Lignomat Moisture Meters

30

1/4"

READ

Ligno Scanner SDM

Lignomat USA, Portland OR

Pin - Pinless - RH In-Situ RH Concrete Test Hygrometers - Data Loggers



Special Section Page 14: -Calibration Check -Accuracy

83

SET HOLD

Proven Measuring Technology Guarantees long-term Accuracy.

Lignomat

Measuring Moisture is our Expertise.



800-227-2105

Portland, Oregon

WHY BUY A METER FROM LIGNOMAT

Many years of research and development have enabled Lignomat to produce accurate and reliable **pin, pinless and RH meters** with stable calibrations, which stay un-altered for the life-time of the meter.

Performance, quality, user-friendly design and competitive prices have given Lignomat a good reputation. We work together with many different industries to continuously test new wood species and new materials, giving our customers up-to-date moisture meters.

Measuring Moisture is our Expertise.

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You have a Choice with Lignomat - Pin or Pinless

Questions? Call Customer Service at 800-227-2105.

PIN OR PINLESS?

Pin Advantage

Versatility: Pin meters can measure all thicknesses of materials, from veneer to logs, flat boards to round and oddly shaped pieces. The measuring area between the two pins is small enough to indicate differences between core and surface moisture.

Usage of pin meters can be optimized by adding electrodes and in-kiln probes. The attachments allow measuring areas, which cannot be reached by the built-in pins of a pin meter or by the flat measuring pads of a pinless meter.

Prices: Pin meters can be purchased from Lignomat for up to half the price of pinless meters. As a low-cost pin meter we recommend the mini-Ligno MD. Built to the same quality standard as all Lignomat meters, the MD has all essential functions needed for basic meter uses.







Pinless Advantage

Quick and Easy: In a short time a large number of boards can be scanned. No effort is needed to push pins into wood. No pin holes are left when using a pinless meter. That is crucial, when measuring finished products or installed wood floors.

Low Moisture: Lignomat's pinless meters measure lower moisture content than pin meters. Great for checking wood floors, when low relative humidity has dried out the floor planks.

Measuring Depth Matters: Dual-Depth 1/4" and 3/4": Standard pinless meters are calibrated for a material thickness of 3/4". That means, accurate readings are only possible, if the product is at least 3/4" thick. Dual-depth selection allows measuring thinner products accurately. Engineered wood floors can also be measured more accurately using a dual-depth meter.

Pin and Pinless Combination Meter

Select the Ligno-VersaTec, a **pin-pinless-RH meter** or add a pinless meter to your pin meter. Scan quickly in pinless mode and check trouble areas in pin mode.



Call Customer Service for a recommendation **800-227-2105.**

Pinless Meters: Ligno-Scanner Series



To meet all of our customers needs, we offer 6 different pinless meters.

Summary and prices for all meters, page 20.

Lignomat's unique measuring technology for pinless meters assures calibration accuracy, reliability, consistency and dual-depth capability. Our scanners produce the same accurate moisture values, today, tomorrow and in a year.

You can trust pinless meters from Lignomat.

Ligno-Scanners are convenient to use. The meters fit comfortable in your hand for measurements. Operation is simple with clearly marked buttons. The large display not only shows the moisture percentages, but also indicates settings for wood species and measuring depth.

Only for Scanners SDM, BW and V-0

Bamboo: Lignomat developed a unique set of calibrations different from any wood calibration to fit different types of solid and engineered bamboo floors. Depth is limited to 1/4", since bamboo is usually less than 3/4" thick.

Drywall and Building Materials: Drywall settings and reference scales are available in the SDM, BW and V for building inspectors and restoration specialists to assess

Prices 210.00 - 435.00

Summary of all Pinless Meters	lien	i. juč	100 000 De	O Pristo	Why I gen	1000 EXP	Solution Co	Por Din Ini	Service Service	Se in print	1000 1010 1010 1010
Ligno-Scanner S	S	\checkmark		\checkmark							210 . ⁰⁰
Ligno-Scanner D	D	\checkmark	\checkmark								210 . ⁰⁰
Ligno-Sc anner SD	SD	\checkmark	\checkmark	\checkmark							289 .00
Ligno Scanner SDM	SDM	\checkmark			308.00						
Ligno-DuoTec BW	BW	\checkmark		365.00							
Ligno-VersaTec only	V-0	\checkmark	\checkmark	435 .00							

SPECIFICATIONS FOR LIGNO-SCANNER S, D, SD, SDM, LIGNO-DUOTEC AND LIGNO-VERSATEC

All pinless meters from Lignomat indicate wood moisture in percent, corrected by 71 wood group settings or by the specific gravity between 0.3 to 1.0 (Settings 30-100). Moisture Range: 5-60%. Resolution 0.1% . HOLD function. The calibration is internally checked and adjusted before each reading. However, calibration and function can be verified with the pinless test block TS. Page 14.

- Additional calibrations for SDM, BW, Ligno-VersaTec:
- -- Bamboo and other strand woven products
- -- Sheetrock scale from 0-2%
- -- Reference scales with 3 sensitivity levels: concrete, standard building materials, laminates

Size of meter: $2^{"}x 5.5^{"}x1/2"$. Weight 8 oz. Measuring pad 1 5/8" by 2 5/8". Test sample should be as large as the measuring pads and as thick as the measuring depth of the meter.

Ligno-DuoTec BW: Multi-Function 3-in-1

- 1: Dual-depth pinless meter for wood, engineered products, bamboo, concrete,...
- **2:** Precision thermo-hygrometer
- 3: In-situ RH concrete moisture testing

We recommend the Ligno-DuoTec BW for the floor covering industry, furniture production, restoration and building maintenance. The BW is the meter for all applications, where moisture content and relative humidity need to be measured. The next step from the BW meter would be the Ligno-VersaTec, which is a pin, pinless and RH meter (page 10).

1: Pinless Function:

Dual-depth 1/4" and 3/4". Calibrated for tropical and domestic wood species, solid hardwood floors, engineered floors, plywood, subfloors, bamboo floors and drywall. Reference scales for concrete, tile and laminates. Pinless function of the Ligno-DuoTec BW is the same as for the Ligno-Scanner SDM (page 4):

Restoration: Find high and low moisture levels in building materials including concrete and obtain accurate percent values for all wood species.

Ligno-DuoTec BW, meter only 365

2: Thermo-Hygrometer Function:

When adding the precision RH BluePeg probe and the adapter RH, the Ligno-DuoTec BW functions as a thermo-hygrometer. Relative humidity, ambient temperature, dew point and GPP are displayed.

To meet more job requirements with one meter, select the package BW-B: a dual-depth pinless meter and a precision thermo-hygrometer in one. Used in woodworking, cabinetry, flooring, restoration and building maintenance. Extension cables for the RH probe are available up to 50 ft long.

