

Model: WT635

# Wood Moisture Meter Instruction Manual



Version: WT635-EN-00

## A. Overview

This meter is a precision meter, using the most advanced microcontroller computer chip core technology. It offers more accurate data, easy operation, and visual readings. With 10 gears for use, it can offer more accurate moisture value. The meter has a beautiful design. It is easy to carry and suitable for measuring the moisture content of wood, bamboo, paper, herbal medicine and other wood fiber items in various occasions.

### B. Feature

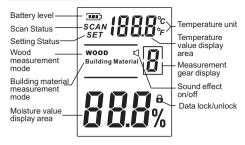
- 1. There are 8 gears available for wood measurement and 2 gears for building material measurement.
- 2. Data hold
- 3. Adopt microcomputer (CPU) to make the measurement more accurate.
- 4. 1000mAh lithium battery
- Large LCD display with backlight illumination ensures clear and parallax free readings.
- 6. Automatic shutdown after 10 minutes without any operation, or manual shutdown.
- 7. Be able to measure the temperature of the environment.

# C. Technical parameters

|                       | Range  | Max error | Resolution |  |
|-----------------------|--|-----------|------------|--|
| Wood                  | Grade 1: 2~69%<br>Grade 2: 1.5~65%<br>Grade 3: 1~60%<br>Grade 4: 0.5~55%<br>Grade 5: 0.5~50%<br>Grade 6: 0.5~45%<br>Grade 7: 0.5~40%<br>Grade 8: 0.5~35% | ±2%       | ±0.5%      |  |
| Construction material | Grade 1: 0.5~15%<br>Grade 2: 0.5~12%   | ±3%       | ±0.5%      |  |
| Temperature           | -9.9 ~ 60°C  | ±2°C      | ±0.1°C     |  |
| Working voltage       | DC 2.75~3.7V   |           |            |  |
| Working current       | 150mA (No sound)   |           |            |  |
| Power                 | 650mW (No sound)   |           |            |  |
| Battery               | 1000mAh 3.7V lithium battery   |           |            |  |
| Size                  | 134*61*25mm  |           |            |  |

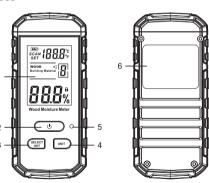
\* Definition of wood moisture content H%: Wood moisture content is the ratio of the weight of water contained in wood to the weight of the whole dry wood: H% = (wood weight - weight of the whole dry wood) / wood weight × 100%. The definition of moisture content of building materials is the same

# D. LCD display



# E. Name of parts

- 1. LCD display
- 2. Power/Data hold/Zero point offset calibration
- 3. Gear switch/Red backlight alarm value setting
- Sound switch/Temperature unit switch
- 5. Indicator light
- 6. Wood moisture induction area
- 7. USB



### F. Table for various trees

| Wood                   | Gear | Wood                    | Gear |
|------------------------|------|-------------------------|------|
| African whitewood      | 1    | Abies holophylla        | 5    |
| Brazil walnut tree     | 1    | maxim<br>Manchurian ash | 6    |
| Walnut tree            | 1    |                         |      |
| Teak                   | 2    | Rose wood               | 6    |
| Apitong                | 3    | Elm tree                | 6    |
| Basswood               | 3    | Syzygium cumini         | 6    |
| Birch                  | 3    | Quercus fabri           | 6    |
| Gmelina chinensis      | 3    | Robinia pseudoacacia    | 6    |
| benth                  |      | Castanopsis delavayi    | 6    |
| Ormosia hosiei         | 3    | Ormosia hosiei          | 6    |
| Rhodes west teak       | 3    | Oriental white oak      | 6    |
| Apitong                | 4    | Dipterocarpus           | 7    |
| White poplar           | 4    | Oak                     | 7    |
| Coquito                | 4    | Quercus sapotifolia     | 7    |
| Banya pine             | 5    | Acer tegmentosum        | 7    |
| Douglas fir/D-fir      | 5    | Alniphyllum pinnatum    | 7    |
| European silver        | 5    | Lemon eucalyptus        | 7    |
| Maple                  | 5    | Oriental oak            | 7    |
| Chinese red pine       | 5    | Hopea mollissima        | 7    |
| Larch                  | 5    | Quercus aquifolioides   | 8    |
| Platycarya strobilacea | 5    | Fujian oak              | 8    |
| Locust tree            | 5    | Polycarya               | 8    |
| Eucalyptus globulus    | 5    | Dalbergia odorifera     | 8    |
| Castanea seguinii      | 5    | Acer henryi             | 8    |
| Privet                 | 5    | Litchi                  | 8    |
| Eucalyptus vitis       | 5    | White ash               | 8    |
| Lauan                  | 6    | Hemlock                 | 8    |

