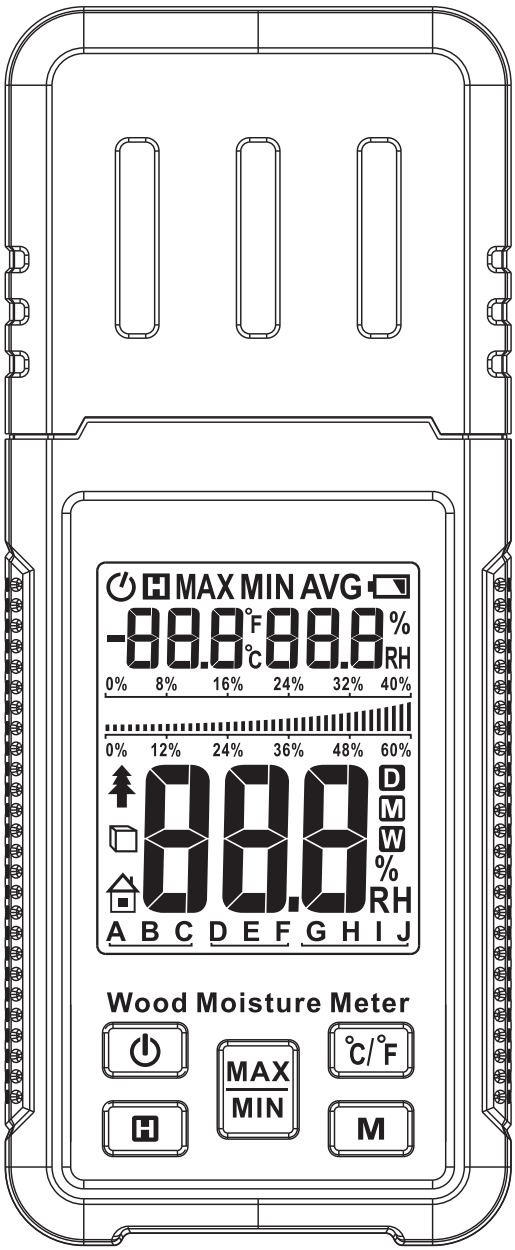
User manual

Wood Moisture Meter



Before using the instrument,please read this manual carefully,and save it well for future using.

Safety information

⚠ **Warning**:

Before using this product, please read this manual carefully and be familiar with the operation of the product, Keep this manual properly so that you can refer to it when necessary.

Precautions to avoid personal injury or instrument damage

- Operate the product correctly within the parameters specified in the technical data sheet according to the purpose of the product.
- Do not store this product with solvents, acids, or other corrosive substances.
- Be careful of personal injury caused by

electrodes. Please cover the protective cap when the product is not in use.

- Do not touch the electrode with any charged object to avoid damaging the product.

Product description

This product is a DC resistance type (pin type) material moisture meter, commonly used to measure the moisture content of wood or building materials. The moisture content of the material is displayed directly as a percentage. The instrument has built-in characteristic parameters of 7 different kinds of wood and building materials. This measurement can provide a basis for the need for further drying.