3: In-situ RH Concrete Moisture Testing:

When adding RH BluePeg probes, sleeves and cable, the meter functions as reader for the in-situ probes.



Lignomat's RH system has retrievable, reusable probes. Readings can be taken in seconds with easy-touse and fail-proof RH cable connections. For more info go to page 16.

Choose package BW-KS:

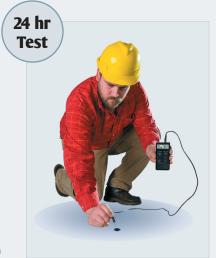
- to measure wood and concrete with pinless mode.
- to measure relative humidity and temperature.
- to perform in-situ RH moisture testing in concrete. Complies with ASTM F2170.

Pkg. BW-KS:

Ligno-DuoTec BW, case S, RH cable, adapter RH BluePeg probe, 10 sleeves, brush...... 547.00 **520**







mini-Ligno Series



Prices 92.00 - 199.00

Accurate and reliable, versatile and affordable, that's what our customers like about the mini-Lignos. The meters deliver measurements you can trust for all applications from woodworking to hardwood floors, from lumber drying to water damage repair.

Every day - every time. True for all mini-Lignos.

Special mini-Ligno Features:

The meter fits perfectly in your hand when measuring and is small enough to fit in a shirt pocket. Green cap serves as cover during transportation and as handle for easy pin insertion.

Convenient to use. Fast, one-hand operation. Unique on-off switch activates meter automatically as pins are pushed into the wood. Strap keeps meter handy and eliminates need to put meter down for other tasks.

Expertly-designed circuitry assures stable calibrations for the life-time of the meter. All mini-Lignos internally check the calibration before each reading.

Bright, large LED display is virtually unbreakable and comes with a life-time warranty.

Supplied with: Cap and wrist strap 2 Pair pins: 3/16" and 7/16" measuring depth Carry pouch with belt loop Battery standard 9V Laminated species card and manual

Low Price

mini-Ligno MD and MD/C

Lignomat quality at its best price. For woodworking hobbyists and all basic meter uses. MD and MD/C come with a numeric display, resolution 1%.



Wood Moisture: 6-25% 2 wood groups for softwood, hardwood and panel products 92 mini-Ligno MD w/pins mini-Ligno MD/C w/pins and 99 connector for electrode

Woodworkers Choice

mini-Ligno E/D

The digital meter has a wide measuring range: Low enough for woodworking, cabinets and flooring. High enough for anyone drying their own lumber, wood turning, pallets and checking firewood.



Wood Moisture: 6-45% 2 wood groups for softwood, hardwood and panel products

mini-Ligno E/D w/pins **119**



Construction - Restoration Building Inspection

mini-Ligno S/D and S/DC

Reliable meter for a variety of building materials, incl. wood, masonry, sheetrock, plaster and concrete. Used in new construction, water damage repair and maintenance.



same as mini-Ligno E/D listed above plus 1 Sheetrock Scale 0.1% to 7.5% 1 Reference Scale 0-99

mini-Ligno SD w/pins**137** mini-Ligno S/DC w/pins and 149 connector for electrode

Most advanced mini-Lignos

mini-Ligno DX and DX/C

Popular for its versatility and reliability. Used for flooring, furniture, cabinets, in wood and veneer processing plants.



40 wood groups built-in. We continuously add new species and engineered products to the wood group list to give you an up-to-date meter.

40 Wood groups for domestic and tropical species, bamboo and engineered panels. Wood Moisture: 5-65%

Sheetrock and Reference Scale

mini-Ligno DX w/pins	10/
mini-Ligno DX/C w/pins a	nd 100
connector for electrode	

Packages with Electrode E12

Undetected high, low or uneven core moisture is often the cause for less than perfect wood products.

Depth Measurement: The integral pins at the mini-Lignos measure 7/16" deep. For deeper measurements you can make a fresh cut and measure the end grain.

If cutting the wood is not feasible, choose the mini-Ligno DX/C, S/DC or MD/C and add Electrode E12. The pins for the E12 are available for a measuring depth up to 2" deep. The pins are insulated and measure only at the tip. As the pins are hammered into the wood, consecutive readings show if wood is dry throughout the core.

In addition: Pin insertion is easier with the slide hammer especially when measuring hard wood. Sub floors can be measured without removing the floor planks.



Select the right mini-Ligno for your E12 package

Package **D2-M** with mini-Ligno DX/C: The DX/C has 40 wood group to accurately correct for domestic and tropical wood species, bamboo and panel products and sub floors.

Package **M2-M** with mini-Ligno MD/C: The MD/C has 2 settings (for hard wood, softwood and panel products). It is a good choice when looking for a low cost solution to measure thick wood.

 Pkg. D2-M: mini-Ligno DX/C, E12, pins, cable, case 382.0
 370

 Pkg. M2-M: mini-Ligno MD/C, E12, pins, cable, case 282.00
 274

 DZ Pins insulated, measuring depth 1"...... per pair
 3.50

 DA Pins insulated, measuring depth 1 1/2"..... per pair
 3.60

 DB Pins insulated, measuring depth 2"..... per pair
 4.00

 mini-BNC cable to connect E12 to mini-Ligno C's
 26.00



Each E12 package consists of: mini-Ligno C-model, Electrode E12, 2 pair insulated pins, mini-BNC cable, case M. At time of ordering a package, you can add cables and pins at a **10%** discount.

Packages with Cables for In-Kiln Monitor

Add cables and kiln probes to mini-Ligno MD/C or DX/C. Install the probes inside the kiln and leave the open cable-end outside the kiln. Then, moisture readings can be obtained while you are outside of the kiln. No need to enter a hot kiln.

Even a one-cable installation shows what happens in a small kiln and allows you to determine when the lumber is dry. Using multiple probes will show differences between slow and fast drying areas. A great tool to optimize kiln performance.

 Pkg. M11: MD/C, cable 6', 1 pair PKB probes 138.0
 105

 Pkg. D11: DX/C, cable 6', 1 pair PKB probes 238.00
 210

 Pkg. D33: DX/C, 3 cables 12', 3 pair PKB probes 316.00
 252



Lignomat offers everything from a one-cable monitor to automatic kiln control systems.

Call 800-227-2105 for more info.





Packages with Electrode E14M

Finding moisture problems in buildings can be a tricky task. Moisture hides behind structural components and travels, wherever it finds a path. It is often impossible to reach these trouble spots with the integral pins on handheld meters.

Reaching problem areas: We recommend adding the electrode E14M. The slim shape of the E14M allows checking for moisture in wall corners, around pipes, below window sills, under baseboards, places which the intergral pins on the mini-Ligno cannot reach.

In addition: To reach further into the building structure we offer 7" long insulated pins. And, for vour convenience, the handle can be elongated by a broomstick or a paint brush handle to reach ceilings without a ladder or floors without crouching.

