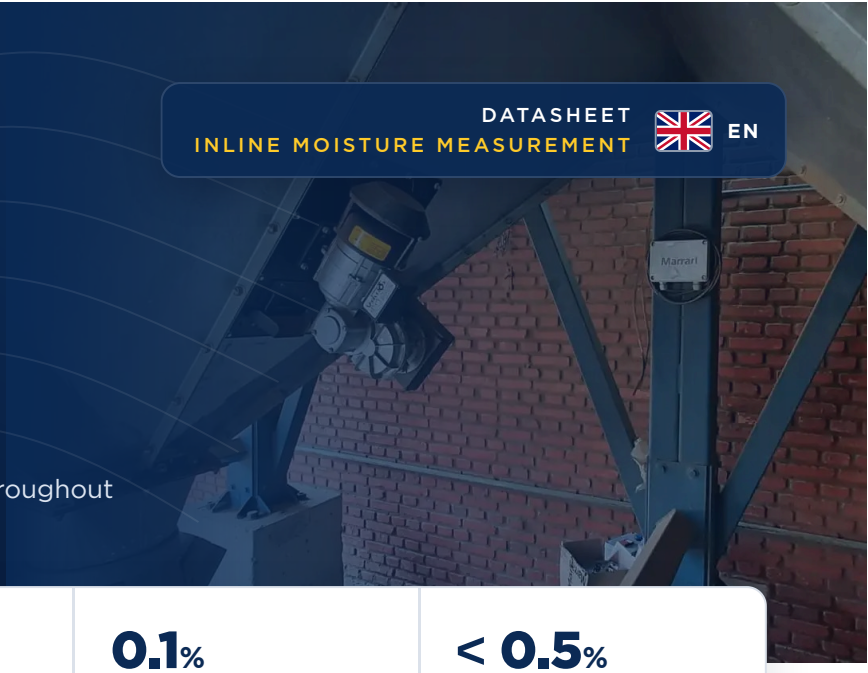
Marrari AUTOMAÇÃO

umi GRAIN Marrari



Inline grain moisture meter

Measures grain moisture content in real time, throughout the whole drying process.

5 /s readings, no sampling needed	**7–30%** measuring range (wet basis)	**0.1%** resolution	**< 0.5%** average error

01 WHY MEASURE INLINE

Dry only as much as needed. No wet grain in the silo, no lost weight.

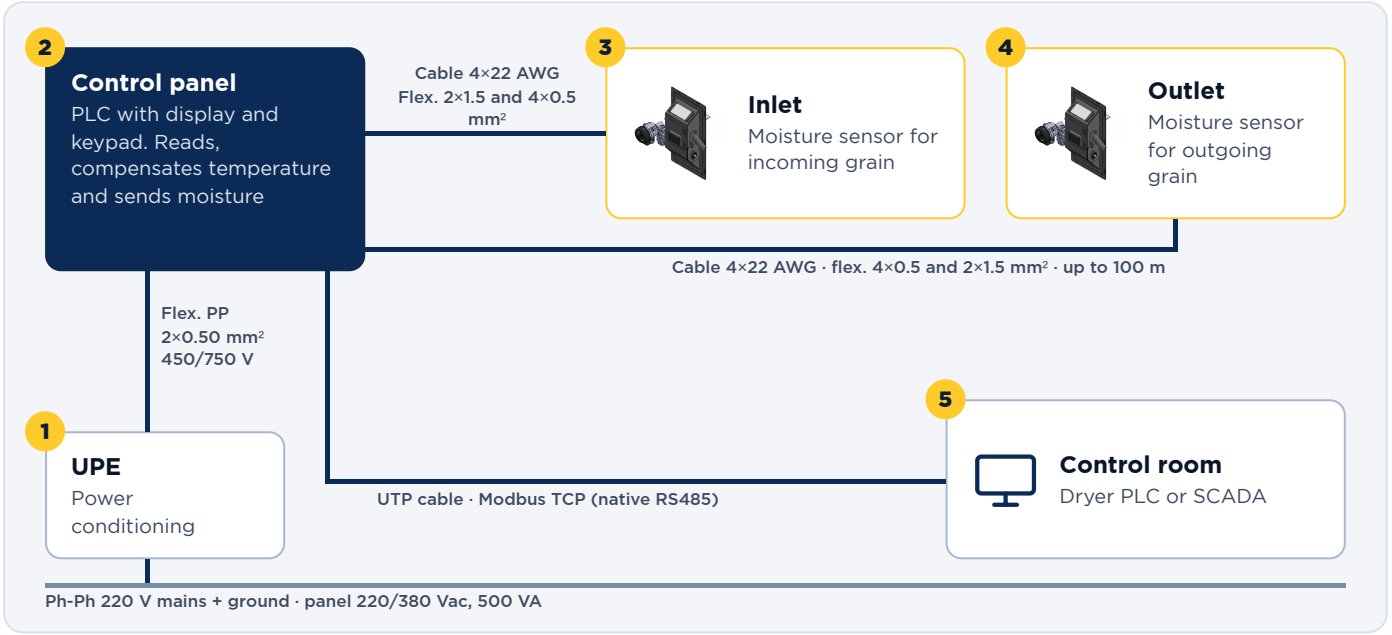
Less energy and time
Cuts thermal energy (biomass), electricity use and drying time.

