# MISTRAL series























## **Characteristics and functionality**

## Main characteristics

- Electronic scale with higher visibility display options.
- Models with receipt printer or label printer (suitable for receipts).
- Variety of formats.
- Functional and robust design.
- Compliance with EU Regulation 1169/2011 on the provision of food information to consumers (only for M-525).

#### **Features**

- Extensive information for each PLU: normal price, price for weight scales and by kg/100 g (in M-520, M-520 B and M-525), 2 names of 20 characters (1 in M-510, M-510 B and M-515), 10 free texts of 24 characters (5 in M-510, M-510 B and M-515), 1 text of 3,000 characters (in M-525), etc.
- PLU search by code or name.
- Preset keys to programming menus: to change prices, register PLUs or vendors, etc.
- Direct access to 999 PLUs from the keyboard.
- Drill down menus.
- Printing of scale menus.
- 2 programmable macros (in M-520, M-520 B and M-525): recording of a sequence of keys to create direct access to

- any task (reopening of receipts, lists, change in batcher number, etc.).
- Sales and management reports: sales (by article, vendor, time frames, last month, etc.), balance available in the cash drawer, modified PLUs, etc.
- Fast and reliable communication between scales, with PC and mobile devices (via DWS).
- Stocks management on the scale.
- Stock / order mode.

## **Capacity / Accuracy**

- Multi-range (3,000 divisions): 6 kg / 2 g 15 kg / 5 g.
- Optional
- > Mono-range (3,000 divisions):  $15 \, kg / 5 \, g$  or  $30 \, kg / 10 \, g$ .
- > Multi-range (3,000 divisions):  $15 \, kg / 5 \, g 30 \, kg / 10 \, g$ .
- > Mono-range (6,000 divisions): 12 kg / 2 g or 30 kg / 5 g.

#### **Available formats**

- Flat.
- Pole.
- Double body.
- Hanging (ABS or stainless steel).
- Self-service.

#### Construction

- Highly resistant ABS plastic casing in counter and hanging formats.
- Stainless steel casing in hanging format.
- Stainless steel plate.
- Access to all non-metrological components without the need to unseal the scale.

## **Displays**

- Backlit LCD segment display (W150.2 X H43.4 mm) for vendor and buyer (showing weight, price / kg, total, tare, vendor and name of articles).
- Optional:
- LCD matrix graphic display (W134 x H41 mm) for vendor and buyer, for M-520, M-520 B and M-525. Possibility of showing: logos, profitability codes and warning messages sent from a PC (on vendor display) and advertising messages with animated effects on buyer display.

#### **Printer**

- Models available with 1 printer for receipts or 1 printer for labels (also suitable for receipts by changing the paper roll and the working mode).
- 54 mm thermal printer.
- Resolution: 8 dots/mm.
- Speed depending on models:
- > M-520 and M-525: 100 mm/sec.
- > M-510 and M-515: 80 mm/sec.
- > M-510 B and M-520 B: 60 mm/sec.
- Cassette for immediate paper roll change (in label printers).
- Optional:
- > Linerless (in M-525).

#### Receipts

- All the models:
  - > 15 fonts (6 monospaced + 9 multispaced: more modern and legible).
  - > Up to 40 items.
- > EAN-13 barcode.
- > 9 payment methods.
- > Total in National currency and another 3 different currencies.
- > Discounts per line and total.



- M-510, M-510 B and M-515:
- > 2 fixed formats.
- M-520, M-520 B and M-525:
- > 2 fixed formats + 1 programmable format.
- > 4 logos per receipt.
- > Name of vendor.
- > Customers on account.

#### Labels

- All the models:
- > 15 fonts (6 monospaced + 9 multispaced: more modern and legible).
- > 40 logos.
- > EAN-13 barcode.
- > 40 fields of information.
- > 100 programmable texts.
- > Manual and automatic pre-packing modes.
- > Automatic adjustment of the paper detection sensor.
- M-515:
- > From W30 x L30 mm to W60 x L80 mm.
- > 20 fixed formats + 5 programmable formats.
- > 1 type of generic traceability (for meat, fish, fruits, vegetables, etc.) up to 10 products. Included in the prevailing European legislation on bovine traceability.
- M-525:
- > From W30 x L30 mm to W60 x L100 mm.
- > 20 fixed formats + 10 programmable formats.
- > 3 levels of totals.
- > Printing of "n" identical labels.
- > Printing with 90°, 180° and 270° rotation.
- > Packaging date, expiry date and extra date (for any application).
- > Alphanumeric batch number.
- > 2 types of generic traceability (for meat, fish, fruits, vegetables, etc.) up to 20 products. Included in the prevailing European legislation on bovine traceability.



CONSUMAS



#### Food information

- M-510, M-510 B and M-515:
- > Minimum letter size: 1.2 mm.
- > For direct sale receipts and labels: possibility of indicating in the PLU name (with an \* or other symbol) those that contain allergens and programming a text, such as "\* Consult allergens".
- > Labels do not comply with the labelling packed food Regulation (only 5 texts of 24 characters are available).
- M-520, M-520 B and M-525:
- > Minimum letter size: 1.2 mm.
- > Effect (**bold**, <u>underlined</u>, or <u>both</u>) for each character in the text
- > Possibility of using the general text "G" (3,000 characters) for ingredients, in lower case or UPPER CASE to highlight allergens.
- > Possibility of including a table of nutritional facts.
- > Free texts (10 x 24 characters).
- > For direct sale receipts and labels: possibility of indicating in the PLU name (with an \* or other symbol) those that contain allergens and programming a text, such as "\* Consult allergens".
- > Possibility of printing 2 labels for each operation: programmable by PLU, configurable information, 2<sup>nd</sup> automatic or manual label (also to be used as promotional labels).
- M-525: Compliance with EU Regulation 1169/2011 on the provision of food information to consumers as of 13 December 2016.