Tough Jobs: Inserting pins into hard material can be a difficult iob. Hard materials are hard to measure. The electrode E14V with EG pins is strong enough to withstand hard pounding with a hammer to insert pins into hard materials such as strand bamboo, MDF boards or hard wood.

Select the right mini-Ligno for your E14 package:

Package S4-P with mini-Ligno S/DC is the contractor's choice with 4 settings to measure: softwood, hardwood, panel products, sheetrock and reference scale for other building materials.

For more accurate wood measurements, choose the **package D4-P** with mini-Ligno DX/C. The DX/C has 40 settings to correct for different wood species, plus sheetrock and reference scale.



Pkg. S4-P: mini-Ligno S/DC, E14M/cable, EG pins, pouch 211.º **199** 271.00 **255** Pkg. D4-P: mini-Ligno DX/C, E14M/cable, EG pins, pouch EG Pins insulated, 3/4" measuring depth, per pair 4.50 29.00 2 EL Pins insulated, 7"

Add 7" EL pins to measure behind structural components or for EIFS test. At the time of placing your package order, you can add EG and EL pins at a **10%** discount.



critical areas anywhere,

In a roof, in a crawl space, by the refrigerator, or any other trouble spot.

Monitoring problem areas Easiest and simplest leak surveillance

Here is our suggestion for monitoring inaccessible areas and making sure a leak is not happening again. Before closing up the area, install metal screws and cables at the trouble spots. Leave the open cable-ends to be reached easily. Now, at any time, connect the meter to check moisture levels.

Pkg. M-10: MD/C, cable 6', 1 pair screws 128.00 103 Pkg. S-10: S/DC, cable 6', 1 pair screws 178.⁰⁰ **159**



Quality production is easier to accomplish with quality tools.

If you are looking for increased reliability, calibration accuracy and ease-of-operation, the Lignometer K is for you. This top-of-the-line meter performs well in harsh environments of manufacturing plants, sawmills, lumber yards and restoration sites.

Accuracy: Unsurpassed accuracy is guaranteed even in the critical range below 8%. The circuitry is stable in extreme ambient conditions and the calibration is internally checked and if necessary, automatically adjusted before each reading.

Multiple built-in Corrections: Wide measuring range, multiple wood species corrections and wood temperature corrections give instant readings and eliminate use of correction tables. These corrections add convenience and accuracy when measuring hot or cold lumber. Ideal for kiln drying operations. Specifications are the same as for the pin mode for Ligno-VersaTec (page 10).

Other Applications: The Lignometer is often used for measuring other materials than wood, because of its wide measuring range and superior calibration stability.

Your Choices for Lignometer K Packages:





Lignometer K and Electrode E12

Complete quality control with E12. Measures up to 2" deep for core measurements. Used for kiln drying, during manufacturing, storage, transportation and installation of wood products.

Package K2-M: Lignometer K, electrode E12, BNC cable , 2 pair pins, Case M

Lignometer K and Electrode E14

- For construction and restoration: Slim E14V reaches where moisture hides
- For hard wood and strand bamboo: Sturdy enough

to hammer on handle to insert EG pins into hard wood. E14 comes with insulated EG pins up to 3/4". Optional 7".

Package K4-S: Lignometer K, electrode E14V/cable, EG pins, Case S

387.00

474⁰⁰

LIST 499.00

K2-M

LIST 408.00 # K4-S Ligno VersaTec

160



in-situ Concrete Moisture Testing

Multi-function Ligno-VersaTec: Pin - Pinless - RH

Anyone needing a multi-function, accurate meter will appreciate the Ligno-VersaTec's absolute quality and reliability for many years of use.

With the Ligno-VersaTec, you can select the right measuring mode and the right accessories for the job at hand. This could be tracking moisture problems with a pin electrode or measuring humidity in a crawl space with the RH BluePeg probe. Floor inspectors could be checking a cupped floor using the pinless mode. The Ligno-VersaTec could also be used to quickly find problem areas after water damage.

Pin and pinless side by side:

High and low moisture areas are easily found in pinless mode. Selectable depth 1/4" and 3/4" allows comparing moisture close to the surface and deeper down. Once a problem is detected, a pin electrode can be used for further investigation.

No matter which function you use, the Ligno-VersaTec gives superior results.

For all industries where moisture measurements are an integral part of every day decision making: The Ligno-VersaTec can be used for rough 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 up to 7" deep. Page 12. Cables and in-kiln probes. Page 13.

The VersaTec combines our accurate pin, pinless and RH measuring technologies.

SPECIFICATION	IS LIGNO-VERSATEC
PIN	150 individualized settings for wood species, bamboo (strand, horizontal,) Wood Moisture Range 5-99%. Resolution for all wood measurements 0.1%. Wood Temperature Settings: 0° to 210° F (-20° to 90° C).
	Gypsum, Drywall Moisture Range: 0.1-7%. Numeric Reference Scale: 0-99.9
	Measuring Depth: 1/4" and 3/4" for all settings except bamboo (only 1/4"). 150 individualized settings for wood species, bamboo (strand, horizontal,) Settings 30-100 can be used for specific gravities 0.3-1.0.
DUAL-DEPTH	Wood Moisture Range 5-60%. Resolution for all wood measurements 0.1%. Gypsum and Sheetrock Moisture Range 0.1-2%. 3 Reference Scales for concrete, other building materials, wood-based materials.
RH	RH BluePeg Probe: Resolution 0.1% for RH, DPT, GPP , 0.1° for temperature. RH Measurement: +/- 1.8% for 10-90%, +/-3% for <10% and >90%. Temp. Measurement: +/- 0.5°F for 32° to 120°F, +/- 1°F for <32°F and >120°F.











Ligno-VersaTec Packages

1. Ligno-VersaTec - pinless

You can use the Ligno-VersaTec by itself as a pinless meter with dual-depth 1/4" and 3/4" deep. Connector for pin electrode and RH probe built-in. **435.00**

499.⁰⁰

584_00

615 00

#V2-M

530.00

#V-B

2. Ligno-VersaTec - pinless and Thermo-Hygrometer

Adding the humidity probe RH BluePeg allows using the Ligno-Versatec as pinless, dual-depth meter and as precision thermo-hygrometer. Add \$ 15.00 for RH probe extension cable.

Pkg. V-B: Ligno-VersaTec, RH BlePeg probe, RH adapter

3. Ligno-VersaTec - pinless and pin

Thorough quality control with electrode E12. Can be used as pin and pinless meter:

- Scanning boards fast and easy.

- Taking core measurements with E12 up to 2" deep.

Pkg. V2-M: Ligno-Versatec, electrode E12, BNC cable, 2 pair pins, case M

4. Ligno-VersaTec / Inspector E14V - pinless and pin

- For construction and restoration:
- Slim E14V reaches where moisture hides. – For hardwood and strand bamboo:

You can hammed and strand bannool.

