## User's manual

# Moisture Meter for Wood and Construction Materials





Read and follow the operating instructions and safety information before using for the first time.

## Technical changes reserved!

Illustrations, functional steps, and technical data may deviate insignificantly due to continuous further developments.

## Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.





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If you have found an error or wish to suggest an improvement, we look forward to hearing from you. Send us an e-mail to:

## service@wiltec.info

or use our contact form:

## https://www.wiltec.de/contacts/

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Our postal address is:

WilTec Wildanger Technik GmbH Königsbenden 12 52249 Eschweiler Germany

To return your goods for exchange, repair, or other purposes, please use the following address. Attention! To allow for a trouble-free complaint or return, it is important to contact our customer service team before returning your goods.

Retourenabteilung WilTec Wildanger Technik GmbH Königsbenden 28 52249 Eschweiler Germany

E-mail: **service@wiltec.info**Tel: +49 2403 55592-0
Fax: +49 2403 55592-15





#### Introduction

Thank you for choosing to purchase this quality product. To minimise the risk of injury, we ask you to always take some basic safety precautions when using this product. Please read this operating manual carefully and make sure that you understand it.

Keep these operation instructions in a safe place.

#### **Description**

This moisture meter has been designed for measuring the moisture level in sawn timber, paper, and cardboard as well as in hardened materials (mortar, concrete, and plaster). It displays the moisture level directly. Furthermore, it can also determine and display the environment temperature. The portable and very easy-to-use device has three LED lights that indicate the moisture of the tested object.

#### **General safety instructions**

- This may be used by children from the age of 8 and by persons with reduced physical, sensory, or mental abilities or a lack of experience or knowledge if they are supervised, have been informed on the safe use of the device, and are able to understand the dangers that could arise.
- Children must not play with the device. Children may only clean and maintain the device if they
  are supervised.
- Do not expose the device to heavy violence or hits.
- Do not expose the device to high temperatures, direct sunlight, dust, and moisture.
- Do not immerse the device in water.
- Avoid contact with corrosive materials.
- Do not throw the device into a fire. Explosion hazard!
- Do not open the casing and do not manipulate the components of the device.

# **Marning!**

- The probe tips are very sharp. Therefore, always be very careful when using the device.
- Always attach the protection cap to the device when this is not in use. Risk of injuries!

#### Safety of cleaning and maintaining

- Do not allow liquids to enter the device. Otherwise, it could be damaged.
- Only clean the device with a slightly moist cloth.
- Clean the probe tips with a slightly moist cloth and dry them afterwards.
- · Before operating the device, check it for damages.
- Before operating the device, check the probe tips for damages.

## Safety of storing

- Always attach the protection cap (1) to the device when this is not in use.
- Always take the batteries out before a long period of non-use.
- Keep the device in a dry place.

## Safety of using batteries

- Do not use rechargeable batteries.
- Insert the battery respecting the correct polarity (+/–).
- Immediately remove empty batteries.
- Remove the batteries when not using the device.
- Do not recharge the batteries and do not throw them into a fire. Explosion hazard!
- Do not store the batteries near metal objects; a contact might provoke a short circuit.
- Do not expose the batteries to high temperatures, extreme humidity, or direct sunlight.
- Always keep the batteries out of children's reach. Danger of suffocation after swallowing up!





Only use the device for its purpose stated!

## Intended use

The device is suitable for measuring wood and building moisture, for example in firewood, paper, card-board, structural timber, mortar, concrete, or plaster. The device is only intended for use in private households and not for commercial use.

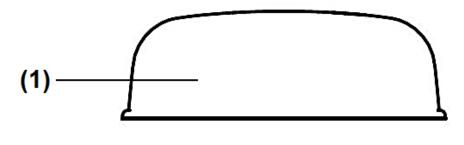
## **Technical specifications**

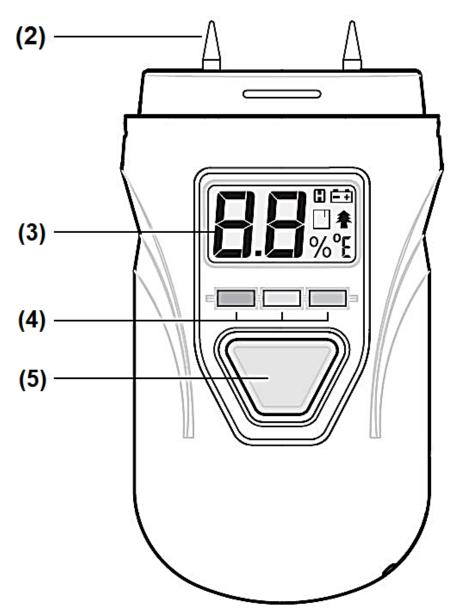
Display type	LCD			
Power supply	1,5 V button cell, LR44 or equivalent, 4× (not included)			
Size (mm)	85×46×16			
Weight (g)	approx. 41 (with button cells)			
	Wood (%)	Other constru	ction materials (%)	Temperature (°C)
Measurement range	6–60	0.2–2.9		0–40 (32–99 °F)
Display resolution	1	0.1 1 (2 °F)		1 (2 °F)
Display accuracy	±2	±0,1		
	Ambient temperature (°C)		Relative air humidity (%)	
Operational conditions	0–40		< 85	
Storing conditions	-10-50		< 85	





## Main parts



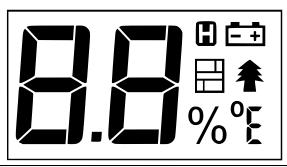


Nº	Name	Nº	Name
1	Protective cap	4	LED indicator lights
2	Probe tips	5	Key
3	LCD display		





