Handheld instrument

Display / Controller

Logger / EASYBus

Transmitter

Temperature probe

Alarm / Protection

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

STANDARD FUNCTIONS:

(AUTO OFF)
(AUTO-HOLD)
(BAT)
(SORT)

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*

ADDITIONAL FUNCTIONS GMH 3851:

(LOGG) (clock)

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