

## Ligno-DuoTec BW: Multi-function 3-in-1

### Description:

The Ligno-DuoTec BW is a **non-invasive, dual-depth** moisture meter for wood and building materials. The Ligno-DuoTec BW provides precise moisture percentages for a wide variety of wood species and other materials, but the meter can also be used for quick-scanning areas for high and low moisture levels.

The BW can also function as a **thermo-hygrometer** to check ambient relative humidity and temperature and perform RH **in-situ tests** in concrete slabs.

The meter gives true moisture percentages for domestic and tropical wood species, OSB, sub floors, engineered floors, bamboo and gypsum (sheetrock wall board). Other building materials are checked with reference scales tailored to the products to be measured: wood composites, laminated panels, vinyl, textile, lightweight building materials and heavy building materials such as concrete, tile, stone, etc.

The Ligno-DuoTec BW is the right choice for all applications where moisture content and relative humidity need to be measured: for contractors, inspectors and the hardwood flooring industry, for furniture and cabinet making as well as for restoration and maintenance.

**Calibration Stability:** The Ligno-DuoTec BW has proven to be a trustworthy meter, which produces the same accurate moisture percentages today, tomorrow and in a year due to internal calibration checks. The calibration is checked before each measurement and if necessary, automatically adjusted. These "background checks" before measurements assure calibration consistency for Lignomat's pinless meters. Manual recalibration by the customer is not necessary. To confirm calibration and functionality of the meter, Lignomat offers one external calibration check block TS for all pinless meters from Lignomat.

### Features:

- Built-in corrections for different wood species, bamboo and other composite materials
- 3 Reference scales for concrete and other building materials
- 3 Percent scales for drywall (sheetrock): ultra-light, water-resistant, glass-mat wall board
- Temperature stable circuitry with built-in calibration check
- Hold function and automatic shut off
- Large LCD display
- Durable rugged design and easy operation
- 2 year warranty for meter (batteries excluded)
- 1 year warranty for accessories

**Item # BW includes:** Ligno-DuoTec BW meter, pouch with belt loop and 9V battery laminated wood species correction card, manual, 2 year warranty for meter (excluding battery), 1 year warranty for RH accessories

Summary of all Pinless Meters	Item	Depth 1/4"	Depth 3/4"	Bamboo	Gypsum Sheetrock	Concrete Pinless Mode	Reference Scales	RH In-Situ Concrete	Pin Mode
Ligno-Scanner S	S	✓							
Ligno-Scanner D	D		✓						
Ligno-Scanner SD	SD	✓	✓						
Ligno-Scanner SDM	SDM	✓	✓	✓	✓	✓	✓		
<b>Ligno-DuoTec BW</b>	BW	✓	✓	✓	✓	✓	✓	✓	
Ligno-VersaTec	V-0	✓	✓	✓	✓	✓	✓	✓	✓



- Accurate, reliable and easy-to-use.
- **Dual-depth**, pinless moisture meter
  - Thermo-Hygrometer
  - In-situ RH concrete moisture testing

Quality built to last.



A favorite meter for any floor application with correction settings for domestic and tropical wood species, bamboo and subfloors. Can be self-calibrated for engineered products.



Building materials including concrete can be measured with one of the reference scales available in the Ligno-DuoTec BW.



Specifications are subject to change without notice.

Lignomat USA LTD, 14345 NE Morris Ct., Portland OR 97230,

503-257-8957, 800-227-2105, sales@lignomat.com www.lignomat.com Page 1/3

## Ligno-DuoTec BW in pinless, non-invasive Mode

Lignomat's unique pinless measuring technology assures calibration accuracy, reliability and dual-depth measuring capability. The Ligno-VersaTec produces the same accurate moisture percentages today, tomorrow and in a year.

In addition to built-in corrections for different wood species, Lignomat developed a special set of calibrations different from wood calibrations to fit different types of solid and engineered bamboo floors.

The meter also comes with reference scales for concrete and other building materials. Reference scales are used in restoration and the building industry to quickly detect different moisture levels. Before performing in-situ probe testing in concrete, pinless measurements can find areas of high moisture levels, where in-situ probes should be set. However, it is not the proper method to determine if a concrete slab is dry enough for resilient floor coverings to be installed. For more information go to the NWFA Installation Guidelines. For use of pinless meters see ASTM F2659.

