

PRECISION MATERIAL MOISTURE METER FOR WOOD, BUILDING MATERIALS, STRAW, HAY, PAPER, TEXTILES AND MUCH MORE.



466 WOOD TYPE CHARACTERISTICS
28 BUILDING MATERIAL CHARACTERISTICS

HIGHLIGHTS:

- serial interface or analog output 0..1 V, freely scalable
- 4 freely programmable user characteristics (GMH 3851)
- including test report

ADDITIONAL FUNCTIONS GMH 3851:



MEETS THE REQUIREMENTS OF EN 14080:2013 EN 16351:2015
SUITABLE FOR CERTIFIED GLUAM TIMBER CONSTRUCTION AND PRODUCTION OF CROSS LAMINATED TIMBER (MPA TESTED AND LISTED)

GMH 3831

Item No. 609289

Resistive material moisture and temperature meter, without accessories

GMH 3851

Item No. 602009

Resistive material moisture and temperature meter, without accessories, with data logger and programmable user characteristics

GENERAL:

The GMH 3831 and GMH 3851 offer significant advantages in handling, ease of use, range of functions, and accuracy. The absolute material moisture of 494 materials is displayed directly and can be automatically converted to the water content. The cumbersome use of conversion tables is a thing of the past. In addition to the displayed moisture value, you also receive a moisture evaluation (wet / moist / dry), which informs you about the condition of the measured material.

APPLICATIONS:

Precision measurements of sawn timber, chipboard, veneer, sawdust, wood wool, flax, straw, hay, concrete, bricks, screed, plaster, lime mortar, cement mortar, paper, cardboard, textiles, wood chips, professional firewood moisture measurement, etc.

User:

Architects, appraisers, housing construction companies, painters, carpenters, parquet layers, tilers, wood processing companies, technical wood drying, construction companies, water damage restoration, textile industry, etc.

TECHNICAL SPECIFICATIONS:

Measuring principle

Moisture: Resistive material moisture measurement according to DIN EN 13183-2: 2002
Temperature: **external:** thermocouple, type K (NiCr-Ni) **internal:** NTC

Characteristic curves: 494 material characteristics

Measuring range

Moisture: 0.0..100.0 % u (material moisture) 0.0..50.0 % w (water content) (depending on the respective material characteristic)

Temperature: -40.0 .. + 200.0 °C (-40.0 .. + 392.0 °F)

Moisture evaluation: in 9 levels (wet ... dry)

Resolution: 0.1 % or 0.1 °C (0.1 °F)

Device accuracy: (at nominal temperature)

Wood: ± 0.2 % material moisture (deviation from the respective characteristic in the range 6..30 %)

Construction: ± 0.2 % material moisture (deviation from the respective characteristic)

Temperature: (external) ± 0.5 % of full scale MW ± 0.3 °C

Temperature compensation: automatically or manually

Sensor connection

Moisture: BNC

Temperature: Thermal stress-free NiCr-Ni socket

Perm. Working temperature: -5 .. + 50 °C (material not frozen)

Display: two 4-digit LCDs (12.4 mm or 7 mm high) and additional indication arrows

Output: 3-pole jack socket Ø 3.5 mm, either serial interface or analog output

Serial interface: Can be connected directly to the RS232 or USB interface of a PC via the galvanically isolated interface converter GRS 3100, GRS 3105 or USB 3100 N (accessory).

Analog output: 0..1 V, freely scalable

Average: from 3 measurements for professional and convenient fire-wood moisture measurement

Power supply: 9 V battery, additional power supply socket for external 10.5..12 V DC voltage supply (suitable power supply: GNG10/3000).

Battery life: approx. 120 h

Housing: Made of impact-resistant ABS, membrane keyboard, transparent panel, integrated pop-up clip

Dimensions: 142 x 71 x 26 mm (H x W x D)

Weight: 155 g

Scope of delivery: Device, battery, test report, operating instructions

FURTHER FUNCTIONS WITH GMH 3851:

User characteristics: 4, freely programmable

Support points per characteristic: 20th

With the free GMHKonfig software, the support points can be conveniently entered into the device using a computer. (Accessories required for this: interface converter)

Sort limiting of the material selection up to 8 favorites

Data logger:

This device is essential for recording or documenting material behavior as part of QM systems or similar. Using the integrated data memory, up to 10,000 measured values can be recorded and processed. In addition, the customer can save 4 individually determined characteristic curves (e.g. by means of a kiln test or CM method) directly in the device. The previous use of conversion tables is therefore no longer necessary.

Logger functions:

- manual: 99 data records (retrieval of data via keyboard or interface)

- cyclical: 10,000 data records (data retrieval via interface) adjustable cycle time: 30 s..1 h
The logger is started and stopped via the keyboard or the interface. An easy-to-use software GSOFT 3050 (see accessories) is available for reading-out the logger data.

ACCESSORIES OR SPARE PARTS:

GSOFT 3050

Item No. 601336

Windows software for GMH 3000 and GMH 5000 with logger

GRS 3100

Item No. 601097

Interface converter GMH3xxx <=> PC, RS232

USB 3100 N

Item No. 601092

Interface converter GMH3xxx <=> PC, USB

see next page for further special accessories.