Marrari
AUTOMAÇÃO

DATASHEET
HANDHELD METER · LOGS AND FIREWOOD EN

# M65 UmiLog

## Log moisture meter with heating value

The probe goes into a radial hole and sweeps the log for a few seconds. Besides moisture, the M65 estimates the net calorific value (NCV).




| 3–60% | 0.1% | ±5 p.p. | 5,000 |
|---|---|---|---|
| measuring range (wet basis) | resolution | accuracy | readings in memory |

### 01 WHY USE IT

## Know what each log is worth before the boiler.

**Moisture and NCV**
Estimates the net calorific value of the log along with moisture.

**Ready recipes**
Eucalyptus and pine preset, plus 20 programmable recipes.

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

### 02 HOW IT WORKS

The M65 uses the **dielectric method** with a **13.2 mm probe** inserted radially into the log. The sweep reading takes 5 to 10 seconds.

1. **Drill the log**
   14 mm radial hole, at least 5 cm deep.
2. **Insert the probe**
   Put the sensor in the hole and choose the recipe.
3. **Turn and read**
   Rotate the probe for 5 to 10 s; moisture shows on the display.
4. **Download**
   Batches go to Umidata, which builds the reports.

ADJUSTMENT

### One recipe per material

The adjusted parameter is the recipe. Preferably, use the Tracker software.

- Bits × moisture correlation (AM1 to AM5)
- Wet basis (w.b.) or dry basis (d.b.)
- Offset (AJT) for an existing recipe
- GCV and hydrogen content for NCV

## 03 SPECIFICATIONS




### Technical data

| | |
|---|---|
| Measuring range | 3 to 60% (wet basis) or 3 to 150% (dry basis) |
| Resolution | 0.1% |
| Accuracy | ±5 p.p. |
| Recipes | 2 preset (eucalyptus, pine) + 20 programmable |
| Memory | Up to 5,000 readings · up to 100 batches |
| Display | 2.2" backlit LCD |
| Temperature | Operation up to 70 °C, automatic compensation |

### Mechanical data

| | |
|---|---|
| Sensor | 180 mm long · 13.2 mm diameter |
| Weight | 0.9 kg |

**For** · Wood-fired boilers · Log yards · Biomass purchasing · Planted forests

## 04 BATTERY, SOFTWARE AND SERVICES

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

### Umidata
**Data software**
Organizes readings by batch and date and creates moisture 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. Recommended for users: weekly zeroing and cleaning, update recipes whenever the material changes, and yearly calibration at Umilab.

### Umilab
**Calibration and testing**
Testing and conformity analysis 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, radial probe | Software | MUG_65 version 5.01 |
| Range | 3 to 60% (w.b.) · 3 to 150% (d.b.) | Battery life | 6 h · 5 h recharge |
| Resolution | 0.1% | Accessories | Charger and USB cable for PC |
| Accuracy | ±5 p.p. | Documents | MUG-M65 manual V4.60e · Annex 05.a |
| Estimate | Net calorific value (NCV) | Data software | Umidata · tuning in Tracker |