

## Multi-Function Ligno-VersaTec Pin - Pinless - RH

### Description:

The Ligno-VersaTec combines the accurate and dependable measuring technologies of Lignomat's pin, pinless (dual-depth) and RH meters. No matter which function you use the Ligno-VersaTec gives superior results:

- pinless mode same as Ligno-Scanner SDM. The VersaTec by itself is a pinless meter.
- pin mode same as Lignometer K
- RH mode same as Ligno-Tec RH

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..

Everybody needing a versatile, accurate meter will appreciate the multiple functions and the reliability of the Ligno-VersaTec. Reliability, calibration accuracy and ease-of-operation are the outstanding features. Unsurpassed accuracy is guaranteed even in the critical range below 8%. In addition, the circuitry has been designed to be stable in extreme ambient conditions,

The calibration is checked internally and if necessary, automatically adjusted before each reading. This "background check" happens before each measurement for pin and pinless mode. This assures calibration consistency for all Lignomat meters. Manual recalibration by the customer is not necessary. To confirm calibration and functionality of the meter, Lignomat provides calibration check blocks for pin and pinless mode.

With the Ligno-VersaTec you can choose the right measuring mode and the right accessories for the job on hand:

It could be tracking moisture problems with a pin electrode or measuring humidity in a crawl space. Floor installers can check cupped floors with the dual-depth pinless mode. Pinless Search and Compare Mode can track moisture in walls, ceilings and floors. Lumber mills use the meter to make sure QC requirements are followed.

Pin and pinless side by side: Large areas can be scanned fast and easy. Dual-depth measurements at 1/4" and 3/4" deep allow to compare moisture close to the surface and deeper down. Once a problem is found, pin electrodes can be used to investigate further.

RH mode: Add RH BluePeg humidity probe to the Ligno-VersaTec and you have a precision thermo-hygrometer for RH, T, GPP, DPT. Add RH concrete accessories to perform in-situ moisture tests in concrete (ASTM F-2170).

**For all industries** where moisture measurements are an integral part of everyday decision making: The Ligno-Versatec can be used for fast estimates of high and low moisture levels, but the meter also provides precise moisture percentages for a wide variety of wood species and other materials. Various electrodes are available to measure up to 7" deep. Cables and probes are available for in-kiln measurements.

### Features:

- Built-in corrections for different wood species, bamboo, etc. see pages 2 and 3
- Built-in wood temperature corrections for pin mode
- 3 Reference scales for concrete and other building materials
- 3 Percent scales for drywall, sheetrock; ultra-light, water-resistant, glass-mat wall board
- Dual-depth pinless measurements
- 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 Ligno-VersaTec (batteries excluded)
- 1 year warranty for accessories (pins excluded)



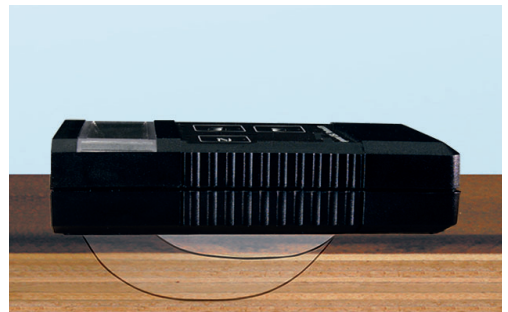
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- Wide measuring range
- Individual wood species and
- wood temperature corrections
- pin - dual-depth pinless mode - RH mode



### Measuring Depth 1/4" and 3/4"

The VersaTec by itself is a pinless, dual-depth meter with the same functions as the Ligno-Scanner SDM. However, you have the option of adding accessories for pin, RH measurements and in-situ testing. All connectors are provided for.



We offer a wide selection of accessories to optimize usage. Standard pins provide a measuring depth up to 7".

## Ligno-Versatec in Pin Mode

The Ligno-VersaTec does not come with built-in pins, therefore an attachment electrode is necessary to obtain moisture measurements in pin mode. We offer 4 electrodes with an assortment of pins. For remote measurements in lumber dry kilns we offer in-kiln cables and probes, switchboxes, etc.

Package V2-M: Includes meter, slide-hammer, 2 pair pins (1 pr DA 1.5" and 1 pr DZ 1"), cable and case. Best quality control is accomplished by taking consecutive readings with the teflon-coated pins. As the electrode pins are hammered towards the core, any moisture gradient within the board becomes obvious.

Package V4-M: Includes meter, inspector electrode / cable and EG insulated 3/4" pins and a case. The E14 electrode was designed for construction, restoration and maintenance to easily measure hard-to-reach areas in the building envelope.

In addition, the Electrode E14 can be used to penetrate hard materials such as strand bamboo even concrete. The electrode allows hammering on top to penetrate these hard surfaces.

Package V24-M includes the Electrodes E12 and E14.

