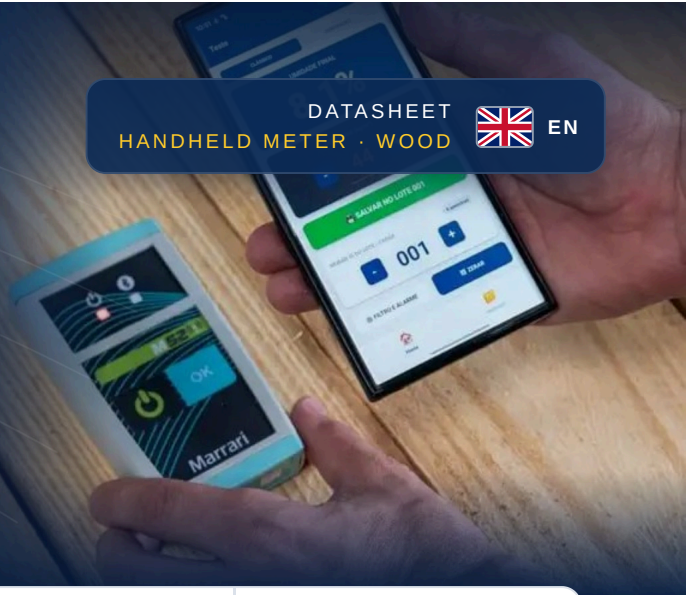
Marrari
AUTOMAÇÃO

DATASHEET
HANDHELD METER · WOOD
EN

M52

Wood moisture meter with mobile app

Bluetooth Low Energy and a mobile app: see moisture on your phone, organize by batch and share the data, with no internet needed.



3–70%	0.1%	±1 p.p.	20 h
measuring range (dry basis)	resolution	accuracy on pine	continuous battery life

01 WHY USE IT

Moisture readings organized by batch, right on your phone.

Works offline
Real-time moisture, density setting and history in the app, even without a connection.

Batches and history
Readings by batch, sample counter and lookup even with the meter switched off.

Limits with alarm
Set minimum and maximum moisture and get an audible alert when out of range.

02 HOW IT WORKS

The M52 uses the **dielectric method** and sends every reading to the app over **Bluetooth Low Energy**. Each measuring function is tied to the species' bulk density at 0% moisture.

1. **Pair with the app**
Connect the M52 to your phone over Bluetooth.

2. **Set the density**
Fine adjustment or one of 5 presets, recalculated instantly.

3. **Place the sensor**
Moisture shows in the app and goes into the open batch.

4. **Share**
Export CSV or JSON via WhatsApp, email or Drive.

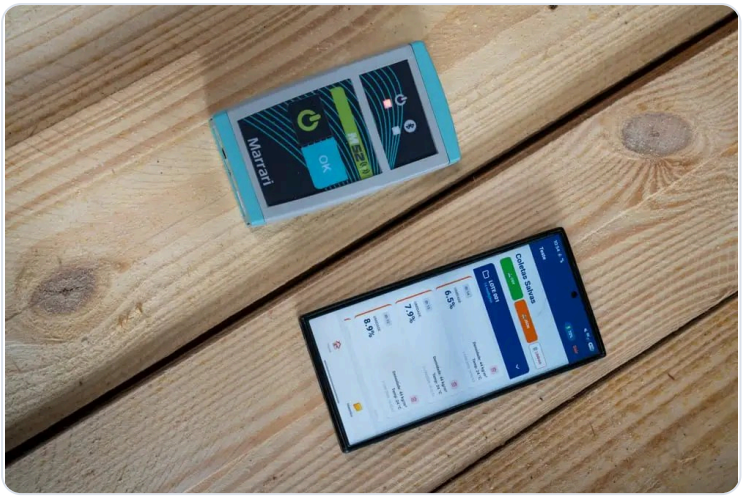
ADJUSTMENT

Right density, right reading

Measuring functions were built for solid planed wood. For rough wood or species not in the table:

- Measure with density 45
- Find the moisture by the oven-dry method
- Measure with density 60
- Interpolate to set the ideal density

03 SPECIFICATIONS



Technical data

Measuring range	3 to 70% (dry basis)
Resolution	0.1%
Accuracy	±1 p.p. on pine · ±2 p.p. on tropical woods
Densities	1 to 120 (100 to 1,200 kg/m³) · 82 species in the manual
Display	In the app
Temperature	Operation up to 70 °C, automatic compensation
Connection	Bluetooth Low Energy · zeroing via app

Mechanical data

Dimensions	130 × 75 × 26 mm
Weight	150 g

For · Sawmills · Wood kilns · Timber yards · Incoming inspection

04 APP, BATTERY AND SERVICES

Mobile app
Measure and manage
Up to 5 density presets, batches, sample counter, history and limits with audible alert.

Data
CSV and JSON
Export through your phone apps. JSON loads into Umidata on a PC for moisture and NCV reports.

Battery
Li-polymer 3.7 V · 1,800 mAh
20 h of use and 5 h to recharge. Use only the charger supplied by Marrari (100–240 Vac, 5 V · 1 A output).

Yearly maintenance
Performed by Marrari
Software update and check against Marrari standards, once a year.

Umilab
Calibration and testing
Calibration and wood moisture testing by the Umilab laboratory: umilab@marrari.com.br.

Warranty
6 months
Made in Brazil, with support and training from the after-sales team: posvendas@marrari.com.br.

General specifications

Method	Dielectric	Software	MUG_M52 V2.51
Range	3 to 70% (dry basis)	Battery life	20 h · 5 h recharge
Resolution	0.1%	Accessories	Charger
Accuracy	±1 p.p. pine · ±2 p.p. tropical	Documents	M52 operating manual · Annex 05.a
Memory	On the smartphone · up to 100 batches	Data software	Umidata (via JSON)