



# User Manual

PCE-ILD 10 Infrared Thermometer



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](http://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.

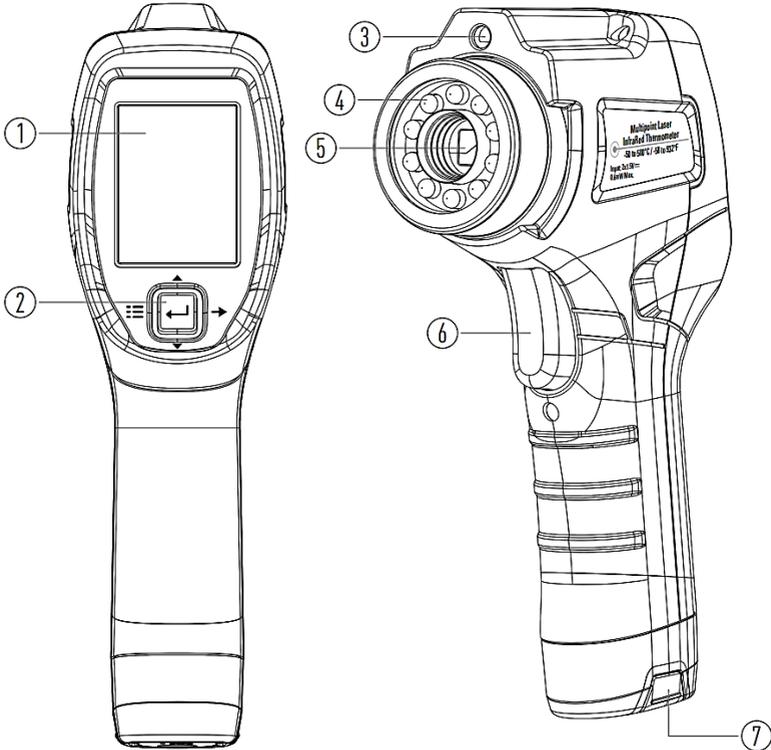
## 2 Specifications

Measurement range	-50 ... 500 °C / -58 ... 932 °F
Resolution	0.1 °C / 0.1 °F
Accuracy	±3 °C / ±5.4 °F at -50 ... 20 °C / -58 ... 68 °F ±2 or ±2°C / ±3.6 °F at 20 ... 500 °C / 68 ... 932 °F
Repeatability	±1 °C / 1.8 °F
Distance-to-target ratio	12:1
Emissivity	0.10 ... 1.00
Sampling rate	2 Hz
Spectral range	8 ... 14 µm
Measurement range exceeded	Display " - - - -"
Laser output power	<1 mW
Wavelength	630 ... 670 nm
Laser class	2
Illuminated ring	5 x white LED 5 x blue LED
Power supply	2 x 1.5 V AA batteries
Operating conditions	0 ... 50 °C / 32 ... 122 °F, 10 ... 90 % RH, non-condensing
Storage conditions	-10 ... 60 °C / 14 ... 140 °F, 10 ... 90 % RH, non-condensing
Dimensions	180 x 100 x 55 mm // 7.0 x 3.9 x 2.1"
Weight	329 g / 11.6 oz with batteries

## 3 Delivery scope

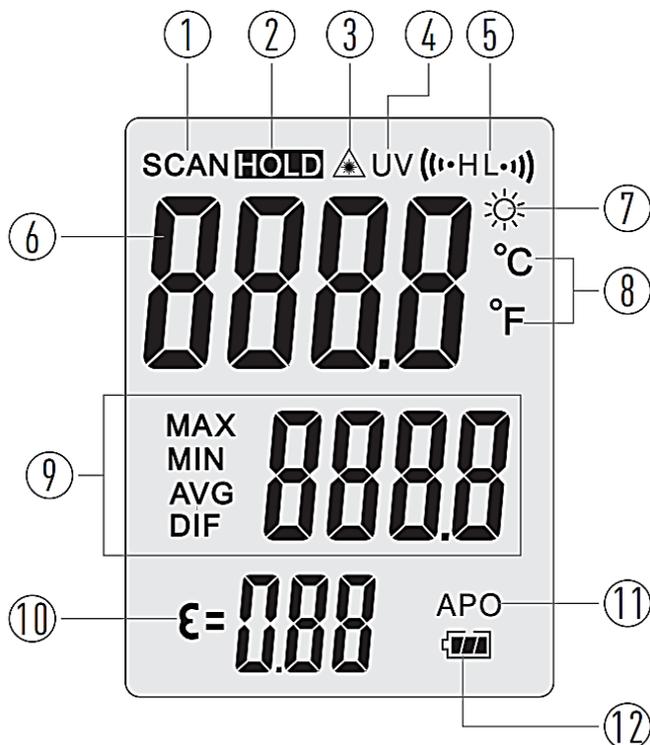
- 1 x infrared thermometer PCE-ILD 10
- 2 x 1.5 AA battery
- 1 x transport bag
- 1 x user manual

