

**MINI-LIGNO "DUO" WOOD MOISTURE METER**

LI0004

MANUAL

**1 PRODUCT DESCRIPTION**

Pocket size moisture detection meter suitable for measuring in wood, and construction materials. The mini LIGNO duo is the succession model of the mini LIGNO S. With the mini LIGNO duo you have the option between four base-wooden groups, 8 building materials as for example gypsum or screed and an reference scale. The measuring area lies between 6% and 75%. With building materials it is distinguished between dry, moist and wet.

**1.1 Specifications**

Measuring area:	6 - 75% with wood dry - moist - wet with building materials
Choices:	four wood groups, 8 building materials and one reference scale
Pins:	5 mm and 9 mm
Showing area:	LCD display
Temperature area:	20°C
electricity supply:	9V battery
Weight:	138 g
Dimensions:	129 mm x 63 mm x 27,5 mm

**Group 1:**

louro red, parana pine, particle board (phenolic resinbonded) pine red, rubberwood, zebrano

**Group 2:**

abura/bahia, afrormosia, andiroba/crabwood, angelique/basralocus, beech, beech steamed, cedar white/red, chestnut, fustic/tatajuba, goupia, hardboard, iroko/kampala, lebombo ironwood, missanda, mora, niangon, obeche/wawa, oregon pine, panga panga, parana pine/sapwood, particle board (urea bonded), poplar, ramin, rosewood, teak, tigerwood, wenge.

**Group 3:**

afzelia, agba, alder, alerce, ash, birch, cherry, douglas fir, elm, eucalyptus, hemlock, hemlock eastern, ilomba, jacaranda para, keruing, larch, lauan red, lenga, limba/korina, macoré, maple, merbau, oak red, oak white, olive, parana pine, peroba de campos, pine, pine maritim, pitch pine, radiata pine, rauli, red ironwood, redwood cal., satinwood, spruce, walnut, wood fiber insulation boards.

**Group 4:**

bangkirai/balau, dibetou, kapur, mahogany, mahogany sipo, mahogany/tiama, meranti dark-red, meranti white, opepe, rosewood african, seraya, walnut african.

Concrete 200 kg/m<sup>3</sup>

Concrete 350 kg/m<sup>3</sup>

Concrete 500 kg/m<sup>3</sup>

Cement

Lightweight concrete

Gypsum  
Plaster Screed  
Elastic floor

**Reference scale:**

The reference scale indicates values between 1 and 100. 1 stands for the lowest measurable humidity and 100 for the highest measurable humidity.

**2 WHAT'S IN THE BOX?**

- Mini Ligno "Duo"
- Pins 5,5 mm
- Pins 9 mm
- pouch

**3 PERFORM A MEASUREMENT**

All Lignomat meters check and adjust the calibration. All devices are calibrated for a wood temperature of 20° C (68° F). Largely differing air or wood temperatures may result in deviant measurement results. Before taking a measurement with the Mini Ligno "duo", the protective cap over the pins has to be removed and should be placed on the other end of the meter for easy pin insertion. For correct usage please take the device upside down and locate the indenture of the cap between your thumb and index finger (see figure 1)



All mini LIGNOS are equipped with built-in wood group corrections. Choose the material group as described in "selecting wood group / building materials". Poke the pins deeply into the material. The mini LIGNO is shock and shatterproof. The switch in between the pins automatically turns the mini LIGNO on, when the pins penetrate the material.

The accuracy for the mini LIGNO is 0,1 %. The measuring range of the moisture content in wood appears in between 6 % and 75 %. In building material the measuring range of the moisture content appears in dry, moi and wet. For values above the measuring range the display shows "value over 75 %". For values under 6% the display shows "value under 6 %". In both cases, the backlight of the device lights up red. The voltage of the battery indicator appears during the measurement.



Setting wood groups / building materials:

Click on-off switch twice to access check/change mode (see figure 2) To change setting between 4 groups, 8 species of building materials and 1 reference scale, click on-off switch again. After 5 seconds without clicking, your selection is saved and the meter turns off automatically. You may now start to measure. Change mode is only accessible when meter is off.

Pins

All mini LIGNOS come with 2 sets of pins for a measuring depth of 5,5 mm (3/16") and for 9 mm (6/16"). To exchange pins, remove screw on back cover, open up into 2 halves. The longer pins are stored inside the back cover on either side of the indentations for the pins. Remove and replace pins.

## 4 CALIBRATIONS

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We recommend annual calibration. For calibration, send the instrument, together with a RMA form\* to TQC, Molenbaan 19, 2908 LL Capelle aan den IJssel, NL.

\*You can download the RMA form here: <http://www.tqc.eu/en/service/repairs-calibrations/>

## 5 REPLACING BATTERIES

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The battery last for about 3000 measurements. During measurement, the display shows if the voltage is high enough. To change the battery, remove the screw from the back cover and open in 2 halves.

**Note:** When closing the device, ensure that no wires are pinched.

## 6 MAINTENANCE

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- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- Always keep the instrument in its case when not in use.
- We recommend annual calibration

## 7 DISCLAIMER

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The right of technical modifications is reserved.

The information given in this manual is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this manual without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this manual or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this manual is liable to modification from time to time in the light of experience and our policy of continuous product development.