E14V comes with insulated pins 3/4" deep. Optional 7".

Pkg. V4-S: Versatec, electrode E14V with cable, 1 pair EG pins, case S

5. Ligno-VersaTec 4-in-1

Includes accessories for pin - pinless - RH

- pinless, dual-depth 3/4" and 1/4"
- pin with depth electrode E12
- precision thermo-hygrometer RH / T / DPT / GPP
- in-situ RH concrete, complies with ASTM F2170.

Pkg. V2-KM: Electrode E12, BNC cable, 2 pair pins, case M 10 sleeves with caps, 1RH cable, 1 RH BluePeg probe, 1 RH adapter, 1 brush

ACCESSORIES FOR LIGN	IO-VERSATEC PACKAGES		Item	List	with purchase of VersaTec
	Thermo-Hygrometer Function add RH BluePeg Probe, RH Adapter.	for pkgs. 1, 3-5	RH- BA	99 .ºº	64 .ºº
	Inspector Electrode E14V to reach tight places in the building envelope. Extendable to reach high and low.	for pkgs. 2, 3, 5	E-14V	59. ⁰⁰	56 .ºº
	EL Pins: teflon-insulated, 7" deep.	for E14V	EL	29 . ⁰⁰	27 .00
C.	Depth Electrode E12 measures core moisture in wood. Insulated pins optional 1", 1.5" and 2" deep.	for pkgs. 4,5	E-12 BNC	136.00	129 .ºº
	RH Probes : Add 5 Pack RH probes, when buying an RH Pkg. Save money!	for pkg 5	RH- 5BP	400.00	325 .00

RH accessories are listed page 17. Electrodes and pins are listed page 12. More VersaTec packages are listed page 20.

Meter Summary and Prices see page 20 and 21 • Order Form see page 23.

497.00 528.00

79 00

768.00

#V2-KM

Special

528.00 #V4-S

Accessories for Pin Meters

Electrodes, Pins and Cables

For true core readings, a third of the wood thickness has to be penetrated. Electrodes are built sturdy and Pins are made for easy penetration, maximum strength and low breakage.

Electrode E12, Pins and Cables:

The electrode E12 is used for measurements up to 2" deep.

The E12 is equipped with a slide hammer to insert and extract pins easily. The pins have insulated shanks to measure only at the tip. As the pins are hammered towards the core, multiple readings show the moisture distribution within the material. The ability to measure a moisture gradient is one of the main reasons why customers still prefer pin meters over pinless meters. No other tool can achieve the same measuring accuracy at a defined depth level.

The electrode E12 can be connected to the Lignometer K, the Ligno-VersaTec and all mini-Ligno C-models. A cable connector (BNC) is mounted at the head of the electrode. The cable needs to be ordered separately.

For wood, wood-based panels and soft building materials. Weight 3.5 lbs. Length without pins 12".

Slide-Hammer Electrode E12, plus insulated pins, 1 pair DA and 1 pair DZ pins BNC Cable to connect E12 to Lignometer K and Ligno-VersaTec mini-BNC Cable to connect E12 to mini-Ligno MD/C, S/DC and DX/C

Pins DZ, insulated, measuring depth 1" (2.5cm), total length 1 5/8" (4.1cm) Pins DA, insulated, measuring depth 1 1/2" (3.8cm), total length 2 1/8" (5.4cm) Pins DB, insulated, measuring depth 2" (5cm), total length 2 5/8" (6.7cm)

113.00 23.00 26.00 3.50 3.75 4.00

Electrode E14

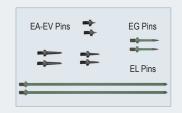
For construction and restoration: The E14 electrode is used to track moisture problems in the building envelope. The slim design allows to track moisture in wall corners, around pipes, below window sills and under base boards. The insulated EG or EL pins measure dry conditions behind a wet surface. The knob at the end of the handle can be replaced by a broom stick or paint brush handl without ladders and floors without cr deeper into walls and for EIFS testing

The electrode E14 is also used for tes such as strand bamboo, fiber boards woods. The electrode handle a enough to withstand hard pour

Electrode E14V with cable for Lign d pins EG 3/4"..... 59.00 Electrode E14M with cable for mini-Ligno MD/C, S/DC, DX/C, 1 pair insulated pins EG 3/4"..... 58.00

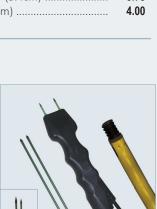
Pins for Electrodes E10, E14 and E16

Insulated pins EL, measuring depth 7", dia. 1/8" per pair	29.00
Insulated pins EG, measuring depth 3/4" per pair	4.50
Pins EA, measuring depth 7/16", dia. 1/16" per pair	3.50
Pins EC, measuring depth 5/8", dia. 1/8" per pair	3.50
Pins EV, for veneer 3/16", dia. 1/16" per pair	3.50



nd the pins are strong
nding with a hammer.
ometer K, VersaTec, 1 pair insulated

lle to reach ceilings rouching. To reach	
g, add the 7" EL pins.	1
sting hard materials or tropical hard-	



Meter Summary and Prices see page 20 and 21 • Order Form see page 23.

Electrode E10: Weight 6oz. Length without pins 6".

Pins can be inserted by hammering on top of the electrode handle (virtually unbreakable) or by grasping the handle and pushing the pins into softer material. The elongated base serves as level to pull the pins out. Optional deep wall probe EL (previous page) for EIFS testing, etc.

Electrode E10 plus 1 pair EC pins 110.00 BNC Cable to connect E10 to Lignometer K and Ligno-VersaTec 23.00 mini-BNC Cable to connect E10 to mini-Ligno MD/C, S/DC, DX/C...... 26.00

Electrode E16: Weight 8oz. Length without pins 3".

- for building materials (soft and hard). Instant evaluation of concrete. May require predrilled holes. Tap on top to insert pins.
- for small pieces and experimental testing, where the distance between the pins can be changed.

