

PCE Instruments PCE-HT 72 Data Logger for Temperature and Humidity User Manual

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Product Information

Specifications

• Measurement function: Temperature, Air humidity

• Measurement range: Temperature (0 ... 100 °C), Air humidity (0 ... 100 % RH)

Resolution: N/AAccuracy: N/A

• Memory: N/A

Measuring rate / storage interval: N/A

• Start-stop: N/A

• Status display: N/A

• Display: N/A

• Power supply: N/A

Interface: N/A

• Dimensions: N/A

• Weight: N/A

Product Usage Instructions

· 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.
- 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.

· Diagram of the software

 To understand the diagram of the software, please refer to the user manual for detailed instructions and explanations.

· Factory settings

• To restore the data logger to factory settings, please follow these steps:

Contact and Disposal

 If you have any further questions or need assistance, please contact PCE Instruments. The contact details can be found at the end of this manual.

Scope of Delivery

- 1 x PCE-HT 72
- 1 x Wrist strap
- 1 x CR2032 battery
- 1 x User manual

• Frequently Asked Questions (FAQ)

- Question 1: How do I change the measurement units?
 - Answer: To change the measurement units, please refer to the user manual section "Unit Settings" on page X.
- Question 2: Can I connect the data logger to a computer?
 - Answer: Yes, the data logger can be connected to a computer via the provided interface cable.
 Please refer to the user manual section "Connecting to a Computer" on page Y for detailed instructions.
- Question 3: How long does the battery last?
 - Answer: The battery life depends on various factors such as usage frequency and settings. On average, the CR2032 battery included in the scope of delivery lasts for approximately Z months.

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.

Specifications

Measurement functio	Measurement range	Resolution	Accuracy	
			<0 °C: ±1 °C	
Temperature	-30 60 °C	0.1 °C	<60 °C: ±0.5 °C	
			0 20 % RH: 5 %	
			20 40 % RH: 3.5 %	
Air humidity	0 100 % RH	0.1 % RH	40 60 % RH: 3 %	
			60 80 % RH: 3.5 %	
			80 100 % RH: 5 %	
Further specifications			I	
Memory		20010 measured val	ues	
Measuring rate / storage	e interval	adjustable 2 s, 5 s, 1	0 s 24h	
Start-stop		adjustable, immedia	tely or when key is pressed	
Status display		via symbol on the display		
Display		LC display		
Power supply		CR2032 battery		
Interface		USB		
Dimensions		75 x 35 x 15 mm		
Weight		approx. 35 g		

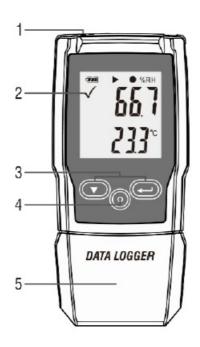
Scope of delivery

- 1 x PCE-HT 72
- 1 x wrist strap
- 1 x CR2032 battery
- 1 x user manual

The software can be downloaded here: https://www.pce-instruments.com/english/download-win_4.htm.

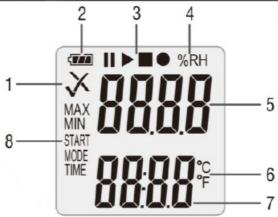
Device description

No.	Description
1	Sensor
2	Display when the limit value is reached, additionally indicated with red and green LED
3	Keys for operation
4	Mechanical switch to open the housing
5	USB port to connect to a computer



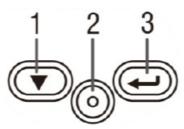
Display description

No.	Description
1	Alarm limit value indicator
	Measured value is within the set limits
	Measured value is outside the set limits
2	Battery status indicator
3	Recording indicator
	II Measuring device in standby mode
	Recording stopped
	Recording started
	Appears after setting
4	Humidity unit
5	Humidity measured value
6	Temperature unit
7	Temperature display
8	Function display



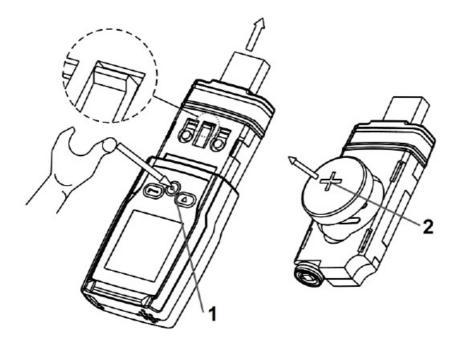
Key Assignment

No.	Description
1	Down key
2	Mechanical key for opening the housing
3	Enter key



Insert / change battery

To insert or change the battery, the housing must first be opened. To do this, first press the mechanical key "1". Then you can remove the housing. You can now insert the battery on the back or replace it if necessary. Use a CR2450 battery.



