

Package VPP-M

Description

The multi-use package VPP-M includes Ligno-VersaTec **pin-pinless-RH** meter and electrodes E12, E14-V and E16.

Applications

Used by flooring inspectors, contractors, water restoration specialists, anyone who needs to investigate moisture conditions in wood floors, drywall, roofing materials and structural elements in the building envelope. With the three electrodes E12, E14 and E16 you can choose the right tool for every moisture measurement application.

Advantages

Pin – pinless – RH: When every job is different, the **Ligno-VersaTec** is the most versatile meter, all-in-one. It measures moisture in a wide range of materials and in relative humidity of air (add RH Thermo-Hygro probe). Meter also complies to ASTM F2170 for in-situ RH concrete test.

The electrode E12 allows accurate measurements up to 2" deep in wood with insulated pins. The electrode E14-V is made for moisture investigations in buildings to measure in corners, under window sills and otherwise hard to reach problem areas. E14-V is tough enough to withstand strong pounding to insert the pins into hard materials. Electrode E16 allows measurements in hard building materials such as concrete, tile, or stone.

The **Ligno-VersaTec** meter combines the accurate, dependable measuring technologies of Lignomat's pin, pinless (dual-depth) and RH meters. Everybody needing a versatile, accurate meter will appreciate the multiple functions and the reliability of the VersaTec. A wide measuring 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...

With the Ligno-VersaTec you can choose the right measuring mode and the right accessories for the job on hand for fast estimates or accurate percent measurements.

The **slide-hammer electrode E12** is designed to measure wood from the surface up 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 E12.

Wood: Taking numerous readings as the pins are driven towards the core 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 and stability of wood products. 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.

Restoration: The moisture in structural component 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 a wet surface.

Inspector Electrode E14-V can be used for measuring moisture on any surface up to 3/4" deep with insulated pins EG. In addition, the slim shape allows for checking places which cannot be reached with the electrode E12; around pipes, below window sills, into corners, through roof coverings. The light weight of the E14 makes it easier to obtain measurements in hard-to-reach areas. Adding the 7" long EL pins lets you reach through



Multi-function meter with Electrode E12, E14-V and E16.

With the three electrodes E12, E14 and E16 you can always choose the right tool for every moisture measurement application.



Pinless dual-depth mode: fast and easy moisture checking of lumber and flat boards. wood floors, engineered products and bamboo. As well as drywall, wall boards and other building materials. engineered products, bamboo.



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

For quality control, for restoration jobs, when installing, inspecting floors.

wall covers and insulation or under baseboards into structural components. Great for EIFS inspections. The knob at the end of the handle can be removed and replaced by a paint brush handle or broom stick. Using the paint brush handle allows to extend the reach. You can stay a safe distance from mold infested areas and still be able to get reliable measurements. Extending the handle with a broom stick makes measuring carpets and carpet padding easy without crouching down. Ceilings can be checked for moisture leakage without a ladder.

Hard Materials: Electrode E14-V and pins EG are very sturdy and allow hard pounding to insert the pins into hard materials. Works for strand bamboo as well as hard and cementitious panel products.

Electrode E16: When measuring hard materials such as concrete, it is hard to push the pins from electrode E12 or E14 into the material. Using the two separate posts of the electrode E16 make it easier to insert the pins. Pre-drilling holes may be necessary to reach the desired measuring depth.

Using the Ligno-VersaTec with electrode E16 to measure the moisture in concrete, gives immediate results in comparison to the Calcium Chloride or RH method. The measurements can show areas of high and low moisture, either when measuring different locations or when measuring with EL pins at different depth levels. However, it cannot replace the in-situ probe test or the Calcium-Chloride test which allow to determine, if a wood floor can be installed.

Measurements obtained from concrete or cementitious materials are not true percent values. They only can be used as reference numbers or comparative readings. Comparative measurements become meaningful, when a dry sample piece of the material is available. Measurements can then be compared to the moisture value obtained from the dry sample.

Meter Specifications

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

Measuring Range:

- Wood: 5-99% (pin)
- Gypsum, Sheetrock, Wall Boards: 0-22%
- 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).