Electrode E16 plus 1 pair EC pins 35.00 BNC-E16 Cable to connect E16 to Lignometer K and Ligno-VersaTec... 26.00 mini-E16 Cable to connect E16 to mini-Ligno MD/C, S/DC, DX/C 26.00

Accessories for Remote Measurements and In-Kiln Monitor

Lignomat's cable and probe systems work well to monitor remote or inaccessible places. After installing cables, leave the open cable-end easy to reach, then you can connect the meter at any time to obtain measurements. This could be outside a lumber dry kiln, in a warehouse or during on-going water damage repair. Even after the repairs are done, remote areas can still be monitored for

Accessories for Measuring Wood Moisture and EMC

9.25	PKA Probes, measuring depth 1/2" per pair
9.75	PKB Probes, measuring depth 3/4" per pair
10.50	PKC Probes, measuring depth 1" per pair
12.00	PKD Probes, measuring depth 1 1/2" per pair
19.00	PKE Probes, measuring depth 2 3/4" per pair
29.00 1.25	PK-mini (PK-H) Cable 6 ft long, for PK Probe to meter each additional foot of cable Adapter H to connect cable from PK probes to
15.00	Lignometer K and Ligno-VersaTec
75.00	4-Station plate inside of kiln
100.00	4-Postion switchbox to mount outside of kiln
55.00	EMC Holder with 10 EMC wafers
80.00	EMC Holder, 10 wafers, mounting angle connector

A Popular In-Kiln Monitoring Package

Lignomat's in-kiln monitoring systems have been used in thousands of kilns and proven to furnish accurate moisture measurements. The system is used in all sizes and types of dehumidification, solar, direct fired, vacuum and conventional steam kilns.

The K33 package listed here is for a medium sized kiln. All readings are obtained outside at the switchbox using the Lignometer K or the Ligno-VersaTec. Electrode E12 is included for spot checking.

Pkg: K2-33M: Lignometer K, E12, BNC cable,

Ask about our fully automated kiln control systems: 800-227-2105



PK Probes







Calibration Check

Pin Meters

All Lignomat pin meters internally check the circuitry and if necessary automatically adjust the calibration



before a measurement is displayed. This assures stable calibrations for the life-time of the meter. Manual re-calibration is not needed.

However, the connection to the integral pins or to the hand probe cannot be checked internally. An external test block TP is needed to

confirm the calibration and all connections from the tip of the pin to the display of the meter.



Pin Check Block TP 35.00

Pinless Meters

All Lignomat pinless meters internally check the circuitry and automatically adjust the calibration. This "back ground check" happens before each measurement and assures calibration consistency for all Lignomat pinless meters at all times. Manual recalibration by the customer is not possible.

To prove calibration and functionality of the meter, we sell the calibration test block TS. Each test block



has a set moisture value. Any Lignomat pinless meter, Ligno-VersaTecs, Ligno-Duo-Tec BWs and Ligno-Scanners should indicate the same

moisture value when set on the test block. Only one test block is needed for all scanners from Lignomat. We are proud to have achieved this high degree of calibration consistency and repeatability for all our pinless meters.



Pinless Check Block TS 63.00

RH In-Situ Concrete Meters

The critical part for RH measurements is a small sensing element on the circuitboard of the RH



probe. Connectors, cables and meters cannot get out of calibration. The RH BluePeg probe can produce off readings and should be checked periodically. The calibration check

is performed by exposing the RH probe to a known relative humidity. For on-site checking we sell salt solutions for 75%.

The ASTM standard F 2170 sets the requirements for calibration testing of RH probes used for in-situ RH concrete testing. We check probes 3 times for free during the first year.



RH Salt solution 75% with measuring cable T-75.... **49.00**

Steps to Accurate Moisture Measurements

Comparing high and low moisture conditions is easy. Insert the pins or place the meter on the test material and compare the numbers. Higher numbers mean more moisture, lower numbers less. However, if you are measuring wood and want to obtain **correct moisture percentages**, there are some essential variables to be aware of.

Pin Measurements are affected by:

1. Differences between different boards of the same species. Each piece of wood, even if cut out of the same log is different in color, structure and electrical characteristics. That is why, even if all boards had the same moisture content, the indicated moisture percentage by a pin meter would still show small deviations of 1-2% if the moisture is below fiber saturation point (25%).

2. Differences between different wood species. Greater variations are found between different wood species. Therefore, pin meters need to be corrected for the wood species. Species with similar correction factors are in the same wood group or have the same species setting.

Note, species corrections for pin meters are not based on specific gravity, they are based on oven testing. When measuring woods with the same wood group in pin mode, the specific gravity settings in pinless mode could be very different from each other.

3. Differences between different wood temperatures. Pin meters indicate different moisture percentages when measuring hot or cold wood. All meters are calibrated for a wood temperature of 70°F. Between 55-85°F corrections are minimal. If the wood is above or below 55-85°F temp corrections should be applied. Use the correction table included in the mini-Ligno manual or set the wood temperature in the LignometerK or the Ligno-VersaTec for built-in corrections.

Pinless Measurements are affected by:

1.There are also differences between different boards of the same species affecting measured values. Boards vary by weight and by structure.

2. Corrections for different wood species are based on the average specific gravity for the wood species and are absolutely necessary to get true moisture percentages.

3. Material within the measuring field. True moisture percentages are indicated when a solid piece of wood is measured with the correct species setting and the wood is thick enough to fill the entire measuring field.

When measuring engineered products there are different materials within the measuring field. By using a well acclimated sample piece you can find the correct calibration setting for engineered products also, see the manual for dual-depth pinless meters from Lignomat. For measuring material less than 3/4" thick, use a dual-depth meter on depth setting of 1/4".



EMC Chart

The EMC chart is an important table to understand the relationship between wood moisture and relative humidity. The table below lists relative humidity conditions and the corresponding wood moisture content, when wood is stable and will not loose of gain any moisture.

Example: At 55% relative humidity and 70° F, wood with a moisture content of 10% will not change. If the relative humidity changes, the wood moisture will also change.

	Equilibrium Moisture Content (EMC) Chart																	
Temp	Relative Humidity %																	
F ⁰	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
30	2.6	3.7	4.6	5.5	6.3	7.1	7.8	8.7	9.5	10.4	11.3	12.4	13.5	14.9	16.5	18.5	21.0	24.3
40	2.6	3.7	4.6	5.5	6.3	7.1	7.8	8.7	9.5	10.4	11.3	12.4	13.5	14.9	16.5	18.5	21.0	24.3
50	2.6	3.6	4.6	5.5	6.3	7.1	7.9	8.7	9.5	10.3	11.2	12.3	13.4	14.8	16.4	18.4	20.9	24.3
60	2.5	3.6	4.6	5.4	6.2	7.0	7.8	8.6	9.4	10.2	11.1	12.1	13.3	14.6	16.2	18.2	20.7	24.1
70	2.5	3.5	4.5	5.4	6.2	<u>6.9</u>	7.7	8.5	9.2	10.1	11.0	12.0	13.1	14.4	16.0	17.9	20.5	23.9
80	2.4	3.5	4.4	5.3	6.1	6.8	7.6	8.3	9.1	9.9	10.8	11.7	12.9	14.2	15.7	17.7	20.2	23.6
90	2.3	3.4	4.3	5.1	5.9	6.7	7.4	8.1	8.9	9.7	10.5	11.5	12.6	13.9	15.4	17.3	19.8	23.3
100	2.3	3.3	4.2	5.0	5.8	6.5	7.2	7.9	8.7	9.5	10.3	11.2	12.3	13.6	15.1	17.0	19.5	22.9

Lignomat's RH System for Concrete Moisture



RH BluePeg System: Our engineering team is proud to present Lignomat's reliable and accurate RH BluePeg sytem. In addition to implementing the latest sensing technologies, we have designed a BluePeg probe, sleeve, cable and meter to allow for fast, simple and fail-proof testing. After the initial investment, only the sleeves are disposable. RH probes can be used time and time again.

