

Package K2-11M

Description

The K2-11M package includes the PK probe/cable system to monitor places that would otherwise be unreachable and the electrode E12 for measurements anywhere, anytime.

Applications

Whenever moisture should be measured, but the location cannot be reached with hand probe attachments. PK probe and cable systems are often used in lumber drying – for all sizes and types of dry kilns – from solar to conventional steam kilns. Also used to monitor studs in a crawl space or structural lumber in a roof. Additionally for on-the-spot, in-depth measurements, the E12 electrode is included.

Advantages

The Lignometer K is Lignomat's most advanced pin meter with multiple wood species and material corrections and wood temperature corrections. The meter also has reference scales for concrete, laminates, plastics and other non-wood materials. Reliable, accurate and sturdy.

Electrode E12 allows accurate surface and core measurements with insulated pins. PK probes and cables allow monitoring hard-to-reach areas.

- When used during kiln drying, nobody has to enter a hot kiln and the center of the load can be monitored to avoid over drying and under drying.
- For monitoring logs, lumber, laminated beams, structural elements in buildings, crawl spaces, attics, roofs, restoration projects, research projects.

The **Lignometer K** incorporates reliability, calibration accuracy and ease-of-operation with over 150 individual wood species corrections, a wide measuring range 5-99% and built-in wood temperature corrections. Unsurpassed accuracy is guaranteed even in the critical range below 8%. The Lignometer K has proven to perform well in rough mill environments with day-to-day usage.

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 and Cables can be used with:

- handheld moisture meters,
- angle connector and switchbox,
- MC Tracker data logger
- wireless transmitters.



Lignometer K with extension cables and Electrode E12 for depth measurements.

From lumber drying to monitoring critical areas in the building envelope.



The K2-11M package includes the PK probe/cable system to monitor places that would otherwise be unreachable and the electrode E12 for measurements anywhere, anytime.



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.

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.

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



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

For measurements up to 2" deep.



At any time, the Lignometer K can be used with the electrode E12 for spot-checking moisture conditions.

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 Lignometer K meter with BNC connector for an assortment of external electrodes and in-kiln probes

1 9V battery

1 laminated wood group card and 1 instruction manual

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

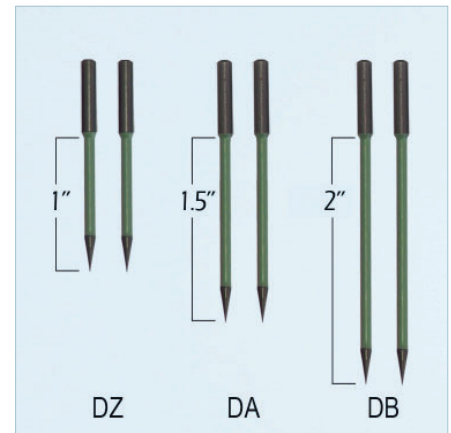
1 Case M



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



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.



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.