Less manual sampling
Fewer samples and lab tests. The team is free for higher-value work.

Dryer on automatic
Connected to the dryer control, it adjusts air temperature and grain flow speed.

02 HOW IT WORKS

The sensor reads the grain's dielectric constant **5 times per second** as it flows past. Grain passes through a **collector**, which ensures a uniform sample, or over **immersed sensors** in the grain mass, inside the dryer.



03 CONTROL PANEL AND UPE



Control panel

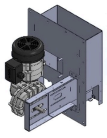
Construction	Carbon steel, double door, grey RAL 7035
Dimensions	520 × 440 × 280 mm · 20 kg
Protection	IP 65
Power supply	220/380 Vac, 500 VA
Capacity	**Up to 4 sensors**

UPE · Power conditioning unit

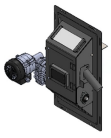
Dimensions	190 × 320 × 120 mm · 10 kg
Protection	IP 65

04 SENSORS AND COLLECTORS

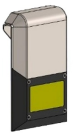
Six models to suit any type of dryer. Dimensions in H × W × D.



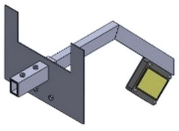
RV 3.0
630 × 380 × 140/280 mm · 25 kg
Powder-coated carbon steel, 304 stainless and UHMWPE



RV 4.0
430 × 330 × 160 mm · 20 kg
Powder-coated carbon steel, 304 stainless and UHMWPE



COLUMN
270 × 180 × 60 mm · 2.5 kg
304 stainless steel



FLAG
500 × 300 × 60 mm · 3.0 kg
Powder-coated carbon steel frame and aluminium



PENDULUM
350 × 60 × 30 mm · 1.0 kg
Zinc-plated carbon steel

FLAT · 3 options
135 × 100 × 30 mm · 0.3 kg · aluminium
190 × 190 × 120 mm · 3.0 kg · SS 304
300 × 190 × 120 mm · 5 kg · SS 304

General specifications

Power supply	**220 Vac or 12 Vdc**	Range	**7 to 30% (wet basis)**
Reading rate	**5 readings/second**	Resolution	**0.1%**
Average error	**Below 0.5%**	Temperature	**Panel ≤ 50 °C · sensor ≤ 85 °C**
Compensation	**Automatic (grain temperature)**	Communication	**Native RS485, Modbus TCP**
Panel–sensors	**Up to 100 m**		