Easier: The RH BluePeg probe drops easily into the sleeve. The cap fits perfectly and is as flat as can be. The cable connection is provided by a simple, fail-proof 3.5mm stereo plug. The probe's ID number appears on the display and allows for easy tracking.

Faster: The meter is always ready, just connect the cable. No set-up of the meter is required. No pin arrangements on the cable need to be fitted. Easy connection with 35mm plug. Plug in and read, that's what our customers like. **Smarter:** After each test the RH BluePeg probes can be removed and can be used for further testing. If there are not enough probes, the probes can be leap-frogged.



Removable, reusable RH probes from Lignomat comply to the latest ASTM F2170 standard.

ASTM Standard F2170 sets the time limit for the in-situ probe test. Nevertheless, shortly after the probes are inserted, measurements can be taken to evaluate moisture conditions for being too high or too low.

It is not required to leave the RH probe in the sleeve for the duration of the test. However, enough time has to be allowed for the RH probe to acclimate.

During the first year, we offer to test the calibration of RH BluePeg probes three times free of charge. See pages 14, 17 for calibration check salts.



RH Packages

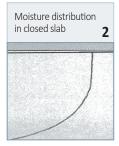
Lignomat offers 3 RH packages with different meters:

- Ligno-Tec RH: RH testing only, no other functions
- Ligno-DuoTec BW: RH testing and pinless meter
- Ligno-VersaTec: RH testing, pinless and pin meter

Summary and Prices for all meters, page 20.

Package	Meter	Function	Accessories	List	Special
RH-KP	Ligno-Tec RH	RH only	1 RH probe, adapter, RH cable, 10 sleeves, brush, pouch	445.00	422. ⁰⁰
BW-KS	DuoTec BW	RH/Scan	1 RH probe, adapter, RH cable, 10 sleeves, brush case S	547.00	520 .00
V2-KM	VersaTec	RH/Scan Pin	with electrode E12, cable, 2 pair pins, 1 RH probe adapter, RH cable, 10 sleeves, brush, case M	768.00	729 .00







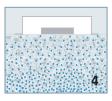
CONCRETE MOISTURE TESTING

Methods commonly used to measure moisture in concrete:

- Handheld moisture meters pin or pinless
- Calcium Chloride testing
- In-situ probe testing

Why in-situ probe testing gives most reliable results?

It is important to find out whether or not there is excess moisture in the mid section of an open slab, because once the slab is covered, any excess moisture will be distributed evenly within the slab. (Graph 1 and 2). This increase in moisture close to the surface can cause problems with epoxy, adhesives and floor coverings. Moisture measurements are mostly taken when the slab has not been covered yet. The in-situ probes reach deep enough to measure moisture levels in the mid section of the slab (Graph 3). The Calcium Chloride test and handheld meters only measure moisture close to the surface (Graph 4 and 5). Handheld meters can still be used to give qualitative results of high and low, but they should not be used to determine if a floor covering can be installed. Many floor manufacturers added the in-situ RH test to their warranty requirements. Check the floor covering manufacturer's manual.





Latest News ASTM F2170-18

Duration of test has been changed from 72 hrs to 24 hrs.

many and Prices for all meters inage 20

ACCESSORIES FOR RH CONCRETE MOISTURE TESTING

		Summary	and Prices for	an meters	, page 20.
	RH BluePeg probe and red cap	1 unit 3 units 5 units 10 units	RH-1BP RH-3BP RH-5BP RH-10BP	80. ⁰⁰ 240. ⁰⁰ 400. ⁰⁰ 800. ⁰⁰	225. ⁵⁰ 365. ⁰⁰ 699. ⁰⁰
	Sleeves/caps 1.8" depth Sleeves/caps 1.8" depth Sleeves/caps 3.0" depth	20 pack 100 pack 10 pack	RH-20S RH-100S RH-10SL	40. ⁰⁰ 200. ⁰⁰ 29. ⁰⁰	170. 00
	RH Top-Extenders for a measuring depth less than 1.5" deep with blue overcap	5 pack	RH-EX	15.00	
	RH Depth-Adapter plugs into RH probe for easy cable connection in over 2.4" deep holes	5 pack	RH-DA	8.00	
\bigcirc	To connect RH BluePeg to RH meter: RH adapter, 35 mm male connectors	1	RH-A	15.00	
	RH cable 6' long with 35mm male connectors with sleeve and seal plug	1 unit	RH-CC	24.00	
	Brush to clean freshly drilled concrete holes	1 unit	BRS	13.00	
	Vacuum Attachment with metal tube to extend reach up to 5"	1 unit	RH-V	20.00	
	Clalibration salt solution for RH BluePeg 75% Salt Solution (for in-situ concrete test) more info page 15.	1 unit	T-75	49. ⁰⁰	

Meter Summary and Prices see page 20 and 21 • Order Form see page 23.

On-site and Wireless Data Loggers

Lignomat is an industry leader in measuring moisture in wood accurately and reliably. This knowledge was combined with latest data processing technology to develop on-site and wireless monitoring devices. Lignomat's wireless probes have been used for over 16 years in lumber dry kilns and pre-dryers.

- 1: BL2 Memo-Chip, a data logger to record relative humidity.
- MC-BL2 Tracker to record moisture in wood and other solid materials. Data is retrieved by connecting the BL2 to a PC.
- **3:** Wireless sytems with automatic data transfer to an on-site PC with remote log-in access to all data.

1: Monitor RH

The BL2 Memo-Chip is a data logger for relative humidity, temperature, dew point, GPP and EMC.

The BL2 Memo-Chip comes with a detachable, precision RH BluePeg probe. 32000 data sets can be sampled in intervals from 30 seconds to 24 hours. An audible alarm indicates out-of-range humidity. A great watchdog for restoration work, floor installations, storage facilities and manufacturing plants.

 1 BL2, RH BluePeg probe, cable, adapter
 187.00
 162.00

 3 BL2s, 3 RH BluePeg probes, 3 cables, 3 adapters
 561.00
 450.00

2: Monitor RH and Wood Moisture

The MC-BL2 Tracker records simultaneously relative humidity and moisture measurements of wood, drywall and other solid materials. The MC-BL2 Tracker is measuring and recording as if you continuously would use **1 thermo-hygrometer and 3 moisture meters.**

Applications range from material testing in labs to monitoring gymnasium floors, restoration jobs, storage facilities and transportation by ship, truck or plane.

