## Measuring material moisture
**with data logger and user programmable material curves**


**Resistive material-moisture meas. device**

# GMH 3850
**with data logger**

This instrument is indispensable for the documentation of material state by quality assurance systems.
By means of the integrated data logger there can be recorded up to 10000 measuring values and processed on demand. Additionally there can be 4 material curves individually programmed by the user to data acquired by reference measurings with dry ovens or CM-method.
This instruments finally makes the usage of paper correction tables and so on obsolete.

## Specification:

**Measuring principle:**
moisture: resistive material-moisture-measuring matching DIN EN 13183-2:2002
temperature external: thermocouple, NiCr-Ni (type K)
temperature internal: NTC
**Characteristic curves:** 498
**Sensor connection:**
moisture: BNC
temperature: flat pin plug (free of thermo-voltage)

***Identical technical data like GMH3830 plus following features:***

**Logger functions:**
**-manuelly:** 99 data sets (visualisation via keys/ display or interface)
**-cyclic:** 10000 data sets (visualisation via interface)
**-adjustable cycle time:** 30sec ... 1h
Logger start and stop via the keyboard or interface. Comfortable read-out and display software (GSOFT3050) available as additional equipment.
**Real-time clock:** clock with day, month and year
**User curves:** 4, programmable via interface
**20 interpolation points per curve**

*By means of the gratis software GMHKonfig the interpolation points can be comfortably edited and stored to the instrument. To connect the instrument to a PC one of the interface converters mentioned below is needed.*

## Accessories:

**SET 38 HF** wood moisture set
**SET 38 BF** wood and building material moisture set
**GSOFT 3050** logger software
**GRS 3100** RS232 interface converter
**USB 3100 N** interface converter
**GKK 3500** case (394 x 294 x 106 mm) with punched lining for device of the GMH3xxx-series

miscellaneous accessories p.r.t. pages 56 - 58

## The handy alternative
**for wood and building material moisture measuring**


**Resistive material-moisture meas. device**

# GMH 3810
**with integrated measuring pins**

The measuring pins integrated on the reinforced front numerous measurings can be done without additional accessories.
For measuring of very hard materials we suggest the components shown at the accessories section.

## Specification:

**Measuring principle:**
moisture: resistive material-moisture-measuring matching DIN EN 13183-2:2002
temperature internal: NTC
**Characteristic curves:** 494
**Measuring range:**
moisture: 0,0 to 100,0 % moisture content (depending on characteristic curve)
temperature: -40,0...+200,0°C (-40,0...+392,0°F)
**Estimation:** in 9 steps (dry ... wet)
**Resolution:** 0,1% resp. 0,1°C (0,1°F)
**Accuracy device:** (at nominal temperature = 25°C)
wood: ±0,2 % moisture content (deviation from characteristic curve at range 6...30%)
building mat.: ±0,2 % moisture content (deviation from characteristic curve)
**Temperature compensation:** automatically or manual
**Measuring probe:** 2 pin holders M6*0.75 with 19mm pins (12mm utilisable)
**Perm. working temperature:** -25 to 50°C
**Storage temperature:** -25 to +70°C
**Relative humidity:** 0 to +95%RH (non-condensing)
**Display:** two 4-digit LCDs
**Power supply:** 9V-battery, type IEC 6F22
**Power consumption:** approx. 2.5 mA
**Dimensions / Weight:** 142 x 71 x 26 mm, 175 g
**Housing:** Impact-resistant ABS plastic housing, membrane keyboard, transparent panel. Front side IP65, integrated pop-up clip
**Functions:** **Hold, Auto-Hold, Sort, Auto Power Off** (description refer to GMH3830)

## Accessories:

**GST 3810** replacement pins (10 pcs.)
**GMK 3810**

1 m measuring cable, incl. adapter
*(2 x banana plug to 2 x banana plug)*
*Allows connection of accessories*

**GSE 91** impact electrode

for additional accessories p.r.t. page 24

miscellaneous accessories p.r.t. pages 56 - 58

## The "little brother"
**for wood and building material moisture measuring**


**Resistive material-moisture meas. device**

# GMR 100
**with integrated measuring pins**

Small, compact measuring instrument for easy measurement of cut wood, chip, veneer, fire wood, wood briquettes, plaster, gypsum, ....

- Integrated, **exchangeable** measuring needles
- **4 popular wood groups A, B, C, D, construction materials E, plaster P**
- **Direct display of moisture content u or wet basis water content w**

## Specification:

**Measuring principle:** resistive material-moisture-measuring matching DIN EN 13183
**Characteristic curves:** 4 different wood groups (A, B, C, D) for a total of 130 kinds of wood, one universal construction material group E (tables), one construction material group P = Plaster
**Meas. range:** 0,0 to 100 % moisture content (depending on characteristic curve)
**Estimation:** in 6 steps (dry...wet)
**Resolution:** 0,0 ... 19,9 %: 0,1% moisture content
20 ... 100 %: 1% moisture content
**Device accuracy:** (at nominal temperature = 25 °C)
wood: ±0,2 % moisture content (deviation to wood group characteristic curve, range 6...20%)
construction: ±0,2 % moisture content (deviation from construction curve)
**Temperature compensation:** manual
**Measuring probe:** 2 pin holders M6x0,75 with 19mm pins (12mm utilisable)
**Perm. working temperature:** -25 to 50°C
**Storage temperature:** -25 to +70°C
**Relative humidity:** 0...95 %RH (non-condensing)
**Display:** 4½-digit LCD-display with additional segments
**Power supply:** 9V-battery, type IEC 6F22
**Power consumption:** approx. 1.8 mA
**Housing:** impact resistant ABS, membrane keyboard, transparent panel, front side IP65
**Dimensions:** 110 x 67 x 30 mm + needles 26 mm
**Weight:** approx. 155 g
**Functions:** **Hold, Auto-Hold, Auto Power Off**

## Accessories:

**GST 3810** replacement pins (10 pcs.)
**GMK 3810** measuring cable incl. adapters

***for additional accessories p.r.t. page 24***

**GKK 252** case (235 x 185 x 48 mm) with foam lining
**GB 9 V** spare battery

miscellaneous accessories p.r.t. pages 56 - 58