The battery status indicator allows you to check the current power of the inserted battery.



Software

To make settings, first install the software for the measuring device. Then connect the meter to the computer.

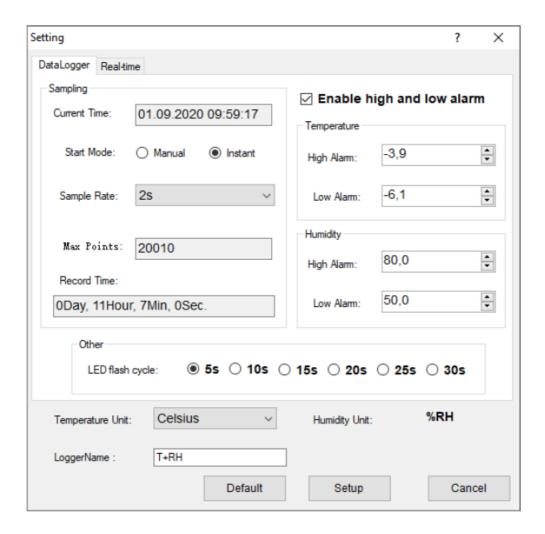
Symbol	Description
	Open measurement sequences saved via the software
	Save measurement sequences recorded via the software
	Read out sensors live
-	Download data stored in the meter
	Settings for the measuring device and the software
	Open software instructions
Real-Time Download/Open	Change view between live data transmission and downloaded measurement data

Carry out settings of the data logger

To make settings now, go to Settings. Under the tab "Datalogger", you can make settings for the measuring device.

Setting	Description
Current Time	The current time of the computer which is used for data recording is displayed here.
Start Mode	Here you can set when the meter is to start recording data. When "Manual" is selected, you can start recording by pressing a key. When "Instant" is selected, recording starts immediately after the settings have been overwritten.
Sample Rate	Here you can set the saving interval.
Max Point	The maximum possible data records that the measuring device can save ar e displayed here.
Record Time	This shows you for how long the meter can record data until the memory is full.
Enable high and low alarm	Activate the limit value alarm function by ticking the box.
Temperature / Humidity High Ala rm Low Alarm	Set the alarm limits for temperature and humidity. "Temperature" stands for the temperature measurement "Humidity" stands for relative humidity With "High Alarm", you set the desired upper limit value. With "Low Alarm", you set the desired lower limit value.
Other LED flash cycle	Via this function, you set the intervals at which the LED should light up to ind icate operation.
Temperature Unit	Here you set the temperature unit.
LoggerName:	Here you can give the data logger a name.
Humidity Unit:	The current ambient humidity unit is displayed here. This unit cannot be changed.

Default	You can reset all settings with this key.
Setup	Click on this button to save all settings you have made.
Cancel	You can cancel the settings with this button.



Live data settings

To make settings for live data transmission, go to the "REAL Time" tab in the settings.

Function	Description
Sample rate (s)	Here you set the transmission rate.
Max	Here you can enter the maximum number of values to be transmitted.
Temperature Unit	Here you can set the temperature unit.
Humidity Unit	The current unit for the ambient humidity is displayed here. This unit cannot be changed.
Default	You can reset all settings with this button.
Setup	Click on this button to save all settings you have made.
Cancel	You can cancel the settings with this button.