1 BL2 with MC Tracker, 1 RH BluePeg probe, RH cable, RH adapter, 3 MC cables 3'ft, 6 screws 1/2"...... 430.⁰⁰ 408.⁰⁰

3: Wireless Monitoring Systems

Outstanding measuring technology and experience in manufacturing top-quality moisture meters are the cornerstone of Lignomat's wireless system. Our customers have used wireless transmitters inside lumber dry kilns and predryers for over 15 years. The system has proven reliable in extreme conditions of high humidity and temp. up to 185°F.

Not only for wood!

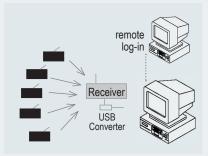
We now offer a wide selection of transmitters for:

- Exterior and interior temperature of materials
- Relative humidity and ambient temperature
- Dew point temperature and GPP
- In-situ RH Probes for moisture in concrete
- Wood moisture and EMC





Measurements can be obtained by a variety of probes up ro 7" deep. Cables can be up to 50 ft long



Transmitters for virtually any application and material.

Receiver

The receiver collects measurements from up to 100 transmitters within its range. One receiver can obtain measurements from any combination of different transmitters. The receiver sends all measurements to a PC. To extend the range for data acquisition, receivers can be daisy-chained.

Transmitter MC

Measures moisture in wood, drywall and other solid materials. Wood moisture readings are given in percent, corrected for different wood species and the temperature of the wood.

Teflon-coated PK probes or stainless steel screws can be embedded in wood, drywall and other materials. A short cable connects the transmitter to the probes. Each measuring point has one transmitter for individual, accurate readings. If required, extension cables are available.

Transmitter TE

Measures exterior and interior temperature of materials. A highly accurate stainless steel probe is used to obtain measurements.

TE Transmitters are often used in the kiln industry for required documentation of heat treatment before exporting lumber (Phytosanitation Heat Treatment).

Transmitter RH/T - single or double

Measures relative humidity and temperature. -- Transmitter RH/T has one RH BluePeg Probe

-- Transmitter 2 RH/T is more economical with two cable connections for two RH BluePeg Probes.

Extension cables are available. Any stereo cable up to 50ft long with 3.5mm plugs can be used to connect transmitters to RH BluePeg probes.

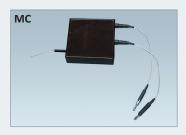
Combo Transmitter MC-TE-RH/T

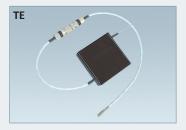
One transmitter measures it all:

- -- moisture in wood, drywall or other materials
- -- surface or exterior temperature
- -- relative humidity and air temperature

Other combinations: Transmitter MC-TE and MC-RH/T











0°F
0

Summary and Prices

Pin Meters	Wood Range	Wood Species Settings	W=Wood B=Bamboo S=Sheetrock C=Concrete	Built-in Pins	External Electrode Connection	ltem	List Price	pg
mini-Ligno MD	6-25	2	W	~		MD-0	92. ⁰⁰	6
mini-Ligno MD/C	6-25	2	W	~	~	MD-1	99. 00	6
mini-Ligno E/D	6-45	2	W	~		ED-0	119. 00	6
mini-Ligno S/D	6-45	2	W, S, C	~		S-0	137.00	6
mini-Ligno S/DC	6-45	2	W, S, C	~	~	S-1	149.00	6
mini-Ligno DX	5-65	40	W, B, S, C	~		D-0	187. 00	6
mini-Ligno DX/C	5-65	40	W, B, S, C	~	~	D-1	199. 00	6
Lignometer K	5-99	150	W, B, S, C		~	K-0	319.00	9
Versatec	5-99	150	W, B, S, C		~	V-0	435. 00	10

Pin Meter Packages	Accessories	ltem	List Price	Special Package Prices	pg
mini-Ligno MD/C	electrode E-12, mini-cable, case M, 2 pair pins	M2-M	282.00	274. ⁰⁰	7
mini-Ligno SD/C	electrode E-12, mini-cable, case M, 2 pair pins	S2-M	332.00	315.00	7
mini-Ligno DX/C	electrode E-12, mini-cable, case M, 2 pair pins	D2-M	382.00	370. ⁰⁰	7
Lignometer K	electrode E-12, mini-cable, case M, 2 pair pins	K2-M	499.00	474. ⁰⁰	9
mini-Ligno MD/C	electrode E14M with cable, 1 pair pins EG, pouch	M4-P	162.00	153.00	8
mini-Ligno SD/C	electrode E14M with cable, 1 pair pins EG, pouch	S4-P	211.00	199.00	8
mini-Ligno DX/C	electrode E14M with cable, 1 pair pins EG, case S	D4-S	287.00	272.00	8
Lignometer K	electrode E14M with cable, 1 pair pins EG, case S	K4-S	408.00	387.00	9

VersaTec Packages	Accessories	ltem	List Price	Special Package Prices	pg
Ligno-VersaTec	meter only	V-0	435.00		10
Ligno-VersaTec	with RH BluePeg probe, adapter (hygrometer)	V-B	530.00	499. 00	11
Ligno-VersaTec	electrode E14V with cable, 1 pr pins EG, case S	V4-S	528.00	497. 00	11
Ligno-VersaTec	electrode E12, BNC cable, 2 pair pins, case M	V2-M	615.00	584. 00	11
Ligno-VersaTec	1 RH probe, RH adapter, RH cable, 10 sleeves, electrode E-12, 2 pair pins, cable, case M	V2-KM	768.00	729. 00	11
Ligno-VersaTec	5 RH probes, RH adapter, RH cable, 100 sleeves electrode E12, 2 pair pins, cable, brush, case M	V2-PP	1288.00	1192. 00	11

Call for Special Prices on packages not listed: **800-227-2105.** All Prices in this brochure are subject to change without notice.

