alarm must be enabled before values can be entered.

Enter the values using the keypad and confirm with OK.

d) Sample rate

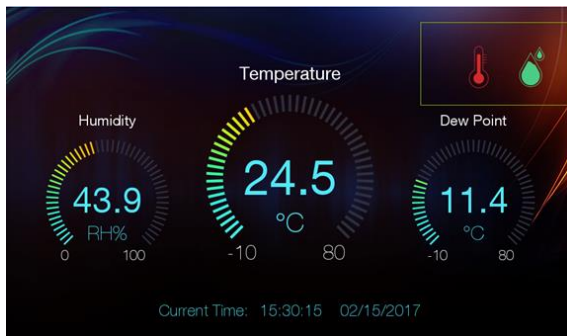
Here you can define how often the alarm data are saved.

H: for hours, M: for minutes, S: for seconds

Tap on "Save" to accept the settings.

Note:

When the alarm is triggered, the instrument beeps and the large display shows the temperature alarm icon or humidity alarm icon or both in the upper right corner.



6.2.2 Alarms

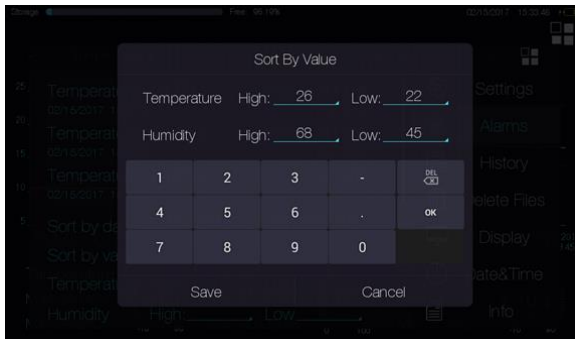
Here you can display the saved alarm values sorted by date or by value. There is only space for 3 values in the display window. You can see the other values by moving the list up or down.



Sorted by date:

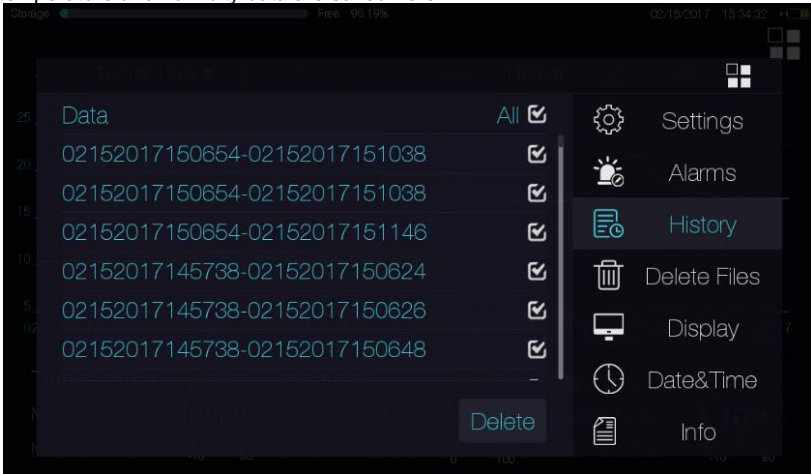


Sorted by value:

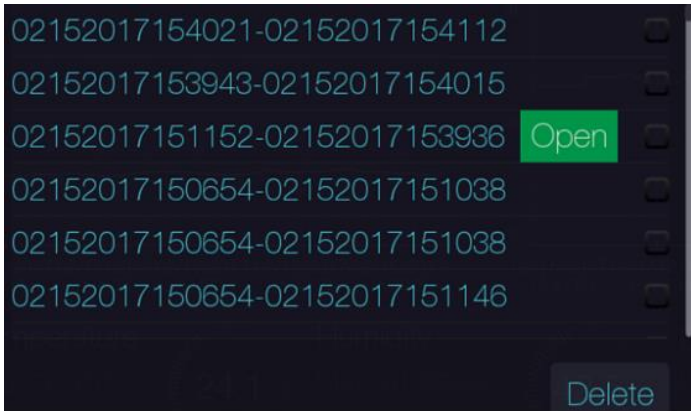


6.2.3 History

The temperature and humidity data are saved here.

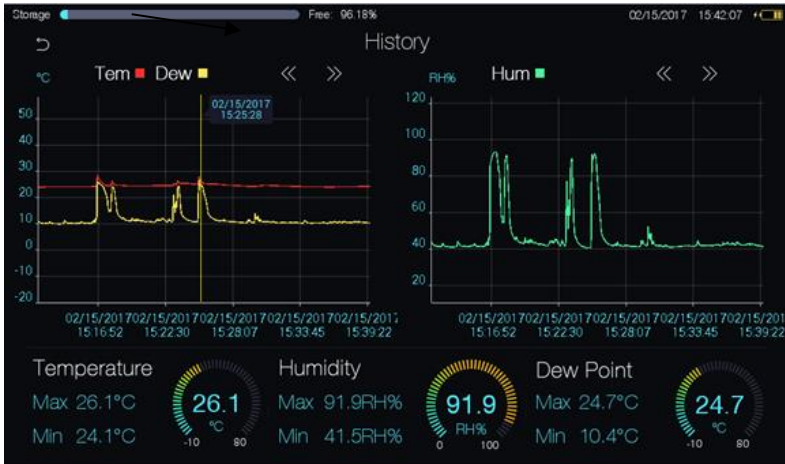


Via "Delete", you can delete all selected data.