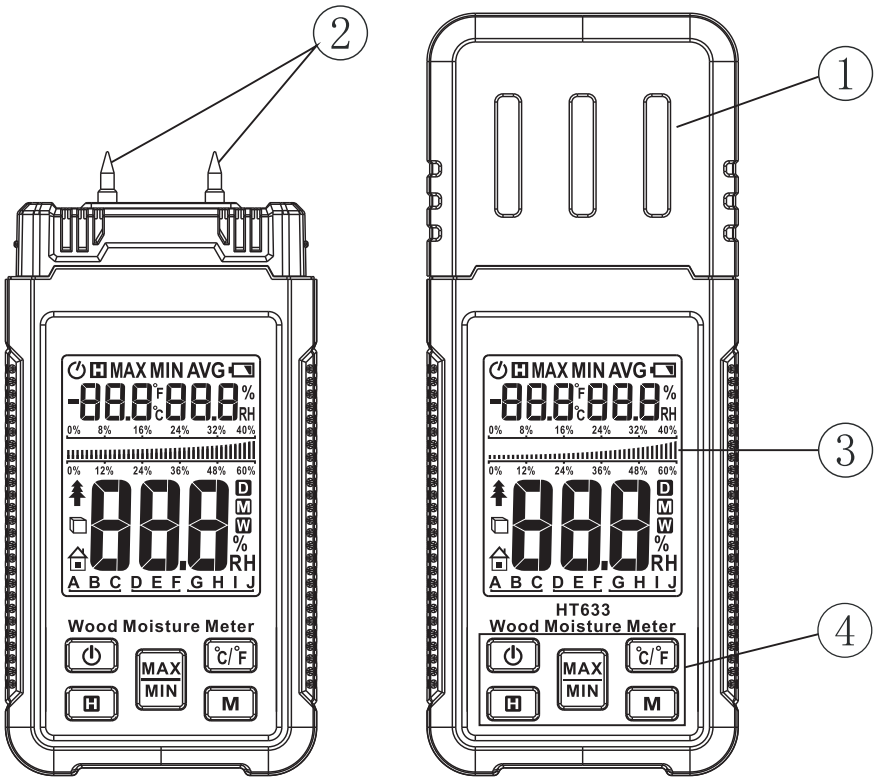
In addition to measuring the moisture content of the material, the ambient humidity and temperature can also be measured so that the dry environment can be evaluated directly on site

Function features

- Built-in characteristic parameters of 7 different kinds of wood and building materials
- Single point measurement
- Multi-point average measurement
- Data hold
- Maximum and minimum measurement
- Automatic shutdown (can be canceled when the user starts up)

- Ambient temperature measurement
- Environmental humidity measurement
- Low battery indicator

Meter description



① Protective cap

② Measurement pins

③ LCD display

④ Function keys

Press key description:

Power on/off key

Data hold key

Temperature unit selection key

Measure material category selection key

Max/Min data key

Measurement operation

Attention

In order to ensure the accuracy of the measurement readings, please select as many points of average measurement as possible. Be sure to measure moisture along the grain.

The values shown are closely related to the building materials/manufacturers and the surrounding environment. Sometimes even for the same material, there will be great differences between different batches

Meter testing

1) Press the ⏻ key to turn on the power and enter the measurement mode.

2) Press the M key to select the measured

material category as A, and the material category letter is displayed in the lower-left corner of the display.

3) After selecting the material category, remove the protective cap, insert two test pins of the instrument into the test contacts on the protective cap at the same time, and ensure good contact.

4) Press the  key to hold the measurement result and the symbol."H" is displayed on the LCD screen.

5) Read the measurement result from the display.

6) When the measurement is finished, please put the protective cap on in time.

Other operations

Auto shut down

Without any operation, the meter will automatically shut down after about 10 minutes to save battery energy. If necessary, you can cancel the automatic shutdown function as follows::

Press and hold the H key, and then turn on the power. The automatic power off will be canceled, and the symbol ⏻ will be hidden. so the user needs to turn the power off manually.

Maximum and minimum measurement

Press MAX/MIN to turn on the function of maximum and minimum values, and then press this key to

view the maximum and minimum values in cycles; press 

and hold for about 2 seconds to exit the function of maximum and minimum values.

Red, Orange and Green tricolor Backlight

Automatically match the appropriate color backlight according to the moisture content

- Red backlight : High moisture content , showing the letter W
- Orange backlight : Moderate moisture content , showing the letter M
- Green backlight : Low moisture content , showing the letter D

Moisture content range for three color backlight

Backlight color	Moisture content range	Material type
Red	W≥24%	A
Orange	15%≤M＜24%	
Green	D＜15%	
Red	W≥22%	B
Orange	14%≤M＜22%	
Green	D＜14%	
Red	W≥4%	C
Orange	2%≤M＜4%	
Green	D＜2%	

Red	W≥2%	D
Orange	1%≤M＜2%	
Green	D＜1%	
Red	W≥3%	E
Orange	2%≤M＜3%	
Green	D＜2%	
Red	W≥2%	F
Orange	1%≤M＜2%	
Green	D＜1%	
Red	W≥3%	G
Orange	1%≤M＜3%	
Green	D＜1%	

Material category selection

Press M key to select A-G material category number. Please refer to the material comparison table for material number selection.