## LCD panel displays



Symbol	Meaning
= +	Weak button cells; replace them immediately.
*	"Wood moisture measurement" mode; in this mode, you can measure the moisture level of wood, paper, and cardboard.
	"Material moisture measurement" mode; in this mode, you can measure the moisture of hardened construction materials (mortar, concrete, or plaster).
%	Percent (moisture unit)
0	Degree Celsius
<sup>0</sup> F	Degree Fahrenheit
	Present reading locked

## Use

- 1. Press the button once to turn on the device.
- 2. Select the desired operating mode:
  - a) After switching on the device, press the button for about 3 s to enter the settings (measured value disappears, symbol starts flashing).
  - b) With the symbol flashing on the display panel, press the button to select the desired mode. The corresponding symbol on the display flashes. The four selectable operating modes are:
    - "Wood moisture measurement" mode (\* flashes)
    - "Material moisture measurement" mode (⊞ flashes)
    - "Centigrade temperature measurement" mode (°[ flashes)
    - "Fahrenheit temperature measurement" mode (°F flashes)
  - c) After selecting the desired operating mode, wait about 3 s until the device has exited the settings by itself. Afterwards, you can proceed to the measurement.

## 3. Measure:

a) If you want to measure the temperature, this is immediately shown on the display panel.





- b) If you want to measure the moisture, the probe tips are held in the material to be measured. The reading appears on the display panel and the LED indicator lights also show the measurement as follows:
  - "Wood moisture measurement" mode (♣)

Reading (%)	Flashing LED indicator light
< 6	_
≥ 6 and < 16	Green
≥ 16 and < 20	Yellow
≥ 20	Red

• "Material moisture measurement" mode (⊞)

Reading (%)	Flashing LED indicator light
< 0.2	_
≥ 0.2 und < 0.7	Green
≥ 0.7 und < 0.9	Yellow
≥ 0.9	Red

c) To lock the current reading on the display panel, press the key. The measurement is paused, the symbol appears. To unlock the display panel, re-press the key; the symbol disappears.

## 4. Auto power-off

- a) When measuring the moisture of wood or other building materials, the device switches off if not operated for 15 s or if the displayed reading does not change for 15 s.
- b) When measuring the temperature, the device will turn off if you do not operate it for 15 s.
- c) When the symbol appears in the display panel, the device switches off after 15 s, regardless of the selected operating mode. In that case, the button cells must be replaced immediately.
- 5. After switching on the device, the backlight is switched on by pressing the key. The background lighting goes out again after about 3 s.

# **O** Imi

## Important instructions:

- Keep the device dry.
- Keep the probe tips clean.
- Keep the device and button cells out of children's reach.
- Certain circumstances (type of material, temperature) can influence the moisture measurement; the displayed value may then must be corrected. Therefore, never use the device for inspection or reference measurements.
- Appearance of the symbol means that the button cells are weak and must be replaced immediately. Pay attention to the correct polarity when inserting new button cells. Remove the button cells before leaving the device unused for a long period.





#### **Battery instructions**

In connection with the sale of batteries or rechargeable batteries, we are obliged under the Battery Act to point out the following:

Batteries and rechargeable batteries must not be thrown in household waste and must not be disposed of in this way. Rather, as the end user, you are legally obliged to return old batteries so that professional disposal of your old batteries can be guaranteed.

You can either return your old batteries to us with sufficient postage or hand them in directly to our dispatch warehouse at the following address free of charge:

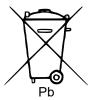
WilTec Wildanger Technik GmbH Königsbenden 28 52249 Eschweiler Germany

Our obligation to take back old batteries is limited exclusively to those old batteries that we have or have had in our range as new batteries.

Batteries are marked with the symbol of a "crossed-out garbage can" (like the illustration below). Batteries that contain more than 0.0005 % by mass of mercury, more than 0.002 % by mass of cadmium, or more than 0.004 % by mass of lead have the chemical name of the pollutant used under the garbage can symbol; "Cd" stands for cadmium, "Pb" (plumbum) for lead and "Hg" (hydrargyrum) for mercury.







Additional note on lithium batteries/accumulators

When returning lithium batteries or accumulators, we ask you to insulate the contact surfaces of the batteries marked + and -, e.g., with tape, to avoid any risk of fire.





## Regulations for waste disposal

The Waste Electrical and Electronic Equipment Directive (WEEE Directive, 2012/19/EU) of the EU was implemented in the German law related to electrical and electronic equipment and appliances.

All WilTec electric devices that fall under the WEEE directive are labelled with the symbol of a crossedout wheeled rubbish bin. This symbol indicates that this electric device must not be disposed of with the domestic waste.

WilTec Technik GmbH is registered with the German registration authority EAR (Stiftung Elektro-Altgeräte Register) under the WEEE-registration number DE45283704.

Disposal of used electrical and electronic devices (intended for use in the countries of the European Union and other European countries with a separate waste collection system for these devices).

The symbol on the packaging or the product itself indicates that this product must not be treated as normal domestic waste but must be disposed of at a recycling collection station for electrical and electronic waste.

By disposing of this product correctly, you contribute to the protection of the environment and the health of your fellow people. Inappropriate disposal threatens the environment and health.



Material recycling helps to reduce the consumption of raw materials.

Additional information about the recycling of this product can be provided by your local commune, the municipal waste disposal facilities, or the store where you purchased the product.

Address: WilTec Wildanger Technik GmbH Königsbenden 12 / 28 52249 Eschweiler Germany

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