Summary and Prices

Pinless Meters	Depth 1/4"	Depth 3/4"	W=Wood B=Bamboo S=Sheetrock C=Concrete	RH Mode Concrete	Pin Mode	ltem	List Price	pg
Ligno-Scanner S	\checkmark		W			S	210.00	4
Ligno-Scanner D		\checkmark	W			D	210. ⁰⁰	4
Ligno-Scanner SD	\checkmark	\checkmark	W			SD	289. 00	4
Ligno Scanner SDM	✓	\checkmark	W, B, S, C			SDM	308.00	4
Ligno-DuoTec BW	✓	\checkmark	W, B, S, C	\checkmark		BW	365.00	5
Ligno-VersaTec only	\checkmark	\checkmark	W, B, S, C	~	\checkmark	V-0	435. 00	11

Concrete RH Pkgs	Function of Meter	Accessories	Item	List Price	Special Package Prices	pg
Package with Ligno-Tec RH	RH Only	1 RH Probe, 10 sleeves and caps, RH adapter RH cable, brush, pouch	RH-KP	445.00	422. 00	16
Package with Ligno-DuoTec BW	RH Pinless	1 RH Probe, 10 sleeves and caps, RH adapter RH cable, brush, case S	BW-KS	547. ⁰⁰	520. 00	16
Package with Ligno-VersaTec	RH, Pin Pinless	1 RH Probe, 10 sleeves and caps, RH adapter brush, E-14V electrode, EG pins, cables, case S	V4-KS	693. ⁰⁰	658. 00	16

Pinless Meter Thermo-Hygrometer	Function of Meter	Accessories	ltem	List Price	Special Package Prices	pg
Ligno-Tec RH	RH Only	1 RH Probe, RH adapter	RH-B	378.00	359. 00	22
Ligno-DuoTec BW	RH Pinless	1 RH Probe, RH adapter	BW-B	468.00	439. 00	5
Ligno-DuoTec VersaTec	RH Pinless Pin	1 RH Probe, RH adapter	V-B	530.00	499. 00	11

Thermo-Hygrometer Data I DIO

Data-Loggers BL2	Accessories	Item	List Price	Special Prices	pg
Thermo-Hygrometer TH		TH	47.00		22
Thermo-Hygrometer PN	Special Price of 62.00 is available only with purchase of a meter.	PN	74.00	62. ⁰⁰	22
Memo-Chip BL2	1 BL2, RH Probe, RH cable 6 ft, RH adapter	BL2	187.00	162. ⁰⁰	18
Memo-Chip BL2 3-pack	3 X 1 BL2, RH Probe, RH cable 6 ft, RH adapter	BL2-3	561.00	429. 00	18
Moisture Tracker - BL2	1 BL2, 1 Moisture Tracker, 1 RH sensor, RH cable 6 ft' RH adapter 3 teflon Cables 3' long, 3 pr screws 1/2"	MC3-R	430.00	408. 00	18

Prices for electrodes, pins and cables are listed on pages 12 and 13.

Prices for accessories for RH concrete measurement are on page 15.

Prices for pin and pinless calibration check blocks and calibration salts for RH are on page 14.

All prices listed in this brochure are subject to change without notice.

Call 800-227-2105 for prices not listed here.

Meter Summary and Prices see page 20 and 21 • Order Form see page 23.

Wood Moisture and Relative Humidity

If you wonder why your wood products warp, cup or check, measuring wood moisture and relative humidity is the key to understanding and preventing these moisture problems. Dimensional changes are most likely caused by the wrong wood moisture and the wrong relative humidity. Use a moisture meter and a thermo-hygrometer to measure both. See table on page 15.

Thermo-Hygrometers

A thermo-hygrometer is the perfect addition to your moisture meter. Select by humidity range, accuracy and response time.

Thermo-Hygrometer PN

Relative humidity: 5%- 95%, Accuracy +/- 5% Temp:-4°F to 122°F (-20°C to 50°C) Hold function. Min/Max memory with reset. No Clock. Shaped to measure hard-to-reach areas.

Ideal for job-site estimates, because of its shorter response time and wider measuring range. Low enough for cold winters and hot, dry summers.

Thermo-Hygrometer TH

Relative humidity: 20% to 95% Accuracy +/- 5% Temp.: 14°F to 122°F (-10°C to 50°C) Min/Max memory with reset.

Built-in wall mounting bracket and stand. Ideal for measuring inside rooms or offices.

RH-B Ligno-Tech RH with RH Probe

Relative humidity: 0.5% to 99.9%, RH, T, DPT, GPP Accuracy: 10-90% +/- 1.8%. <10% and >90% +/- 3%. Temp: 5°F to 160°F (-15°C to 70°C) Accuracy: +/- 0.50F Detatchable RH Probe /cable. Hold function. Most accurate, widest range, shortest response time.

Order as Ligno-Tec RH-B.

Ligno-DuoTec BW-B pinless and RH (5 page). Ligno-VersaTec V-B- pin, pinless and RH (page 11).

BL2 Memo-Chip

BL2 is a data-logger recording relative humidity, temperature, dew point, GPP and EMC. For more info go to (1) page 18.





l ist Price

Special Package

			LIST Price	Prices
TH Thermo-Hygrometer		TH	47.00	
PN Hygrometer Special Pric	e of 62.00 is available only with purchase of a meter.	PN	74.00	62. ⁰⁰
Ligno-Tec RH, adapter and RH E	luePeg probe	RH-B	378. ⁰⁰	359. 00
Ligno DuoTec BW adapter and	RH BluePeg probe	BW-B	468.00	439. ⁰⁰
Ligno VersaTec adapter and RH	BluePeg probe	V-B	530.00	499. 00
BL2 Memo-chip adapter, RH Blu	uePeg, RH cable	BL-2	187.00	162. 00

Thermo-Hygrometer and Moisture Meter



An all-important pair of tools. Add a Thermo-Hygrometer to your meter order.

We offer a special discount for the PN Thermo-Hygrometer when purchased with a meter.

> **62.00** list 74.00

with purchase of a meter

The best woodworking machinery and most skillful craftsmanship cannot prevent shrinking and warping. These unsightly defects can be avoided by using dry lumber and by keeping the finished product at the right relative humidity. Relative humidity and corresponding stable wood moisture contents are listed in the EMC chart on page 15.

You can find out from the EMC Chart if wood is stable, will dry out or absorb moisture.

Use your moisture meter and thermo-hygrometer to measure moisture content and relative humidity and compare to the EMC Chart, page 15.

There will be no more surprises. What your wood will do, becomes predictable. Shrinking and warping, cupping and delamination can be avoided, when using the rwood at the right moisture content and the right relative humidity.

Questions? Call Customer Service at

Meter Summary and Prices see page 20 and 21.

Order Form

Item #	Description	Qty	Price	Total			
тн	Thermo-Hygrometer		47.00				
PN	Hygrometer with purchase of a meter		62.00				
, <i>'</i>	epaid order is under \$200 and handling will be added		,				
	onal, Canadian orders- call for freigh	nt charg	ges				
Chec	e Continental US for COD we chan k Enclosed COD Mastercard, Discover, American		f	Thank you or your order!			
	ny:						
Name							
Street:							
City:							
State:	Zip:	Сс	ountry:				
Telepho	one:						
E-mail:	-						
	Mastercard, Discover or	Ame	rican E	xpress			
Card N							
Exp. Da				······			
Card Ho							
Signature: CVV Code: Zip Code of C.C.:							
	de: Zip Code of	C.C					
Mail to: Lignomat PO Box 3 Portland		el: 800-	256-3844 227-2105 257-8957				

Lignomat moisture measurement

P.O. Box 30145 Portland, OR 97294 USA Change Service Requested

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▶ Pages 16 to 17.

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