\* Another pinless advantage: The Ligno-DuoTec BW measures lower moisture content than pin meters. That is a great advantage for the flooring industry for areas with low relative humidity conditions and high-desert climate zones.

**Measuring Depth Matters:** Lignomat's dual-depth meters including the Ligno-VersaTec are more accurate, because of the ability to choose the measuring depth according to the thickness of the material to be measured. No false readings.

- Measuring products less than 3/4" thick: Many panel and floor products are less than 3/4" thick. These panels can be measured accurately with the 1/4" depth. For example: When 5/8" floor planks are installed and you measure 3/4" deep, you cannot be sure that the subfloor or concrete underneath is not affecting the readings. You definitely only measure the floor planks with the 1/4" depth setting.
- Measuring engineered products: You can find the true moisture content of the thin top layer made from hardwood by using the corresponding species setting and 1/4" depth. Using those results, a setting can be found for the entire floor plank.
- 1/4" depth setting allows for checking dryness of waterborne finishes. Works great for veneer or for measuring moisture close to the surface.
- Many building materials including drywall are quickly scanned with the 1/4" depth setting. The shallow measuring depth assures that the material behind the drywall is not included in the measuring field and cannot produce false high values.

### Specifications for Ligno-DuoTec BW Pinless Mode:

Size: 4.75"L X 2.5"W X 1"H, 12 x 6 x 2.5 cm, 1 9-V battery included

Size of measuring pads: 1 5/8" by 2 5/8", 4.2 by 6.8cm

Wood Species Settings: 71 individual settings for wood species, OSB, AdvanTec and other subfloors, panel products, etc. (addtl. 11 Bamboo Settings)

Wood Species Corrections can be set according to the Specific Gravity: 0.3-1.0 (#30-#100)

Corrections for Gypsum: 1 percent scale for gypsum and drywall. Range 0-2%

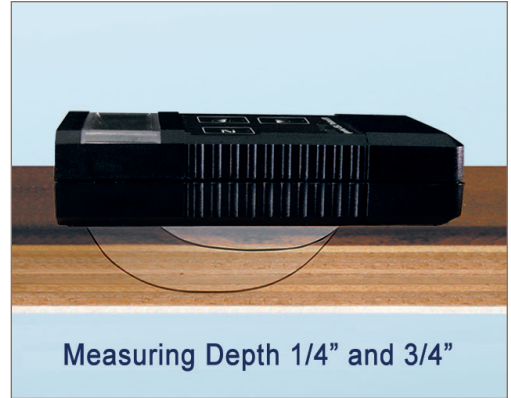
Bamboo Settings: 11 settings for solid and engineered bamboo floors. Lignomat developed a unique set of calibrations different from any wood calibration to fit different types of solid and engineered bamboo floors.

Reference Scales: - **for panels** made out of wood and laminated products, textile, etc  
- **for light-weight** building materials other than drywall and gypsum  
- **for concrete** and similar building materials, brick, stone, tile, etc.

Measuring Range: Wood: 5\*-60% dependent upon wood species setting:  
- Less accurate above fiber saturation point at 25%  
- Measures lower moisture than 5%  
Gypsum: 0-2% Reference Scales 0-99.

Measuring Depth: 1/4" (7mm) and 3/4" (20mm)

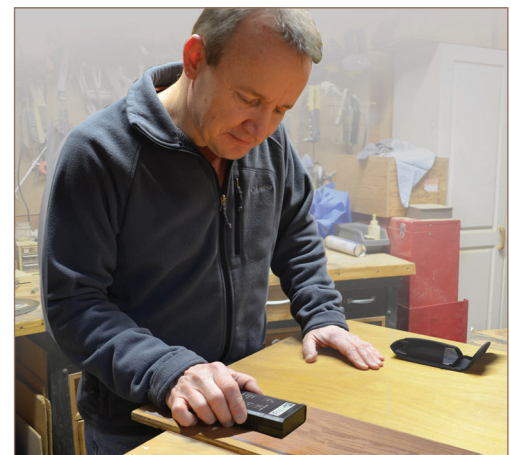
Resolution: 0.1% for entire range



Dual-depth allows choosing the measuring depth according to the material thickness. Works also great for engineered floors.