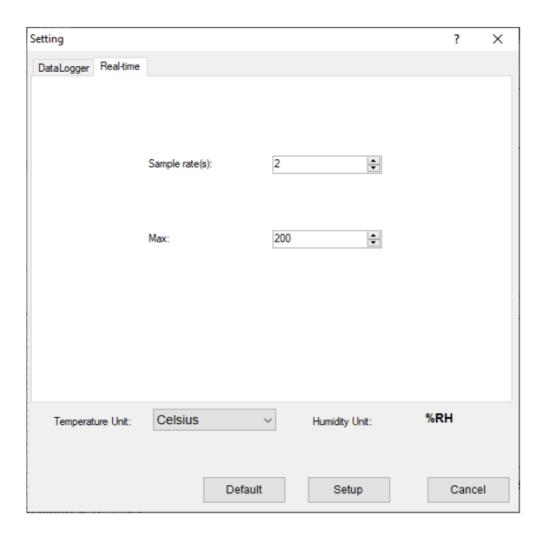
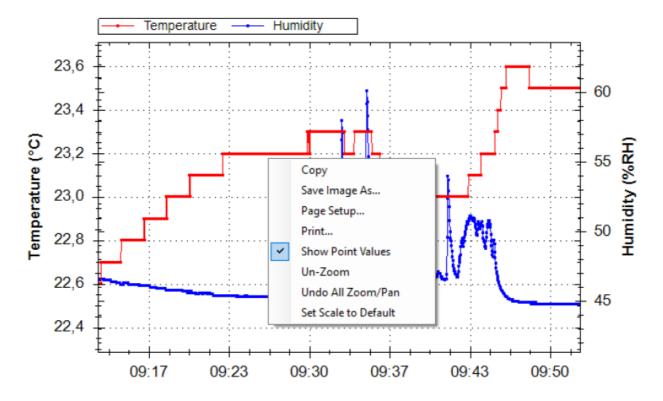


Diagram of the software

- You can move the diagram with the mouse.
- To zoom into the diagram, keep the "CTRL" key pressed.
- You can now zoom into the diagram using the scroll wheel on your mouse.
- If you click on the diagram with the right mouse button, you will see more properties.
- Via "Graph with markers", points for the individual data records can be displayed on the graph.

Datalogger Graph



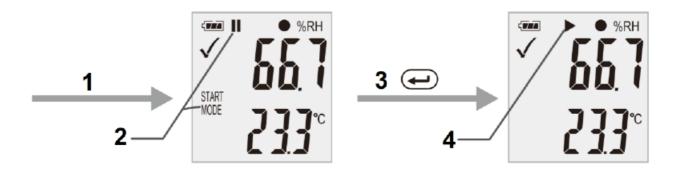
TIME

Function	Description
Сору	Graph is copied to the buffer
Save Image As	Graph can be saved in any format
Page Setup	Here you can make settings for printing
Print	Here you can print the graph directly
Show Point Values	If the function "Graph with markers" is active, the measured values can be displayed via "Show Point Values" as soon as the mouse pointer is on this point.
Un-Zoom	The zoom goes one step back
Undo All Zoom/Pan	The entire zoom is reset
Set Scale to Default	Scaling is reset

Start and stop manual recording

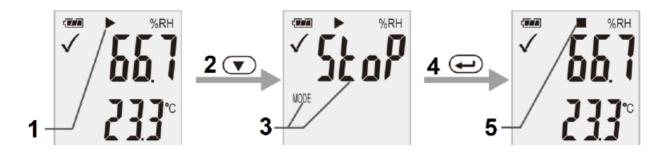
To use the manual mode, perform the following procedure:

No.	Description
1	First set the meter using the software.
2	After the upload, the display shows "Start Mode" and II.
3	Now press the explored key for two seconds to start recording.
4	This indicates that recording has been started.



To cancel the measurement now, proceed as follows:

No.	Description
1	Here you are informed that the recording has started.
2	Now briefly press the key.
3	The display now shows "MODE" and "STOP".
4	Now press and hold the key.
5	Normal measurement was resumed and the display shows



Important: When recording is finished, the measuring device must be reconfigured. It is therefore not possible to resume recording.

Display remaining

Display remaining recording time

To view the remaining recording time, briefly press the wey during recording. The remaining time is displayed under "TIME".

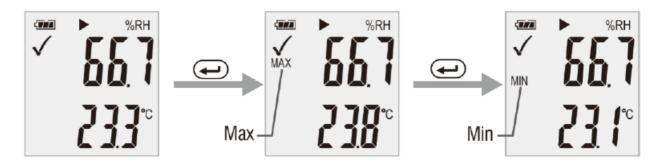


Important: This display does not take the battery into account.

Lowest and highest

Lowest and highest measured value

To display the lowest and highest measured values, press the ekey briefly during the measurement.