E14-V reaches easily into corners where the electrode E12 cannot be placed. Light-weight, sturdy and easy to use. Handle can be extended.



Measurements obtained from concrete or cementitious materials are not true percent values. They only can be used as reference numbers or comparative readings.



Reaching through insulation and wall boards. Depth measurements are possible with the long EL pins. Photo shows usage with E16 electrodes. EL pins can also be used with the E14 electrode. Reaching through insulation and wall boards.

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 VPP-M

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 are not included.

Electrode E14-V Specifications

Weight 5 oz. Length without pins 7".

The electrode E14-V comes with a cable to connect to the Ligno-VersaTec.

E14 pins are teflon coated to only measure at the tip and come in two options:

- EG Pins insulated, measuring depth 3/4"
- EL Pins insulated, measuring depth 7"

1 pair EG pins is included in the package. EL pins are not included.

Electrode E16 Specifications

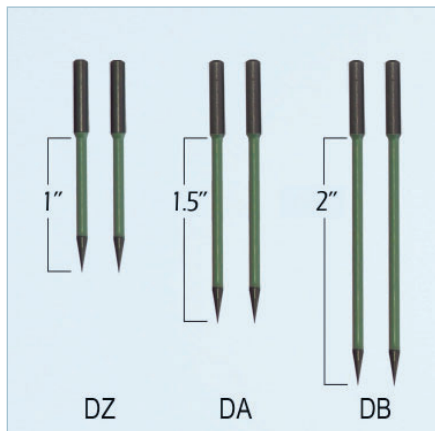
Electrode E16 consists of 2 posts. Each post is connected with the BNC-E16 cable to the Ligno-VersaTec. The split cable with two 4mm plugs and a BNC connector for the Ligno-VersaTec is included in the package.

E16 Pins:

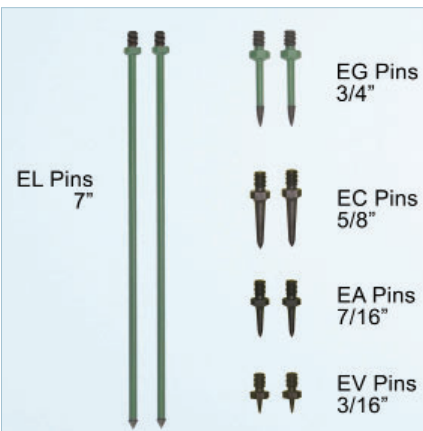
- teflon-coated pins EG and EL
- un-coated pins EC, EA, EV (1 pair EC pins is included with E16)

1 pair EC pins is included in the package. EG, EL, EA and EV pins are not included.

Pins for electrode E12



Pins for electrodes E14 and E16



Package Includes

1 Ligno-VersaTec meter with 9V battery, laminated wood group card, instruction manual and built in BNC connector for external electrodes including E14-V and in-kiln probes or monitoring cables (with 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 Inspector electrode E14-V with BNC cable, 1 pair pins EG 3/4", teflon-coated

1 Specialty electrode E16, 1 pair pins EC 5/8", un-coated

1 BNC-E16 cable for E16

1 Case M



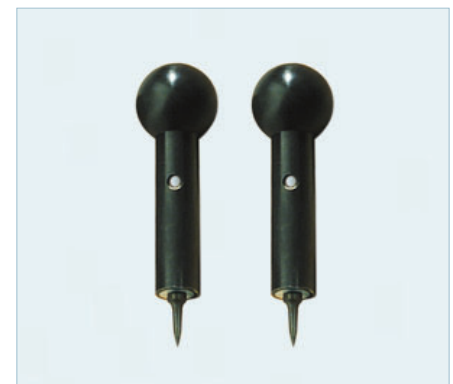
The electrode E12 has a slide hammer to insert and extract pins easily.

For measurements up to 2" deep.



Inspector Electrode E14-V is designed to measure hard to reach areas easily..

E14-V is tough enough to hammer pins into hard materials.



Electrode E16 for hard bldg materials and cement-based panels for
Connects with BNC-E16 cable to VersaTec