## In-Kiln Monitors

For in-kiln applications we offer accessories from a one-cable in-kiln monitor to a stand-alone wireless monitoring system for multiple kilns. Give us a call to find the right set-up for your kiln operation:

### 800-227-2105

You can count on our expertise when calling. We have sold and provided service for thousands of kiln control systems with in-kiln monitors. We offer wireless and wire-bound measurements for all kilns from solar to large industrial dry kilns.

## Specifications for Pin Mode:

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

Wood Species Settings: 150 individual settings for wood species, bamboo (strand, ...) OSB, Advantec and other subfloors, panel products, etc.

Sheetrock Settings: 3 percent scales for:  
- ultra-light wall board  
- water-resistant wall board  
- exterior/interior glass mat wall board

Reference scales: 3 scales  
- for panel 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: 5-99% dependent upon wood species setting  
Gypsum: 0-7.5%  
Reference scales: 0-99

Resolution: 0.1% for entire range

Wood Temperature Settings: 0<sup>o</sup>-210<sup>o</sup>F (-20<sup>o</sup>-90<sup>o</sup>C)

Same features as the Lignometer K moisture meter.



Quality Control with E12 slide-hammer electrode, pins up to 2" deep.  
Package: V2-M



Pkg: V4-M:  
Ideal package for the building industry, new construction, restoration and maintenance with the handprobe to reach corners and wall (pins up to 7" long optional)



This is the right meter for your kiln operation. Corrects for different wood species and wood temperature. Accessories are available for one-cable to complete kiln monitor, switch box and all.



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## Ligno-VersaTec 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 correction settings 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-VersaTec in pinless mode measures lower moisture content than in pin mode. 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 such as the Ligno-DuoTec BW 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 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: 150 individual settings for wood species, bamboo (strand, ...) OSB, AdvanTec and other subfloors, panel products, etc.

Wood Species Corrections by Specific Gravity: 0.3-1.0 (30-100)

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.

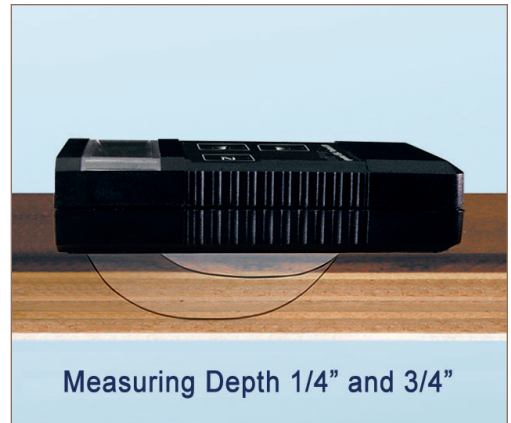
Reference scales: - for panel made out of wood and laminated products, textile, etc  
- for light-weight building materials other than drywall and gypsum  
- for concrete and similar building materials, brick, stone, tile, etc.

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

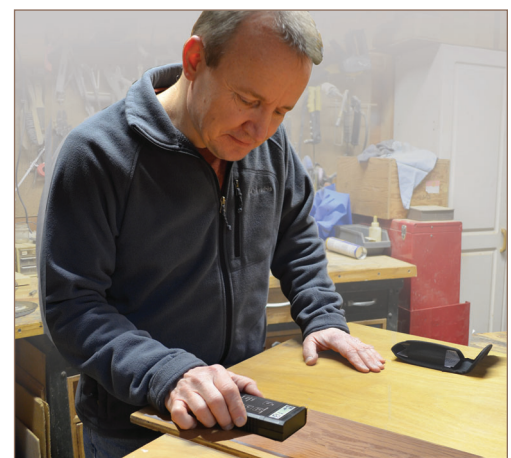


Measuring Depth 1/4" and 3/4"

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



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



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



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## Ligno-VersaTec as Thermo-Hygrometer

The RH BluePeg probe is the perfect addition to the Ligno-VersaTec. 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 only be avoided by keeping the relative humidity low. Measuring ambient conditions is a first step.

The Ligno-VersaTec comes with a 35mm stereo connector mounted besides the BNC connector 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 upon request.

## Ligno-Versatec 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-VersaTec 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-VersaTec 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, measurements can be taken 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: 0.5" by 1 1/4", 1.2 by 3.2cm

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: +/-1.8% for 10% - 90%

+/-3% for below 10% and above 90%.

Measuring range for **temperature**:

5°F to 180°F (-15°C to 82°C).

Accuracy for Temperature: +/-0.5°F for 32°F to 104°F (0°C - 40°C)

+/-1°F for <32°F and >120° F (<0° C and >49° C).

Measuring range for GPP: 0-99.9.

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



RH, T, DT and GPP indicated on easy-to-read display.

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



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



Package V2-KM includes meter, slide hammer and accessories for in-situ RH testing, ideal for floor installer and inspector.



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