

Package V2-11M

Applications

For monitoring moisture with extension cables in lumber drying, storage facilities, restoration applications, and home maintenance. In addition, the Ligno-VersaTec can be used at any time to measure in pinless mode 1/4" and 3/4" deep and in pin mode with Electrode E12 to 2" deep with DB pins.

Advantages

The Ligno-VersaTec is the most versatile meter, all-in-one. **Pin – pinless – RH**. A great meter for lumber drying and wood product manufacturing. Wide moisture range, multiple species corrections and wood temperature corrections are built-in. E12 electrode is used for spot-checking surface and core moisture for even or uneven moisture distribution.

Cables and PK probes are used:

- For kiln drying, nobody has to enter a hot kiln. The drying cycle is monitored to avoid over and under drying and to determine, when the lumber is dry.
- For monitoring logs, lumber, laminated beams, structural elements in buildings, crawl spaces, attics, roofs, restoration projects.

Description

The package consists of the moisture meter Ligno-VersaTec, PK wood probes / cable sets and E12 pin electrode in a hard-shell carry case.

The **Ligno-VersaTec** is the most advanced meter among Lignomat's meters for pin-pinless-RH measurements. The meter provides for pin and pinless measurements and the option to add a RH probe for RH/T/DT/GPP readings. Features are the wide moisture range and more than 170 correction settings for measuring domestic and tropical wood species, OSB and other panel products, bamboo, gypsum and different types of wall boards. Relative scales are included for concrete, cementitious materials, plastics, insulation...

The **pinless mode** on the Ligno-VersaTec is set to measure 1/4" and 3/4" deep, using separate sets of calibrations for each measuring depth. Pinless mode in the VersaTec allows fast and easy measurements of flat materials up to 3/4" deep. If the material is not flat, or measurements should reach deeper and differences between surface and core moisture have to be measured, the Electrode E12 should be used to accomplish those tasks.

PK probes and cables have been used to measure moisture inside a dry kiln for over 50 years. To this day, the same PK probes are used with Lignomat's dry kiln control systems for small and large, industrial kilns. If multiple probes and cables are used, kiln performance can be checked by distributing the cables in top, bottom, sides and middle of the kiln. Cables can be custom-cut upon request, standard 6ft.

All PK probes have a hole in the head for pushing a 4mm banana plug through. This is a fail-proof connection. The probes have teflon-coated shanks measuring at the core not affected by surface moisture. Probes are inserted into pre-drilled holes and are set and removed properly with the Pulling Tool.

All PK probes are made out of stainless steel to withstand the harsh conditions in a kiln. They can be re-used for many drying cycles. Using pulling tool will help to set and remove probes without any damage.

PK probes can be used in many materials other than wood, such as concrete, brick, tile, roofing. They monitor changes in moisture content at the depth where the tips of the probes are placed. PK probes can be used with handheld moisture meters, angle connector and switchbox, MC Tracker data logger or wireless transmitters.



Multi-function meter with extension cable for remote measuring. From lumber drying to monitoring critical areas in the building envelope.



Pinless mode: fast and easy moisture checking of lumber and flat boards. Domestic and tropical woods, wood floors, engineered products, bamboo.



Place probes in the kiln, read moisture outside without opening a hot kiln. Multiple probes allow monitoring different areas in a kiln.

Electrode E12: The E12 is designed to measure from the surface to 2" deep (with DB pins). All E12 pins are insulated and measure only at the tip. The slide hammer helps inserting and removing the pins. As pins are hammered into the material, consecutive readings show the moisture distribution within the material at every depth level the pins are driven to. The ability to measure a moisture gradient is one of the main reasons for our customers to use the electrode E12, even though the Ligno-VersaTec by itself can take moisture measurements at two depth levels 1/4" and 3/4" deep in pinless mode.

Wood: Taking numerous readings as pins are inserted, indicate if a moisture gradient exists or if the wood is dry throughout the core. Making sure wood is evenly dried is the best assurance for quality wood products. The thicker the wood, the more important core readings become. When inspecting wood floors, using the E12 gives you a tool to assess moisture distribution through floor planks into the sub floor without having to remove any floor planks. No other tool can achieve the same measuring accuracy at a defined depth.

Restoration: The moisture in structural components even behind wall coverings can be checked with the electrode E12. When assessing water damage, the pins of the E12 can be driven to different depth levels and thus indicate how far water has been absorbed or if there is still residual moisture inside the structure after drying. Insulated pins can measure dry material behind wet surfaces.

We recommend adding the electrode E14-V (Package V24-M), if the round head of the E12 cannot reach the area to be measured or you need to measure deeper than 2".

