English



User Manual

PCE-HT 300 Thermo Hygrometer

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Contents

1 Safety notes 1

2 Device description 2

3 Delivery contents 2

4 Specifications 2

5 Device overview 3

6 Operation 4

6.1 Main surface 4

6.2 Main menu 5

7 Contact 11

8 Disposal 11

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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

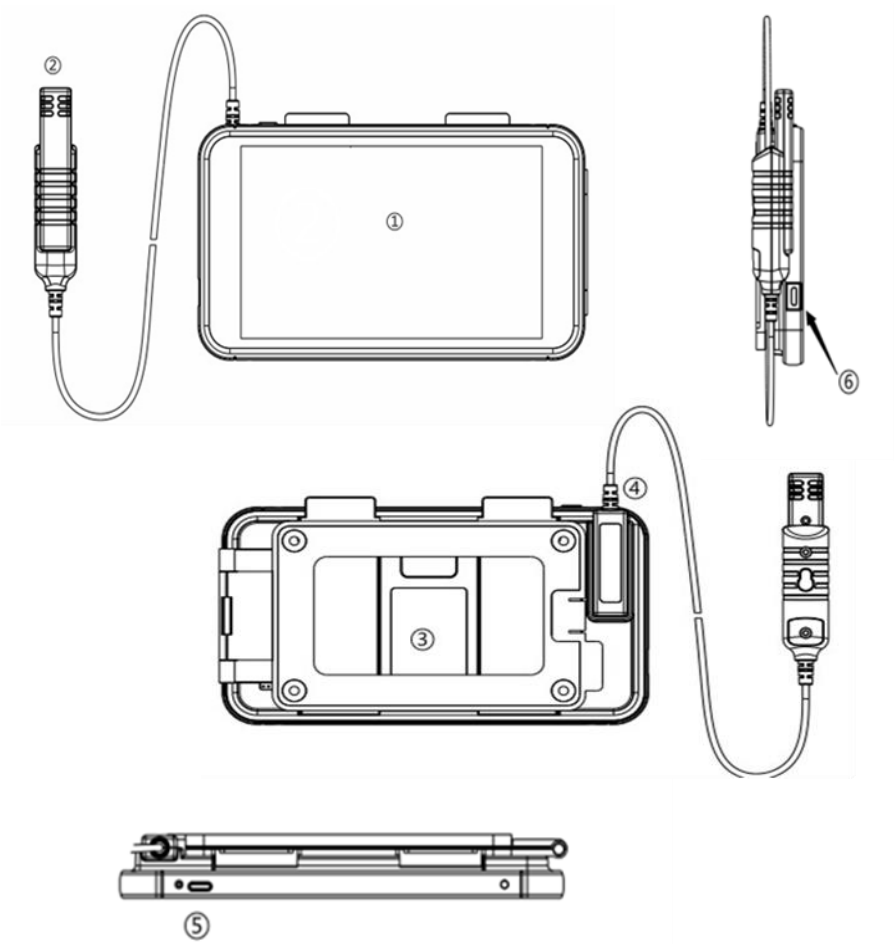
1 x mains adaptor 5V/2A



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



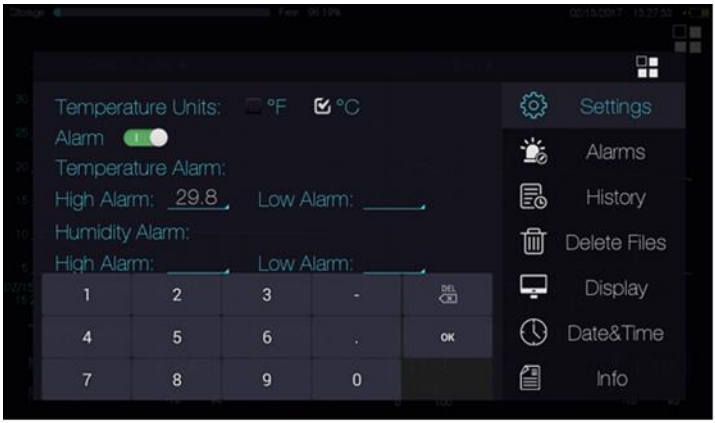
- "Temperature" shows the value of the temperature.
- "Humidity" shows the value of the air humidity.
- "Dew Point" shows the value of the dew point temperature.
- By touching one of the three circles, you can access the large display of the current values.

