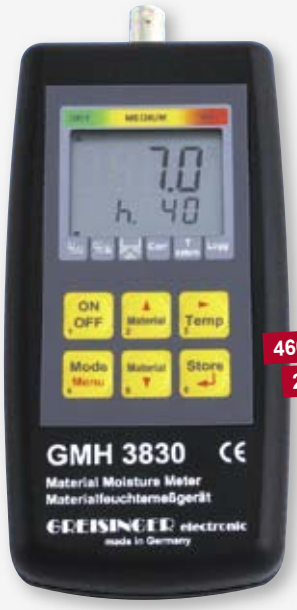
Precision material moisture measuring device for wood, building materials, straw, hay, paper, textiles, etc.



- **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**
- **incl. calibration protocol**

466 WOOD TYPE CHARACTERISTICS
28 CONSTRUCTION MATERIALS

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

additional functions of GMH 3851

- **Average function e.g. for firewood moisture** NEW
- **2 integrated logger functions**
- **4 programmable characteristics**
- **Real-time clock**

GMH 3830

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

GMH 3851

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

Description:

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
Characteristics:	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
Dimensions / weight:	142 x 71 x 26 mm, 155 g
Housing:	impact-resistant ABS, front side IP65, integrated pop-up clip for table top or suspended use.

Functions:

Hold, Auto-Hold Automatic „freezing“ of stable measuring values
Battery change indicator ⚠ and „bAt“
Sort Limits the characteristics selection to up to 8 favorite curves.
Auto Power Off

additional functions of GMH 3851:

Data logger: This instrument is essential for the documentation of material state by quality assurance systems, etc.
By means of the integrated data logger there can be up to 10000 measuring values recorded and processed on demand. Additionally it is possible to individually program 4 material curves (e.g. with dry oven or CM-method). This instruments finally makes paper correction tables unnecessary.
Logger functions:
- manual:
99 data sets (the data can be read out by keypress or interface)
- cyclic:
10,000 data sets (data can be read out by interface)
adjustable cycle time: 30 s ... 1 h
The logger is started by keypress or interface.
There is a comfortable software GSOFT 3050 (accessories) available for read-out of the logger data.

Real-time clock: clock with day, month and year

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)

Accessories and spare parts:

GSOFT 3050
Logger operation software

GRS 3100
RS232 interface converter

USB 3100 N
Interface converter

GKK 3500
case (394 x 294 x 106 mm)

additional accessories: see next page