Marrari
AUTOMAÇÃO

DATASHEET
HANDHELD METER · BIOMASS AND GRANULAR
EN

M75-D

Biomass moisture and density meter

The M75 measures moisture while the cart scale weighs the sample: bulk density on wet and dry basis, in the same reading.



3–70%	850 kg/m³	±2 p.p.	<5%
moisture (wet basis)	maximum density	on process wood chips	density error

01 WHY USE IT

Moisture and density from the same sample, in the yard.

Built-in scale
30 kg load cell with about 50 g resolution, checked with calibrated test weights.

Price on what it delivers
Moisture, density and NCV to buy biomass by dry weight.

Reports in Umidata
Up to 5,000 readings in 100 batches, with moisture, density and NCV.

02 HOW IT WORKS

The M75 measures moisture by the **dielectric method** and talks to the **scale cart**, which weighs the sample and calculates **bulk density** on wet and dry basis.

1. **Tare the scale**
With the empty bucket on the cart.

2. **Fill the bucket**
Fill all 35 L, without packing or shaking.

3. **Save the reading**
Press OK: moisture shows and density is on the next screen.

4. **Download**
Batches go to Umidata, which builds the reports.

ADJUSTMENT

Recipes and density factor

Besides the moisture recipe, a correction factor matches results to the NBR 14984 density test, which uses packed chips.

- Bits × moisture correlation (AM1 to AM5)
- Wet or dry basis
- Offset for an existing recipe
- Density correction factor

03 SPECIFICATIONS



Technical data

Moisture	3 to 70% (w.b.) or 3 to 150% (d.b.) · 0.1% resolution
Moisture accuracy	Process chips ±2 p.p. · biomass ±3 p.p.
Density	Up to 850 kg/m³ · 0.1 kg/m³ resolution · error < 5%
Scale	30 kg · typical resolution 50 g (5,000 divisions)
Recipes	10 preset + 10 programmable
Memory	Up to 5,000 readings in up to 100 batches
Display	3.4" backlit graphic LCD

Mechanical data

Capacity	35 liters of material
Weight	M75 5.2 kg · scale cart 27 kg

04 BATTERIES, SOFTWARE AND SERVICES

M75 battery
Li-ion 3.7 V · 2,600 mAh

Up to 14 h of use and 5 to 6 h to recharge. Use only the charger supplied by Marrari (100–240 Vac, 5 V · 1 A output).

Cart battery
Sealed lead-acid 6 V · 4 Ah

Up to 15 h of use and up to 8 h to recharge via power cord (90–240 Vac).

Umidata
Data software

Organizes readings by batch and date and creates moisture, density and NCV reports in Excel or PDF.

Tracker
Recipe adjustment

Statistical software that tunes recipes with lab results and lowers the average error.

Yearly maintenance
Performed by Marrari

Software update and check against Marrari standards, once a year. Includes a scale check.

Umilab
Calibration and testing

Traceable calibration certificate by the Umilab laboratory: umilab@marrari.com.br.

General specifications

Methods	Dielectric and load-cell weighing
Moisture	3 to 70% (w.b.) · 3 to 150% (d.b.)
Density	Up to 850 kg/m³
Temperature	Operation up to 70 °C, automatic compensation
Estimate	Net calorific value (NCV)

User care	Weekly zeroing and scale check with a known weight
Warranty	6 months
Accessories	Charger, USB cable and backpack
Documents	MUG-M75D manual V5.10 · Annex 05.a
Data software	Umidata · tuning in Tracker