

Precision material moisture measuring device for wood, building materials, straw, hay, paper, textiles, etc.



STANDARD
FUNCTIONS:



466 WOOD TYPE CHARACTERISTICS
28 CONSTRUCTION MATERIALS

HIGHLIGHTS:

- Moisture rating
- Display in material moisture *u* or water content *w*
- Connection of external temperature probes
- serial interface or analog output 0-1 V, freely scalable
- 4 programmable characteristics (GMH 3851)
- incl. calibration protocol

MPA certified appr. for glued timber construction acc. to DIN 1052-1

GMH 3830

Product-ID: 600347

Resistive material moisture and temperature measuring device, w/o accessories

GMH 3851

Product-ID: 602009

Resistive material moisture and temperature measuring device, w/o accessories, with data logger and programmable characteristic curves memory

Features:

The GMH 3830 and GMH 3851 offer decisive advantages in handling, user-friendliness, functional range and accuracy. The absolute moisture of 494 material types is displayed directly and can be automatically converted to water content. The cumbersome usage of calculation tables becomes a thing of the past. Additionally you get a moisture rating (wet ... dry) of the measured material.

Application:

Precision measurements in cut-wood, chip board, veneer, sawdust, wood chips, wood wool, flax, straw, hay, concrete, gas concrete, bricks, wash floor, cast, limestone mortar, cement mortar, paper, carton, textiles etc.

User:

architect, expert, inspector, building contractor, painter, carpenter, parquet joiner, floor tiler, wood works, timber desiccation plant, building repair company, textile industry etc.

Specifications:

Measuring principle:

Moisture: Resistive material moisture measurement acc. to DIN EN 13183-2:2002

Temperature:
external: thermocouple, NiCr-Ni (type K)
internal: NTC

Kennlinien: 494 material characteristics

Measuring range:

Moisture: 0.0 ... 100 % *u* (material moisture)
0.0 ... 50 % *w* (water content, wet basis)
(depends on selected characteristic)

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

Moisture rating: 9 steps (dry ... wet)

Resolution: 0.1 % or 0.1 °C (0.1 °F)

Device accuracy: (at nominal temperature)

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

Building material: ±0.2 % material moisture (deviation from corresponding characteristic curve)

Temperature: (external) ± 0.2 % of m.v. ± 0.3 °C

Temperature compensation: automatic or manual

Sensor connection:

Moisture: BNC

Temperature: thermovoltage-free type K (NiCr-Ni) socket

Perm. working temperature: -25 ... 50 °C

Display: two 4-digit LCD displays (12.4 mm and 7 mm high), additional indicator arrows

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

Serial interface: connectable to RS232 or USB interface of PCs via electrically isolated interface converter GRS 3100, GRS 3105 or USB 3100 N (accessories).

Analog output: 0 - 1 V, freely scalable

Power supply: 9 V battery, additional socket for external 10.5-12 V direct current power supply (adequate PSU: GNG10/3000).

Power consumption: approx. 2.5 mA

Housing: impact-resistant ABS, front side IP65, integrated pop-up clip for table top or suspended use.

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

Weight: 155 g

Scope of supply: Device, battery, manual

additional functions of GMH 3851:

User specific characteristics: 4, freely programmable

Interpolation points per curve: approx. 20

*By means of the gratis software GMHKonfig the interpolation points can be comfortably edited and stored to the instrument.
(Required accessories: interface converter)*

Average value of 3 measurements, e.g. for professional firewood moisture measurements

Accessories and spare parts:

GSOFT 3050
Logger operation software

GRS 3100
RS232 interface converter

USB 3100 N
Interface converter

additional accessories: see next page