6.2 Main menu

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



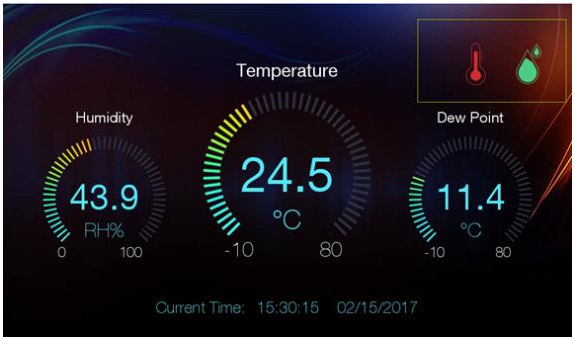
6.2.1 Settings



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:

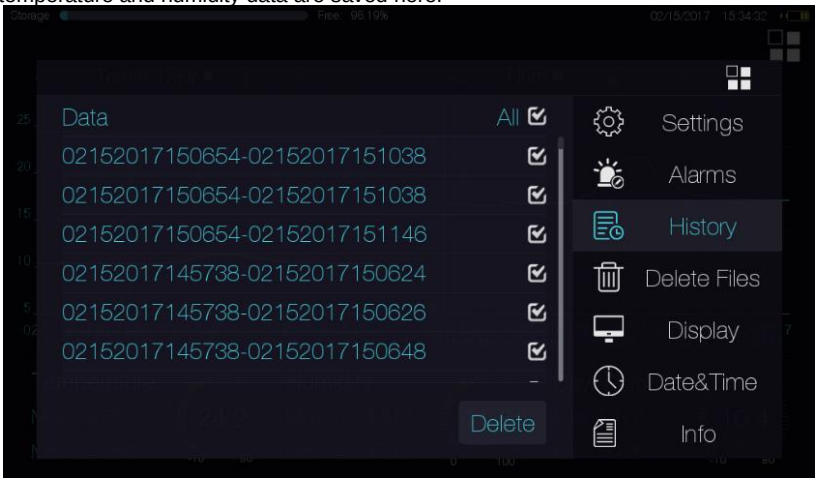


Sorted by value:

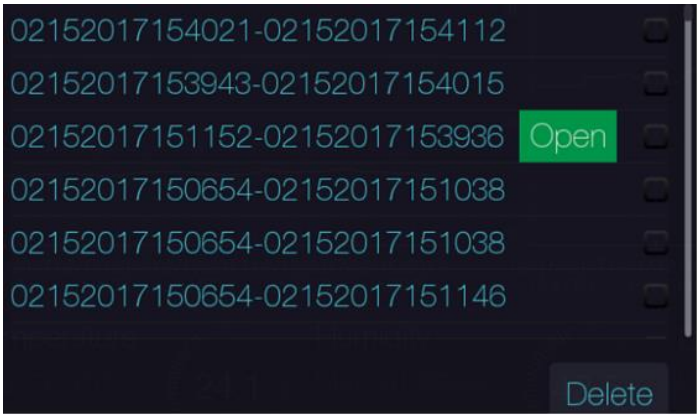


6.2.3 History

The temperature and humidity data are saved here.

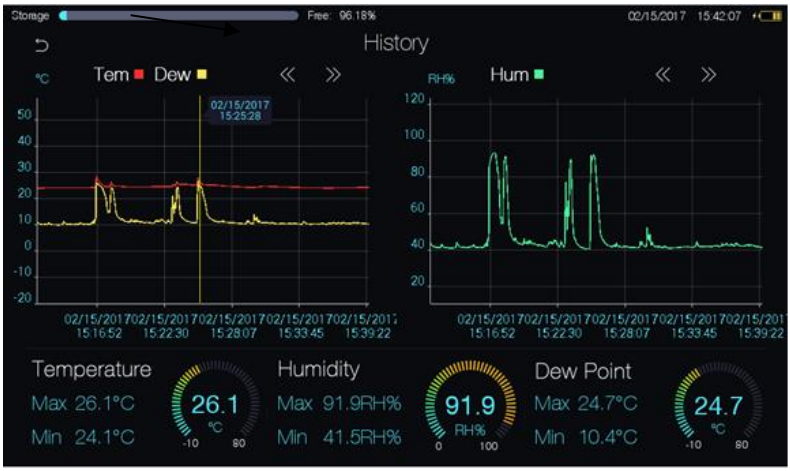


Via "Delete", you can delete all selected data.