#### Annotation:

If the user is unsure which gear is suitable for which type of wood, it is recommended to use gear 3 first, as it is compatible with most woods. For wood with a too soft texture or strong water absorption ability, gears 1 or 2 are recommended; for wood with a too hard texture or weak water absorption ability, gears 7 or 8 are recommended. Gears 3 to 6 are commonly used for testing most types of wood.

### G. Operation instruction

- 1 Power on/off
- (1) When the power is off, short press the Power button to turn on the meter.
- (2) When the power is on, long press the Power button to turn off the meter.
- (3) Automatic shutdown: After short pressing the power button to turn on, there is no button operation, and it will automatically shut down after about 10 minutes;
- (4) Cancel automatic shutdown: When shutting down, long press the power button until the LCD displays [upf], and the system will not automatically shut down.
- 2. Wood / building materials measurement gear selection After power on, short press the SELECT/SET button circularly, [WOOD] icon lights up to indicate the Wood measurement mode, gear value: 1-8; [Building Material] icon lights up to indicate the Building material measurement mode, grade value: 1-2. Short press the SELECT/SET button circularly to select the wood / building material gear. Pay attention to the change of the [WOOD] icon and [Building Material] icon.

# 3. Sound-light alarm

(1) Sound settings

After the power is turned on, short press the UNIT button to turn on/off the sound. LCD display [  $\square$  ], turn on sound; On the contrary, turn off sound.

(2) Indicator light

After the power is turned on, short press the UNIT button to turn on/off the indicator light. LCD display [◄], turn on the indicator light; On the contrary, turn off the indicator light. The flashing frequency of the indicator varies with the moisture value.

(3) Red backlight alarm value setting

After power on, long press the SELECT/SET button,LCD display will show [SET][RLR] to enter the settings. Short press the power button/UNIT button to increase/decrease the value (long press fast increase/decrease). The default alarm value is 20%, and the adjustable range is 0.1%-90%. Press and hold the SELECT/SET key again to complete the setup.

4. Temperature unit switch

After power on, if [°C] unit is displayed, long press the UNIT button to switch to [°F] unit. Long press the button again to switch to [°C] unit.

### 5. Data hold

During measuring, at the time when the LCD has already displayed the moisture value, if you short press the power button, the lock [ a ] will be displayed and the current data value will be locked. If you short press the button again, the lock [ a ] will disappear and the current data value will be released.

### 6. Zero point offset calibration

After power on, ensure that the product induction area does not touch any objec, ensure that there is no water in the induction area, If the LCD display is not [  $L_{\Omega}$ ], such as display [  $B_{N}$ ], note If the zero reference point of the moisture value changes, ensure that the instrument does not shake and the sensing area does not touch anything. Quickly and continuously short press the power button 3 times and [  $_{\Omega}F_{\Delta}$ ] will display, which means calibration is complete.

# H. Cautions

- 1. The following factors affect the measurement results:
- The measurement section is uneven and has a large error, which is for reference only;
- (2) Measuring plastics, glass, and metals, with numerical values but invalid;
- (3) Inaccurate gear position, can switch to other gears for multiple measurements;
- (4) When the battery is low, it will affect the measurement results. Please charge it in a timely manner;
- 2. Do not let the meter and probe touch water or any corrosive liquid.



Specific Declarations:

Our company shall hold no any responsibility resulting from using output from this product as an direct or indirect evidence.

We reserves the right to modify product design and specification without notice.