



User Manual

PCE-HFX 100 Air Quality 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

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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.
- Charge the battery directly as soon as it is flat.

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 Specifications

Measuring function	Measurement range	Resolution	Accuracy
Formaldehyde HCHO	0 ... 2 mg/m ³	0.01 mg/m ³	<0.6mg/m ³ : ±0.06mg/m ³ >0.6 mg/m ³ : ± 10 %
Temperature	-10 ... 50 °C / 14 ...122°F	0,1 °C / 0.18°F	± 1 °C / 1.8°F
Humidity	0 ... 99 % RH	1 % RH	30 ... 80 % RH: ± 5% RH remaining range: ± 8 % RH
Display	LC display with backlight		
Low battery voltage indication	via icon on the display		
Power supply	3.7 V rechargeable Li-Ion battery		
Operating conditions	0 ... 50 °C / 32 ... 122°F / max. 85 % RH		
Storage conditions	-20 ... 60 °C / -4 ... 140°F / max. 95 % RH		
Weight	195 g / <1 lb		
Dimensions	75 x 55 x 130 mm / 2.9 x 2.1 x 5.1 in		

3 Delivery scope

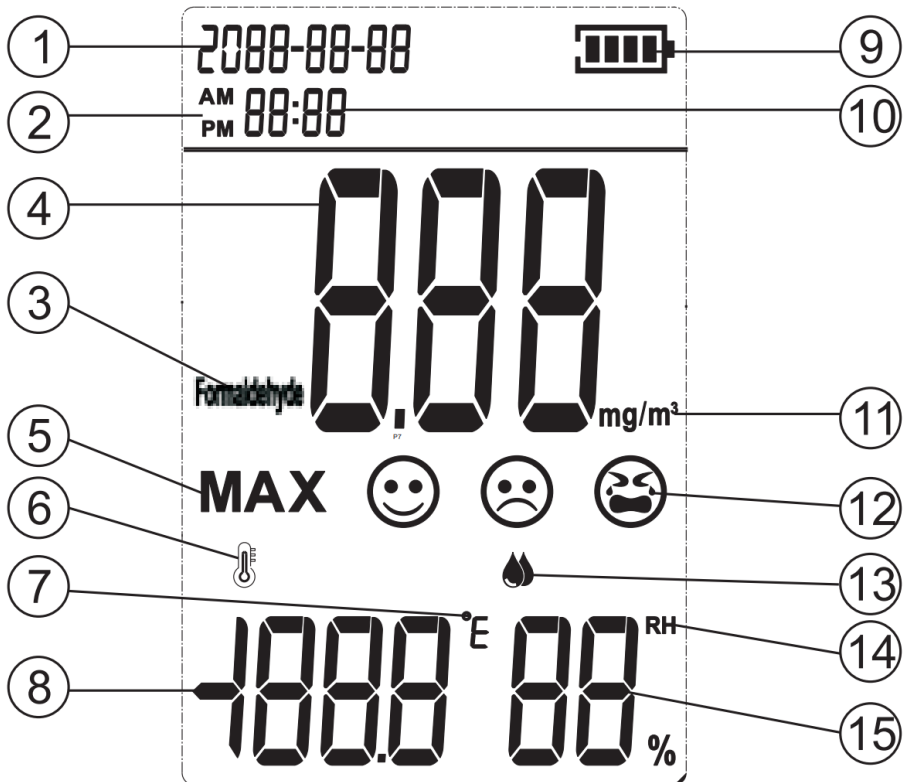
1 x air quality meter PCE-HFX 100

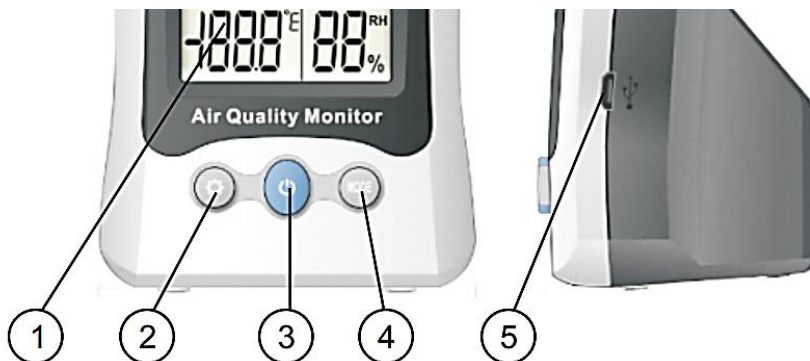
1 x micro USB cable

1 x user manual

4 Display description

No.	Description
1	Date: year-month-day
2	AM and PM display for the time
3	Formaldehyde (HCHO)
4	Measured value HCHO
5	The "MAX" display shows the highest measured HCHO value
6	Temperature icon
7	Temperature unit
8	Temperature reading
9	Battery status display
10	Time
11	HCHO unit
12	Air quality icons (depending on HCHO value)
13	Humidity icon
14	Humidity unit
15	Humidity reading





No.	Description
1	LC display
2	Setup key
3	On/off key
4	Mode key
5	Micro USB port

5 Switch on/off

To switch on the meter, press and hold the on/off key for 2 seconds. Make sure you switch on the meter in fresh air as the meter calibrates itself in the first 90 seconds. This procedure is always performed when the meter is switched on.

Leave the meter in fresh air for another 5 ... 10 minutes so that it can adapt to the environment. The temperature and humidity sensors also need 20 ... 30 minutes to adapt to the environment. To switch off the meter, press the on/off key again for 2 seconds.

6 Backlight

To switch on the backlight, press and release the on/off key once. To switch off the backlight, press the on/off key again. When the measured value is $>0.09 \text{ mg/m}^3$, the backlight turns red. As soon as the measured value is below $>0.09 \text{ mg/m}^3$, the backlight turns white again. Even if the backlight is disabled, the red lighting switches on when the value is exceeded.

7 Change temperature unit






To change the temperature unit, press and release the setup key once. The temperature unit can be set to either °C or °F.