#### 4 Device description



No.	Description
1	Display
2	Operating toggle
3	Laser
4	LED ring
5	Infrared sensor
6	Measurement key
7	Battery compartment

#### 4.1 Display description

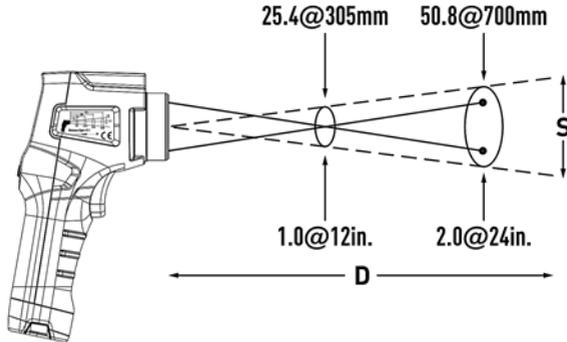


No.	Description
1	Measurement is carried out
2	Display frozen
3	Laser is activated
4	Blue illuminated ring is active
5	Limit value alarm
6	Measured value
7	White illuminated ring is active
8	Temperature units
9	Additional display for the maximum, minimum, average and differential value
10	Set emissivity
11	Automatic power off
12	Battery status display

## 5 Making a measurement

Hold the meter firmly in your hand and point the sensor at the surface to be checked. Now press and hold the measurement key. The device will switch on automatically and start the measurement. "SCAN" is displayed.

The infrared sensor has a measuring spot ratio of 12:1, which means that at a distance of 12 metres, for example, the measuring spot has a diameter of 1 metre.



If you release the key, the measurement is interrupted and the display is frozen. "HOLD" is displayed.

## 6 Settings

To open or close the settings, move the operating toggle to the left. Press the operating toggle up or down to change the displayed parameter. The setting is applied directly. To go to the next setting, press the operating toggle to the right or inwards.

The menu is organised as follows.

Display	Function
	Switch the white illuminated ring on or off
UV	Switch the blue illuminated ring on or off
$\epsilon$	Set the emissivity
°C / °F	Set the temperature unit
	Switch the laser on or off
HI (ON/OFF)	Switch the upper limit alarm on or off As soon as the set limit value is exceeded, an audible and visual alarm is triggered.
HI [COUNT]	Set the upper alarm limit value
LO (ON/OFF)	Switch the lower limit alarm on or off As soon as the value falls below the set limit value, an audible and visual alarm is triggered.
LO [NUMBER]	Set the lower alarm limit value
MAX/MIN/AVG/DIFF	Switch the additional display on or off
AP0	Set the automatic power off time in seconds

## 7 Additional display

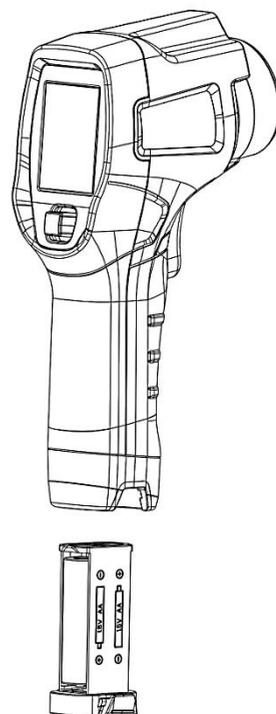
If the additional display is activated, you can select between the individual functions in the measurement window by pressing the operating toggle up or down. The display is reset after pressing the measurement key.

Display	Function
MAX	Highest measured value
MIN	Lowest measured value
AVG	Average measured value
DIFF	Difference between MAX and MIN

## 8 Replace batteries

The battery compartment is located underneath the handle. To insert or replace the batteries as soon as they are discharged, first remove the battery compartment. Now insert new batteries. Ensure that the polarity is correct. You can then reinsert the battery compartment and resume measurement. Only use 2 x 1.5 V AA batteries.

**Note:** As soon as the battery compartment is removed, all settings will be reset.



## 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.



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