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

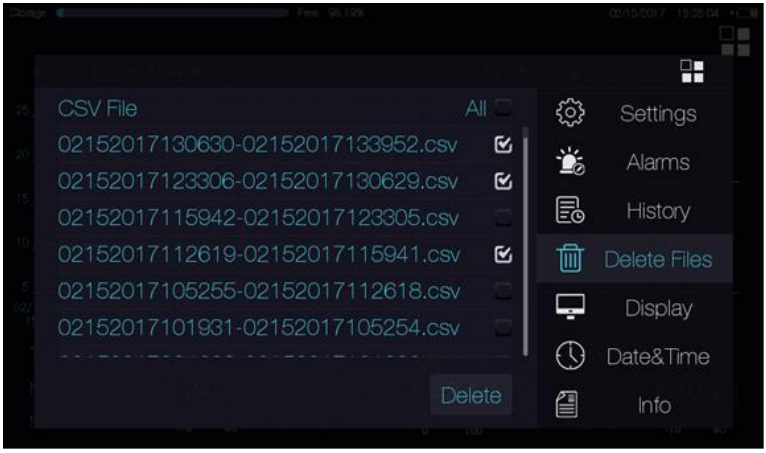
After opening the data record, you can view its values graphically and digitally, displayed as during the measurement.



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

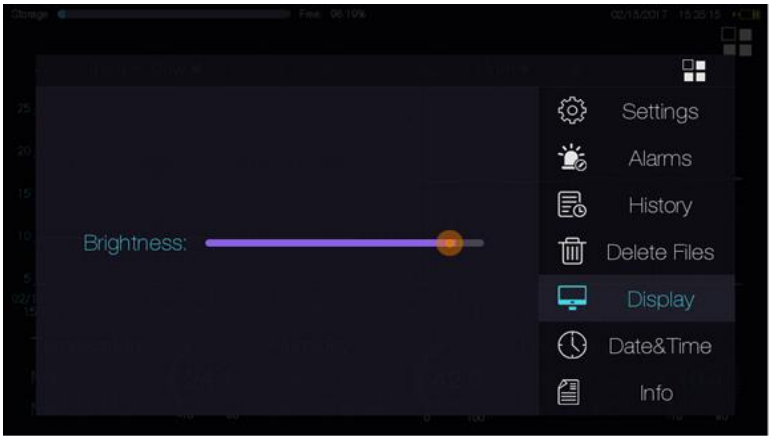
6.2.4 Delete Files

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



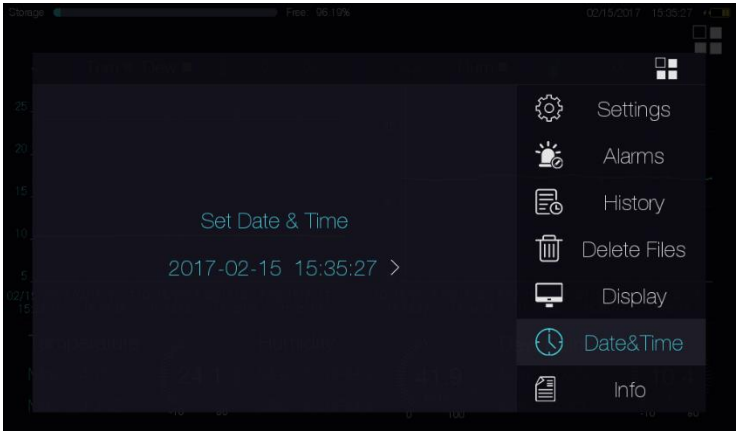
6.2.5 Display

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 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.

www.pce-instruments.com

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