If you select a saved record by tapping on it, you can open or delete it.

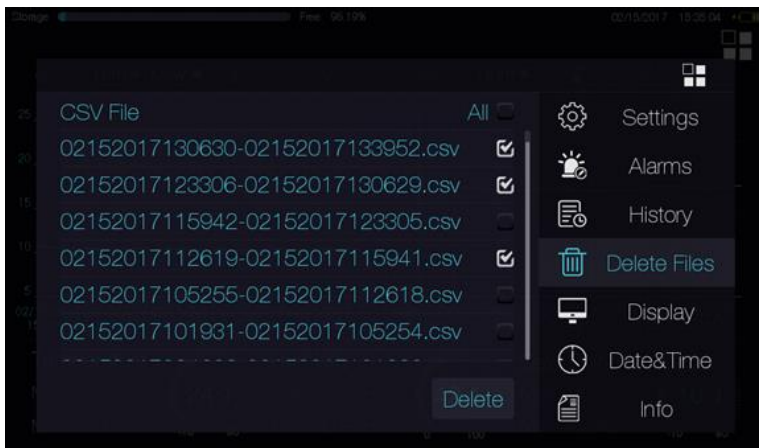
After opening the data record, you can view its values graphically and digitally, displayed as during the measurement.



With the back arrow in the upper left corner, you can return to the menu interface with the list of data records.

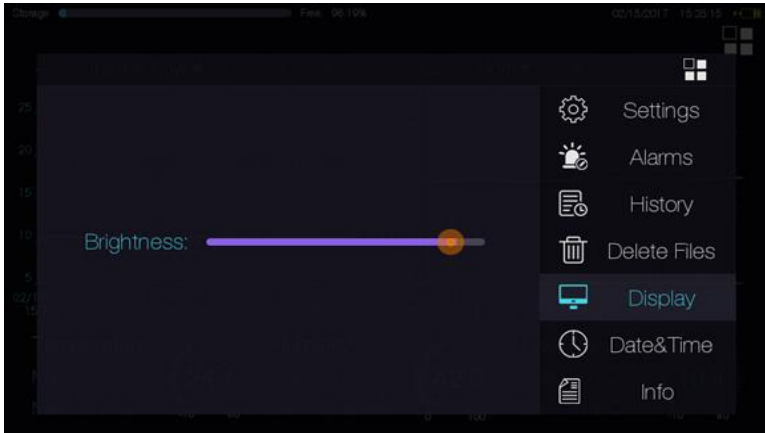
6.2.4 Delete Files

CSV files are automatically created and can be transferred to the PC. You can delete individual files or all files here.



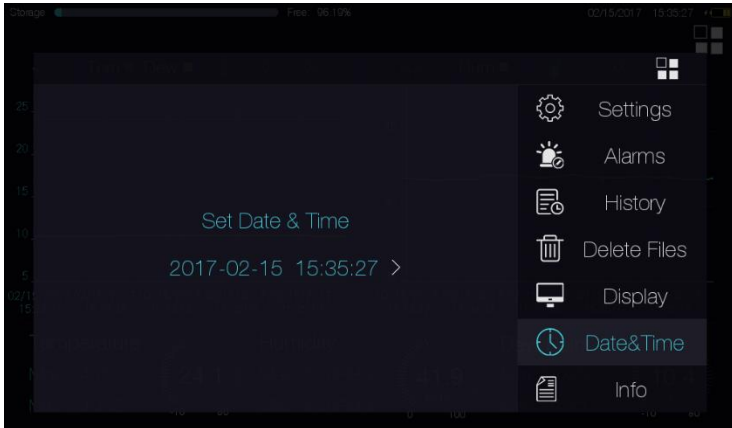
6.2.5 Display

Here you can adjust the screen brightness.



Move the dot on the line to the left or right to increase or decrease the brightness.

6.2.6 Date & Time



To change the values, tap on the range.



You can adjust the values for year, month, day, hour, minute individually by sliding them up or down. Confirm the changes with "Yes".

7 Warranty

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

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.





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

United Kingdom

PCE Instruments UK Ltd
Unit 11 Southpoint Business Park
Ensign Way, Southampton
Hampshire
United Kingdom, SO31 4RF
Tel: +44 (0) 2380 98703 0
Fax: +44 (0) 2380 98703 9
info@pce-instruments.co.uk
www.pce-instruments.com/english

The Netherlands

PCE Brookhuis B.V.
Institutenweg 15
7521 PH Enschede
Nederland
Telefoon: +31 (0)53 737 01 92
info@pcebenelux.nl
www.pce-instruments.com/dutch

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

France

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

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

China

PCE (Beijing) Technology Co., Limited
1519 Room, 6 Building
Zhong Ang Times Plaza
No. 9 Mentougou Road, Tou Gou District
102300 Beijing, China
Tel: +86 (10) 8893 9660
info@pce-instruments.cn
www.pce-instruments.cn

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

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

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
jyi@pce-instruments.com
www.pce-instruments.cn