Meter Specifications

Size: 4.75"L X 2.5"W X 1"H

Measuring Range:

- Wood: 5-99% (pin)
- Gypsum, Sheetrock, Wall Boards: 0-7%
- Reference Scale: 0-99

Display: Resolution: 0.1% for all values

Species Corrections

over 170 settings to correct for:

- domestic and tropical wood species
- bamboos, vertical, horizontal and strand
- OSB and wood-based panel products
- gypsum, drywall, wall boards interior, exterior, and water resistant (%)

3 Reference Scale for building materials including concrete

Operation: Working with the Ligno-VersaTec is simple with clearly marked push buttons. Meter fits comfortable in your hand for pin and pinless readings.

Functions:

Push SET repeatedly to dial settings for species, wood temperature and measuring depth.

Change settings with up and down keys.

Push READ to obtain moisture measurements.

Instrument stays on for 3 minutes, then turns itself off.

At any time you can change from pin mode to scan mode by depressing up or down button

When the RH BluePeg is connected, the meter automatically switches to RH mode. No further set-up is necessary.

HOLD function is available for measuring in places, where the display cannot be seen or when taking photos of the display.

Display shows moisture percentage, wood species, wood temperature (only pin) and depth settings (only pinless).



Slide-hammer to pin-point moisture distribution from surface to core.



The electrode E12 has a slide hammer to insert and extract pins easily. For measurements up to 2" deep.



At any time, the Ligno-VersaTec can be used as pinless dual-depth moisture meter.

Electrode E12 Specifications

Weight 3.5 lbs. Length without pins 12".

A cable connector (BNC) is mounted at the head of the electrode.

A BNC cable (3ft) to connect electrode E12 to Ligno-VersaTec is included in the V2-11M

E12 pins are teflon coated to only measure at the tip and come in three options:

- DZ Pins insulated, measuring depth 1"
- DA Pins insulated, measuring depth 1.5"
- DB Pins insulated, measuring depth 2"

1 pair DZ pins and 1 pair DA pins are included in the package. DB Pins not included.

PK probes can be used in many materials other than wood, such as concrete, brick, tile, roofing. They monitor changes in moisture content at the depth where the tips of the probes are placed. Pulling tool helps to insert and remove PK probes properly.

PKA: measuring depth 1/2" (1.2cm) 4/4 lumber

PKB: measuring depth 3/4" (1.9cm) 6/4 lumber

PKC: measuring depth 1" (2.5cm) 8/4 lumber

PKD: measuring depth 1 1/2" (3.8cm) 12/4 lumber

PKE: measuring depth 2 3/4" (7cm)

Measurements from PK probes can be obtained with

- handheld moisture meters (Lignometer K or Ligno-VersaTec)
- MC Tracker data logger
- wireless transmitters

Options:

Add EMC holder, angle connector and LP-H cable to measure EMC (relative humidity) inside a dry kiln, in your warehouse, manufacturing place, etc.

Package Includes

1 Ligno-VersaTec meter with 9V battery, laminated wood group card, instruction manual, built in connector for assortment of external electrodes and in-kiln probes (Adapter H)

1 pair PKB probes

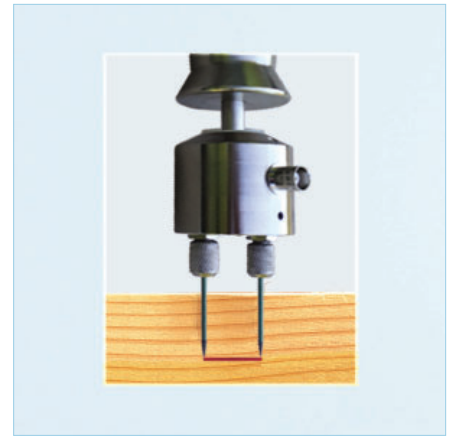
1 PK-H cable

1 adapter H

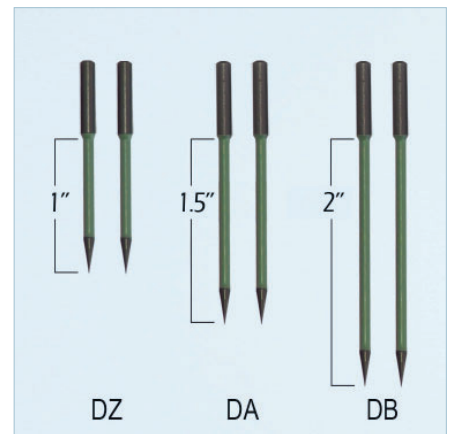
1 Slide-hammer electrode E12, 1 pair pins DZ 1" and 1 pair pins DA 1.5", teflon-coated

1 BNC cable for E12

1 Case M



Teflon coated pins measure only at the tip. The E12 is the only tool to measure moisture at a defined depth.



Pins for E12: DZ, DA, DB pins can only be used with the Electrode E12. DB pins need to be ordered separately, not included in package.



Pulling tool fits over PK probe head. Assures placement and removal without damage to the probes. Must be ordered separately.



Assortment of PK probes for a measuring depth of 1/2" to 2 3/4" deep. V2-11M package comes with PKB probes, work for 4/4 and 6/4 lumber.