Lignomat's dual-depth scan meters have become the go-to meter in the flooring industry.



The ideal meter to scan a large number of boards quickly and easily.



Specifications are subject to change without notice.

Lignomat USA LTD, 14345 NE Morris Ct., Portland OR 97230,

503-257-8957, 800-227-2105, sales@lignomat.com www.lignomat.com Page 2/3

## Ligno-DuoTec BW as Thermo-Hygrometer

The RH BluePeg probe is the perfect addition to the Ligno-DuoTec BW. Now you can measure wood moisture and relative humidity. Comparing these values to the EMC chart will tell you if wood is stable, or shrinking and expanding is to be expected.

The relative humidity is also very important, when restoring water damage. High relative humidity allows mold growth. Mold can be avoided by keeping the relative humidity low. Measuring ambient conditions is a first step.

The Ligno-DuoTec BW comes with a 35mm stereo connector mounted in the top of the meter. Lignomat's RH BluePeg probe can be connected via the adapter RH. The RH BluePeg probe comes with a fast responding, high precision sensing element. The meter is set to indicate relative humidity, ambient temperature, dew point temperature and grains per pound (GPP). Besides the adapter RH, any 32mm stereo cable can be used for remote measurements. We offer 6ft extension cables, longer cables are available upon request.

## Ligno-DuoTec BW for in-situ RH Concrete Testing

Our engineering team is proud to present Lignomat's reliable and accurate RH BluePeg system for in-situ moisture testing in concrete. In addition to implementing the latest sensing technology, we have designed RH probes, sleeves, cables and meter to allow for fast, simple and fail-proof testing. Lignomat's RH system has retrievable, multi-use probes. The system complies to ASTM F 2170.

The Ligno-DuoTec BW can serve as a reader for in-situ RH probes. Readings can be taken in seconds with easy-to-use, fail-proof cable connection. Once the Ligno-DuoTec BW is connected to probe and cable, the meter instantly gives RH and Temp values. No pin arrangements on the cable need to be fitted. No-set up procedure is necessary.

After the initial investment, only the sleeves are disposable. RH probes can be used time and time again. See ASTM standard F2170 for interim calibration testing of RH probes.

The ASTM standard F2170 sets the time limit for all in-situ probe testing. Nevertheless, shortly after the probes are inserted, readings can be obtained to evaluate moisture conditions for being low or too high.

During the first year we offer to test the calibration of RH BluePeg probes three times without a charge. You can also perform on-site calibration testing with the calibration test bottle.

## Specifications for RH BluePeg Probe:

Size of RH BluePeg probe:  $\varnothing$  0.5" (1.3cm), length 1.35" (3.3cm)

The RH BluePeg probe uses a single microchip, factory calibrated to NIST standard.

Applications include: Measuring ambient conditions and in-situ moisture testing in concrete.

**Measuring Range for Relative Humidity:** 0-99.9%.

Accuracy for RH:

$\pm$  2% for 10% - 90%

$\pm$  3% for below 10% and above 90%.

**Measuring Range for Temperature:** 5°F to 160°F (-15°C to 70°C).

Accuracy for Temperature:

$\pm$  0.5°F for 32°F to 120°F ( $\pm$  0.3°C for 0°C - 50°C)

$\pm$  1°F for below 32°F and above 120°F ( $\pm$  0.5°C for below 0°C and above 50°C).

Measuring range for DPT: -17.8°F to 160°F (0°F to 70°F)

Measuring range for GPP: 0-99.9

Resolution for all indicated values is 0.1% and 0.1°F



RH, Temp, DPT and GPP indicated on easy-to-read display.

The 3-digit number below RH lists the individual probe serial number, which allows easy tracking of the RH BluePeg probes. Order as package BW-B.



All accessories for in-situ probe testing of concrete are available from Lignomat, complying with ASTM F2170.



Package BW-KM includes meter, and accessories for in-situ RH testing, ideal for contractor, floor installer and inspector.



Specifications are subject to change without notice.

Lignomat USA LTD, 14345 NE Morris Ct., Portland OR 97230,

503-257-8957, 800-227-2105, sales@lignomat.com www.lignomat.com Page 3/3