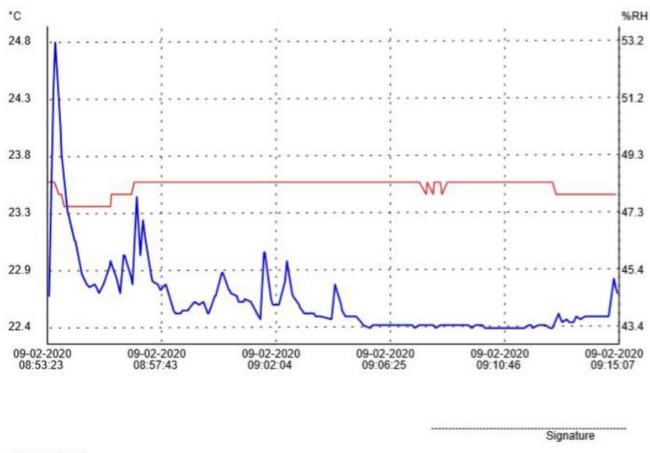
To display the measured values again, press the expression wait for 1 minute.

Data output via PDF

Consent Information

- To receive the recorded data directly as a PDF, all you need to do is connect the measuring device to the computer. A mass data memory is then displayed on the computer. From there you can get the PDF file directly.
 - **Important:** The PDF is only generated when the measuring device is connected. Depending on the data volume, it may take about 30 minutes until the mass data memory with the PDF file is displayed.
- Under "Logger Name:", the name saved in the software is displayed. The configured alarm limit values are also saved to the PDF.

General Information		PCE Instruments			
Device Information					
Logger name:	T+RH	Se	rial ID:		HT-72_0200417014
Data Logger Setting					
Record Start Condition:	Immediately until m	emory full	Start Ti	me:	09-02-2020 08:53:23
Sampling Rate:	2Sec		Stop Ti	me:	09-02-2020 09:15:07
Data Count:	653		Recorded Time:		21Min,44Sec
Alarm Status					
Alarm:	Enable				
Temperature:	Low Alarm	-6.1°C	×	High Alarm	-3.9°C
Relative Humidity:	X Low Alarm	50.0%RH	✓	High Alarm	80.0%RH
Graph					
		Minimum	M	aximum	
Temperature:		23.4°C	23	.6°C	
Relative Humidity:		43.4%RH	53	2%RH	



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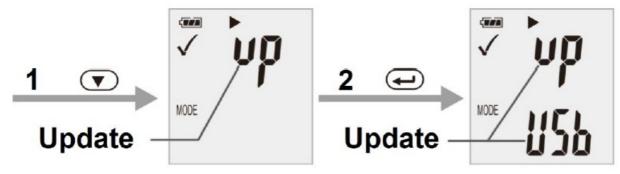
LED status display

LED	Action
Flashing gree	Data recording
Flashing red	Measured value outside the limits during data recording
	- Manual mode started. Meter is waiting for the start by the user
	– Memory is full
	- Data recording was cancelled by pressing a key
Double flashin g in green	- Settings were successfully applied
	- Firmware was successfully applied

Perform firmware upgrade

To perform a firmware upgrade, first install the battery. Now briefly press the key. The display shows "up". Now press and hold the key for approx. 5 seconds until "USB" additionally appears on the display. Now connect the test instrument to the computer. A folder (mass data memory) now appears on the computer. Insert the new firmware there. The update starts automatically. After the transfer and installation, you can disconnect

the measuring device from the computer. A red LED glows during the update. This process takes about 2 minutes. After the update, the measurement will resume normally.



Delete all saved data

- To delete all data on the meter, hold down the keys and connect the data logger to the computer at the same time.
- The data will now be deleted. If no connection has been established within 5 minutes, you must reset the
 meter.

Factory settings

- To reset the meter to the factory settings, press and hold the keys while the power is off.
- Now switch on the meter by inserting the batteries or connecting the meter to the PC.
- The green LED lights up during the reset. This process can take up to 2 minutes.

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.

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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User manuals in various languages (français, italiano, español, português, nederlands, türk, polski, русский,) can be found by using our product search on: www.pce-instruments.com.



• Last change: 30 September 2020

Documents / Resources



PCE Instruments PCE-HT 72 Data Logger for Temperature and Humidity [pdf] User Manual PCE-HT 72 Data Logger for Temperature and Humidity, PCE-HT 72, Data Logger for Temperature and Humidity, Temperature and Humidity

References

- O France.fr : Actualités, destinations et infos du tourisme en France
- O iberica.es
- O instruments.cn The domain is available for purchase
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