8 Highest measured value

From the moment the unit is switched on, the highest measured value is temporarily saved. To have this measured value displayed, press the mode key. The display shows "MAX" and the highest measured value is shown on the display. To exit this display, press the mode key again. To reset this display without restarting the meter, press and hold the mode key for 3 seconds.

9 Battery

With this meter, it is possible to carry out measurements even without a fixed voltage supply. A rechargeable battery is built in for this purpose. The battery status can be read directly from the display. Charging the battery takes approx. 3 hours. The meter can be used during the charging process.

Icon	Meaning
	Battery sufficiently charged
	
	Battery should be charged soon
	Please charge the battery as the battery has almost no voltage left
	Switch off the meter and do not use it again until the battery is charged

10 Set date and time

To enter the window for the date and time setting, press and hold the setup and mode keys simultaneously for 3 seconds. To exit the settings, press and hold the setup and mode keys again simultaneously for 3 seconds.

To set the date and time, now press the mode key to select between year-month-day, hours and minutes. The setting key increases the value. Press the on/off key to decrease the reading.

Press and hold the setup key or the on/off key to change the value more quickly.

After you have also set the minutes, press the mode key again. Now you can choose between a 12-hour display (AM / PM) and a 24-hour display. To do this, press and hold the mode key for approx. 5 seconds to save the settings.




11 Set language

It is possible to set the display language to either English or Chinese. To set the language, first enter the menu by pressing and holding the setup and mode keys simultaneously for 3 seconds. Now press the mode key repeatedly until the temperature display shows "LAN G" – which will also be visible on the humidity display. Now press and hold the mode key for 5 seconds to change the language.

To exit the settings, press and hold the setup and mode keys again simultaneously for 3 seconds.

NOTE: The setting items "LOW" and "HIGH" have no function.

12 Limit value table

Concentration	Icon	Comment
0 ... 0.1 mg/m ³		Safe environment
0.1 ... 0.3 mg/m ³		Increased formaldehyde concentration present. It is recommended to let fresh air enter the room.
0.3 ... 2.0		Poor air quality. Provide fresh air



13 Warranty

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

14 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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