Temperature unit selection

Press ℃/℉ to change the temperature unit.

Technical

Sensor: Resistance type (conductivity measurement), high precision temperature and humidity sensor

Measurement Range/Accuracy:

Material A：9.0%~57.0% ±2.0%

Material B：7.0%~52.0% ±2.0%

Material C：0.9%~23.0% ±2.0%

Material D： 0.0%~12.0% ±2.0%

Material E： 0.7%~9.0% ±2.0%

Material F： 0.5%~10.0% ±2.0%

Material G： 0.0%~17.0% ±2.0%

Temperature &Humidity specification:

Temperature	Measuring range	-20.0℃~60.0℃(-4.0℉~140.0℉)
	Accuracy	0.0℃~45.0℃(32℉~113℉) ±1.0℃/2.0℉ Other: ±1.5℃/3.0℉
Humidity	Measuring range	0.0% ~99.9%RH
	Accuracy	20%~80%:±5.0RH Other: ±6.0RH

Ambient temperature：

-20.0~60.0℃（-4.0~140℉）±1.5℃

Ambient humidity：

0.0~99.9%　±4.0%RH

Use environment: -10 ~50°C / 20 ~90%RH

Storage environment: -10 ~60°C / 20 ~90%RH

Power:3x1.5V AAA Alkaline battery

Maintain

Battery replacement

1) Turn off the power

2) Use a screwdriver to loosen the screws on the battery cover and open the battery cover.

3) Remove the old battery and replace it with a new battery of the same type (3 x

1.5V AAA alkaline battery)

4) Then close the battery cover and lock the battery cover with screws.

Note: Pay attention to the polarity of the battery when replacing it

Clean

Clean the meter surface with a mild detergent and a slightly wet cloth

Material comparison table

MaterialA	Beech, spruce, larch, birch, cherry, walnut: 8.8~54.8 %
MaterialB	Oak, pine, maple, ash, Douglas fir, Eucalyptus:6.8~47.9%
MaterialC	Cement mortar layer, concrete: 0.9~22.1 %
MaterialD	Anhydrous gypsum mortar layer: 0.0 ~11.0 %
MaterialE	Cement mortar: 0.7~8.6 %
MaterialF	Lime mortar, gypsum: 0.6~9.9 %
MaterialG	Brick: 0.0~16.5 %

Calibration Tables of Wood

Abies alba (B)
Abies grandis (A)
Abies Procera (A)
Acacia Wood (A)
Acanthopanex ricinifolius (A)
Acer macrophyllum (A)
Acer pseudoplatanus (A)
Acer saccharum (A)
Aetoxicon punctatum (B)
Afara (A)
Formosa (B)
Afrormosia elata (B)
Afzelia (B)
Afzelia spp (B)
Agathis australis (B)
Agathis Palmerston (A)
Agathis robusta (A)
Agba (A)
Amblygonocarpus andogensis (A)
Amblygonocarpus obtusungulis (A)
Amboyna (B)
Araucaria angustifolia(B)
Araucaria bidwilli (B)
Araucaria cunninghamii (B)
Ash, American (B)
Ash, European (A)
Ash, Japanese (A)
Ayan (B)
Baguacu, Bracllian(A)
Balsa (A)

Bamboo (A)
Banga Wanga (A)
Basswood (B)
Beech, European (B)
Berlina (B)
Berlinia grandiflora (B)
Berlina spp (B)
Betula alba (A)
Betula alleghaniensis (A)
Betula pendula (A)
Betula spp (A)
Bintang (B)
Birch, European (A)
Birch, Yellow(A)
Bisson (B)
Bitterwood (A)
Blackbutt (B)
Bosquiea (A)
Bosquiera phoberos (A)
Boxwood, Maracaibo (A)
Brachylaena hutchinsii (A)
Brachystegia spp (B)
Calophyllum brasiliense (B)
Camphorwood, E African (B)
Canarium schweinfurthii (B)
Canarium, African (B)
Cardwell sublimes (B)
Carya glabra (A)
Cassipourea elliotii (A)
Cassipourea melanosana (A)
Castanea Sativa (B)
Cedar, West Indian(A)

