Tracker MC/RH Module

The Tracker MC/RH module is part of a data logger to measure moisture and humidity from:

- 3 measuring points for wood, drywall, brick and other solid materials
- 1 RH BluePeg probe for relative humidity and temperature

The Tracker works like 3 moisture meters and 1 thermo-hygrometer taking measurements simultaneously at pre-selected intervals. To save measurements, the Tracker has to be connected to the BL2 Memo-Chip. To download and review the saved data, the BL2 has to be connected to a PC. The PC shows graphs and logs of the measured values with date and time stamp. Data can also be downloaded to an excel spread sheet.

Advantages

Long and short term monitoring show changes in moisture and humidity continuously, whereas handheld thermo-hygrometers and moisture meters just show at-this-moment values. Since both moisture and humidity are recorded simultaneously over time, the graph shows how changes in humidity affect the moisture content of the test material.



Tracker MC-RH module needed for measuring

- Relative Humidity / Temperature
- Moisture in wood, drywall and other solid materials

Description

The Tracker MC/RH module contains state-of-the-art measuring circuitry for relative humidity, ambient temperature and moisture measurements, same as provided by the advanced Ligno-VersaTec moisture meter from Lignomat.

Data Logging:

Probes, pins or screws, the RH BluePeg probe and connecting cables are installed and plugged into the MC Tracker. Then, the Memo-Chip BL2 is set up for the test series (using a free application from the Internet) and connected to the Tracker.

The BL2 initiates measurements at pre-set time intervals. The Tracker takes the measurements and the BL2 saves the measurements. The BL2 can save up to 32000 sets of RH and MC measurements with date and time stamp. Data can be downloaded and reviewed once the BL2 is connected to a PC.

Tracker MC-RH module:

The Tracker has connectors for 4 cables in the front and 1 cable in the back. All connections are plug-ins, easy to use and fail-proof.

The connectors in the front are for measuring cables:

Three sets of 2mm jacks are for 3 cables with 2mm plugs coming from screws, probes or pins for moisture measurements. One 3.5mm stereo jack is for a RH cable or RH adapter to connect the RH BluePeg probe for relative humidity and temperature measurements.

The connector in the back is for data transfer:

One 3.5mm jack for a RH cable or RH adapter to connect Tracker with BL2.

Measuring cables:

- If screws are used, LP-mini cables connect to Tracker
- If EL or EG pins are used, LP-mini cables with Loop Nuts connect to Tracker
- If PK Probes are used, PK-mini cables connect to Tracker

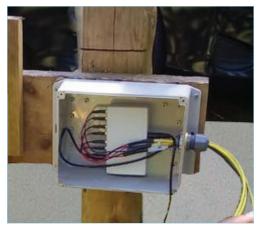
- For RH probes, stero cables with 3.5mm plugs are used to connect to the Tracker.

Applications are:

- from furniture making to wood floor installations
- from crawl space monitoring to attics
- green house moisture control
- from water damage clean-up to moisture in concrete floors
- plus monitoring ambient conditions and moisture in a home or at a customer site







Tracker module can be mounted inside or outside in protective enclosure. Photo shows cables coming from the measuring points in the wood to the Tracker module.



Ideal to monitor floors and keep track of changes in moisture content in relationship to the relative humidity..

Specifications

Tracker MC/RH Module:

Size: 4" x 2.5" x 1" (10cm x 6.4cm x 2.6cm) No battery needed, measurements are initiated and recorded by the BL2 Memo-Chip. Built-in connectors for

- cables to measure moisture content and relative humidity
- cable to connect BL2

Measuring range for wood moisture: 5-99.9% Tracker has a built-in temperature probe for wood temperature corrections.

- Final moisture values, which appear in graph and log on PC are corrected for:
- wood temperature as measured by the Tracker
- wood species as selected when the BL2 is set up for the test
- drywall settings and reference scales as selected when the BL2 is set up for the test

RH BluePeg Probe:

Size of RH BluePeg probe: Ø 0.5" (1.3cm), length 1.35" (3.3cm) The RH BluePeg probe uses a single microchip, factory calibrated to NIST standard. Applications: Measuring ambient conditions and in-situ moisture testing in concrete.

Measuring range for relative humidity: 0-99.9% Accuracy for RH: \pm 2% for 10% - 90%, \pm 3% for below 10% and above 90%.

Measuring range for temperature: 5° F to 160° F (- 15° C to 70° C). Accuracy for Temperature: +/-0.5°F for 32°F to 120°F (+/-0.3°C for 0°C - 50°C) +/-1°F for below 32°F and above 120° F (+/-0.5°C for below 0° C and above 50° C).

Measuring range for DPT: -17.8°F to 160°F (0°F to 70°F)

Photo 1: Graph shows, how changes in relative humidity affect moisture of materials.

Photo 2: A wide selection of probes, pins and screws is available to monitor moisture.

Photo 3: Lignomat's RH BluePeg probe with RH adapter and RH cable is used to monitor relative humidity and ambient temperatures.







Temp		Relative Humidity																			
٥C	٥F	5	10	15	20	25	30	(35)	40	45	50	55	60	65	70	75	80	85	90	95	98
-1	30	1.4	2.6	3.7	4.6	5.5	6.3	7.1	7.9	8.7	9.5	10.4	11.3	12.4	13.5	14.9	16.5	18.5	21.0	24.3	26.9
4	40	1.4	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	26.9
10	50	1.4	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	26.9
16	60	1.3	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	26.8
21	70	1.3	2.5	3.5	4.5	5.4	6.2	6.9	7.7	8.5	9.2	10.1	11.0	12.0	13.1	14.4	16.0	17.9	20.5	23.9	26.6
27	80	1.3	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	26.3
32	90	1.2	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	26.0
38	100	1.2	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	25.6
43	110	1.1	2.2	3.2	4.0	4.9	5.6	6.3	7.0	7.7	8.2	9.2	10.0	11.0	12.0	13.2	14.7	16.6	19.1	22.5	25.2
49	120	1.1	2.1	3.0	3.9	4.7	5.4	6.1	6.8	7.5	8.2	8.9	9.8	10.7	11.7	12.9	14.4	16.2	18.6	22.0	24.7

EMC Table

Example: For a relative humidity of 35% and a temperature of 70°F, the EMC is 6.9%. A wood floor at 6.9% moisture content is stable, if the surrounding air has a relative humidity of 35% and a temperature of 70°F. In short a floor is stable, when MC and EMC are the same.



Specifications are subject to change without notice. Lignomat USA LTD, 14345 NE Morris Ct., Portland OR 97230, 503-257-8957, 800-227-2105, sales@Lignomat.com www.Lignomat.com