

Resistive material moisture measuring GMR 100

Precise measurements in

- cut wood, chip board, veneer
- firewood, wood briquette
- plaster, gypsum

with accessory:

- wood chips, pellet, sawdust, wood wool
- flax, straw, hay, concrete, gas concrete, bricks, wash floor, cast, limestone mortar, cement mortar, paper, carton, textiles, etc.

User

- Users of regenerative fuels (tiled stoves, wood firing, etc.)
- Architect, expert, inspector, building contractor, painter, interior decorator, carpenter,
- parquet joiner, floor tiler, wood works, timber, desiccation plant, building repair companies, textile industry etc.

Highlights

- Integrated Measuring needles
- Direct display of **moisture content u (=MC) in %** (e.g. furniture) or **wet basis water content w in %** (e.g. firewood)
- 4 popular wood groups A,B,C,D, construction materials E, plaster P
- Stability detection with automated measuring sampling
- Extreme wide measuring range
- Moisture indication (wet - medium - dry) in 6 steps
- Manual temperature compensation (the calculation necessary for wood moisture measurements is no more necessary)

User friendly

The GMR100 was completely new designed to meet the needs of the practitioner. Part of this policy is the impact resistant ABS-housing and the frontside IP65-protection.

By the means of the integrated needles many kinds measurements can be performed without additional accessories within seconds.

Die display can be switched from moisture content u (=MC) to wet basis water content w. This eliminates the conversion which had to be calculated formerly. Particularly the measuring of fuel material (to wet basis water content w) is simplified by this feature.

The four wood groups is established since years and accomplishes a sufficient precision for most applications. If highest precision is needed, we recommend the GMH3810.

As an aid for the evaluation of moisture damages the calibration 'P' is integrated. Via this calibration a estimation of the moisture in plaster or gypsum boards is possible without conversion table.

Moisture indication:

Additionally to the display in percent an individual indication of the moisture state is done via a 6 step arrow display. The decision "wet" or "dry" can be read directly from the display and has not to be derived from literature or tables.

Extreme wide measuring range

0,0 - 100,0% moisture content u in wood, depending on the group.

0,1 – 4,4% in plaster

Power consumption

Thanks to the low consumption of ca. 1,8mA, the instrument is ready for operation for the maximum period of time.

Proof of stability via AUTO-HOLD

Especially when measuring dry wood, electrostatic charges can affect the stability of the measuring display.

If the Auto-Hold-Function is activated, the instrument reads automatically until a stable value is found. It freezes the display ("HLD") if this process is finished. A new measuring is started by pressing the Hold-key.



Application example



Measuring of firewood

Set: with case



Specification:

Principle:	Resistive moisture-measuring acc. to DIN EN 13183
Char. curve	4 different wood groups (A, B, C, D) 1 universal construction material group (E, tables) 1 construction material group (P)=Plaster
Indication	in 6 steps from WET to DRY
Resolution	0.0...19.9%: 0,1% moisture content 20...100%: 1% moisture content
Precision(at nominal temperature)	Wood: ±0,2% moisture content (deviation from groups characteristic curve, range 6...30%) Others: ±0,2% moisture content (deviation from groups characteristic curve)
Display	ca. 11 mm high, 4½-digit LCD-display with additional segments for simultaneous display of moisture, wood group and wet/dry evaluation.
Pushbuttons	3 membrane keys
Power Consumption	1.8mA
Nom. temperature	25°C
Ambient Temperature	-25 ... +50°C (-13 ... 122°F)
Relative humidity	0 ... 95%r.F. (non condensing)
Storage temperature	-25 ... +70°C (-13 ... 158°F)
Housing	Dimension: 110 x 67 x 30 mm (L x B x D) + Needles 26mm impact resistant ABS, membrane keyboard, transparent panel. Front side IP65
Weight	approx. 155 g
Highlights	Hold-/Auto-Hold-Function (automatic acquisition on key press), configurable Auto-Power-Off-Function