Cedar, Western Red (B)
Cedar, Japanese (B)
Cedrela odorata (A)
Ceratopetalum apetala (B)
Chamaecyparis spp (18-28%mc) (B)
Chamaecyparis spp (8-18%mc) (A)
Cherry and Apple Wood (A)
Cherry and apple wood (B)
Cherry, European (A)
Chestnut (B)
Chlorophora excelsa (A)
Coachwood (B)
Cordia alliodora (A)
Cordia, American Light (A)
Croton megalocarpus (A)
Cryptomelia japonica (B)
Cupressus spp (A)
Cypress, E African (A)
Cypress, Japanese (18-28%mc) (B)
Cypress, Japanese (8-18%mc) (A)
Dacrydium franklinii (B)
Dahoma (A)
Dalbergia latifolia (A)
Danta (B)
Diospyros virginiana (B)
Dipterocarpus (Keruing) (A)
Dipterocarpus zeylanicus (A)

Distemonanthus benthamianus (B)
Douglas Fir (B)
Dracontomelium mangiferum (B)
Dryobanalops spp (A)
Dyera costulata (B)
Elm (D)
Elm (D)
Elm, English (B)
Elm, Japanese Grey Bark (B)
Elm, Rock (B)
Elm, White (B)
Empress Tree(A)
Endiandra palmerstoni (B)
Entandrophragma angolense (B)
Entandrophragma cylindricum (B)
Entandrophragma utile (A)
Erimado (A)
Erythrophleum spp (B)
Eucalyptus acmcnicides (B)
Eucalyptus crebra (B)
Eucalyptus diversicolor (A)
Eucalyptus globulus (B)
Eucalyptus maculate (A)
Eucalyptus marginata (B)
Eucalyptus microcuries (A)
Eucalyptus obliqua(B)
Eucalyptus pilularis (B)
Eucalyptus saligna (B)

Eucalyptus wandoo(A)
Fagus sylvatica (B)
Picea abies(B)
Fir, Douglas(B)
Fir, Grand(A)
Fir, Noble (A)
Flindersia brayleyana (B)
Fraxinus Americana(B)
Fraxinus excelsior (A)
Fraxinus japonicus (A)
Fraxinus mardshurica (A)
Gequ, Nohor(B)
Gonystylus macrophyllum (B)
Gossweilodendron balsamiferum (A)
Gossypiospermum proerox (A)
Greenheart (B)
Grevillea robusta (B)
Guarea cedrata (B)
Guarea thomsonii (A)
Guarea, Black (A)
Guarea, White (B)
Guibortia White (B)
Gum, American Red(A)
Gum, Saligna(B)
Gum, Southern (B)
Gum, Spotted (A)
Gurjun (A)
Hemlock, Western (B)
Hevea Brasiliense (B)
Hiba (A)
Hickory (A)
Hyedunani (B)
Intsia bijuga(B)
Jarrah (B)

Jelutong (B)
Juglans nigra (A)
Juglans regia (B)
Kapur (A)
Karri A
Kauri, New Zealand (B)
Kauri, Queensland (A)
Keruing (A)
Khaya ivorensis (A)
Khaya senegalensis (B)
Kuroka (A)
Larch, European (B)
Larch, Japanese (B)
Larch, Western (A)
Larix decidua (B)
Larix kaempferi (B)
Larix Nephrolepis (B)
Larix occidentalis (A)
Lime(B)
Liquidamber styraciflua (A)
Locust/Robinia pseudoacacia (A)
Locust/Robinia pseudoacacia (A)
Loliondo (B)
Lovoa klaineanaL (A)
Lovoa trichiloides (A)
lroko(A)
Lronbank (B)
Maesopsis eminii (A)
Mahogany, African (A)
Mahogany, West Indian (B)
Makore (B)
Mansonia (B)
Mansonia altissima(B)
Maple, Pacific (A)

Maple, Queensland(B)
Maple, Rock (A)
Maple, Sugar (A)
Matai (B)
Meranti, Red (dark/light) (B)
Meranti, White (B)
Merbau (B)
Millettia stuhimannii (A)
Mimusops heckelii (B)
Miranda (B)
Mitragyna ciliata (B)
Muhuhi (A)
Muninga (B)
Musine (A)
Musízi (A)
Myrtle, Tasmanian(A)
Nauclea diderrichii(B)
Nesogordonia papaverifera (B)
Nothofagus cunninghamii (A)
Oak（White/Red）(A)
Oak（White/Red）(A)
Ochroma lagopus (A)
Ochroma pyramidalis (A)
Ocotea rodiaei (B)
Ocotea usambarensis (B)
Octomeles sumatrana (B)
Olea hochstetteri (B)
Olea welwitschii (B)
Palaquium spp (A)
Paulownia tomentosa (A)

Pecan (B)
pecan (B)
Pericopsis elata (B)
Piacenza excelsa (B)
Picea jezoensis (18-28%mc) (B)
Picea jezoensis (8-18%mc) (A)
Picea sitchensis (B)
Pine, Scots (A)
Pine, Sugar (B)
Pine, Yellow (A)
Pinus caribaea (B)
Pinus contorta (A)
Pinus lampertiana (B)
Pinus nigra(B)
Pinus palustris (B)
Pinus pinaster (B)
Pinus ponderosa (B)
Pinus radiate (B)
Pinus spp (B)
Pinus strobus (A)
Pinus sylvestris (A)
Pinus thunbergii (B)
Pipadeniastrum africanum (A)
Piptadenia africana(A)
Podocarpus dacrydiodes (B)
Podocarpus spicatus(B)
Podocarpus totara(B)
Poplar, Black (A)
Populus spp (A)
Prunus avium (A)
Pseudotsuga menzesii (B)
Pterocarpus angolensis (B)

Pterocarpus indicus (B)
Pterocarpus soyausii (A)
Pterygota bequaertii (A)
Pterygota, African (A)
Pyinkado (B)
Queensland Walnut (B)
Queensland Kauri (A)
Quercus Alba (A)
Quercus Alba (A)
Quercus robur (A)
Quercus spp (A)
Quercus cerris (B)
Quercus delegatensis (B)
Quercus gigantean (B)
Ramin (B)
Redwood, Baltic (European) (A)
Redwood, Californian (B)
Ricinodendron heudelotti (A)
Rosewood, Indian (A)
Rubberwood (B)
Santa Maria (B)
Sapele (B)
Sarcocephalus diderrichii (B)
Scottellia coriacea (B)
Sen (A)
Sequoia sempervirens (B)
Seraya, Red (B)
Shorea smithiana (B)
Shorea spp (B)
Silky Oak, African (B)
Silky Oak, Australian (B)

Southern Cypress(A)
southern cypress (A)
Split California Black Oak (A)
Spruce, Japanese (18-28%mc) (B)
Spruce, Japanese (8-18%mc) (A)
Spruce, Norway (European) (B)
Spruce, Sitka (B)
Sterculia rhinopetala (A)
Sterculia, Brown (A)
Stringybark, Messmate (B)
Stringybark, Yellow(B)
Swietania candollei(A)
Swietenia mahogany(B)
Sycamore (A)
Syncarpia glomulifera (B)
Syncarpia laurifolia(B)
Tallowwood (A)
Tarrietia utilis (B)
Taxus baccata (B)
Teak (A)
Tectona grandis (A)
Terminalia Superba(A)
Thuja plicata (B)
Thujopsis dolabrat(A)
Tieghamella heckelii(B)
Tilia americana (B)
Tilia Vulgaris(B)
Totara (B)
Triploehiton scleroxylon (B)
Tsuga heterophylia(B)

Turpentine (B)

Ulmus americana (B)

Ulmus procera (B)

Ulmus thomasii (B)

Utile (A)

Walnut (B)

walnut (B)

Walnut, African (A)

Walnut, American (A)

Walnut, European (B)

Walnut, New Guinea (B)

Walnut, Queensland (B)

Wandoo (A)

Wawa (B)

White Pine (A)

white pine (A)

Whitewood (B)

Xylia dolabriformis (B)

Yew (B)

EMC&LVD