#### Communications

- TCP/IP Ethernet for interconnection and connection to PC.
- RS-232, for connection to scanner (in M-520, M-520 B and M-525).
- Optional: Wi-Fi.

#### Security

 Access to different protected programming menus via configurable passwords.

#### Interconnection

- M-510, M-510 B and M-515: up to 5 scales per section.
- M-520, M-520 B and M-525: up to 10 scales per section.

## Connectivity with other devices

- PC.
- Barcode scanner (powered by the scale –5 VDC–) to read EAN-13 bard codes (in M-520, M-520 B and M-525).
  Optional built-in scanner, for double body format.
- Cash drawer.
- Queueing system (for hanging scales).
- Connectable to a single load cell weighing platform, up to 400 x 400 mm max., and up to 30 kg. Consult compatible scales formats.

#### Software

(See section on software)

#### PC software:

- DFS:
  - > Programming of scales.
  - > Receipt of sales data.
- > Data backup copy.
- > Graphic design of receipts and labels (DLD).
- > Design and management of advertising images for graphic display.
- Integration tools: in Windows or Linux to facilitate communication with the Back-Office.

#### Scale firmware:

- DWS (Dibal Web Server):
- > Allows access to the information on each scale from any computer or mobile device with an Internet browser.

#### Power supply

- Mains: 110 up to 230 VAC.
- Depending on the models, also:
- > High performance rechargeable internal battery (M-510 B and M-520 B): up to 52 hours of life (calculated for 1,500 receipts, with 3 articles per receipt)\* and connector to external battery 12 V.
- > Optional: Anti-blackout rechargeable internal battery 24 V and connector to external battery 24 V.

#### **Energy consumption**

• 6.5-91 W (depending on the conditions of use).

<sup>\*</sup> With segment display and back lighting disconnected. The charging and autonomy times may vary considerably in accordance with the temperature, age and condition of the batteries, use of back lighting, frequency of use of the printer, interconnection, etc.

## Flat Format

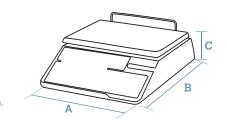


## **Dimensions**

## DATA IN mm

A	370	
В	450	
C	140	

Plate dimensions: L360 x W260 mm. Weight with packaging: 9.0 kg.





	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-510 F	LCD Segment	Receipts	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M101P2LGE
M-510 B F	LCD Segment	Receipts	2,000	45x2 +4x2*	5	Mains / Battery	6 kg/2 g-15 kg/5 g	7M111P2LGE
M-520 F	LCD Segment	Receipts	5,000	40x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M201P2LGE
M-520 B F	LCD Segment	Receipts	5,000	40x2 +9x2*	10	Mains / Battery	6 kg / 2 g -15 kg / 5 g	7M211P2LGE



<sup>\*</sup> Using the Shift key and those of Vendor.





	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-510 P	LCD Segment	Receipts	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M101T2LGE
M-510 B P	LCD Segment	Receipts	2,000	45x2 +4x2*	5	Mains / Battery	6 kg / 2 g -15 kg / 5 g	7M111T2LGE
M-520 P	LCD Segment	Receipts	5,000	40x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M201T2LGE
M-520 B P	LCD Segment	Receipts	5,000	40x2 +9x2*	10	Mains / Battery	6 kg / 2 g -15 kg / 5 g	7M211T2LGE

 $\bigcirc$  optional

 $<sup>\</sup>ensuremath{^*}$  Using the Shift key and those of Vendor.



	Displays	11111101	1200	2110011200	Vollagio	10001	capacity / / toodracy	11010101100
M-510 DB	LCD Segment	Receipts	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M101D2LGE
M-510 B DB	LCD Segment	Receipts	2,000	45x2 +4x2*	5	Mains / Battery	6 kg / 2 g -15 kg / 5 g	7M111D2LGE
M-520 DB	LCD Segment	Receipts	5,000	70x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M201D2LGE
M-520 B DB	LCD Segment	Receipts	5,000	70x2 +9x2*	10	Mains / Battery	6 kg / 2 g -15 kg / 5 g	7M211D2LGE

**M** optional

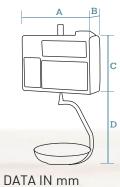
 $<sup>\</sup>ensuremath{^*}$  Using the Shift key and those of Vendor.



## ABS Hanging Format



## **Dimensions**



A 403
B 190
C 327
D 415
Plate dimensions: Ø 310 mn

Weight with packaging: 11.0 kg.



	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-510 H ABS	LCD Segment	Receipts	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M101C2SGE
M-520 H ABS	LCD Segment	Receipts	5,000	70x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M201C2SGE



 $<sup>\</sup>ensuremath{^*}$  Using the Shift key and those of Vendor.

## S. Steel Hanging Format



## **Dimensions**

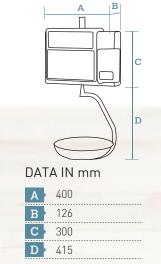


Plate dimensions: Ø 310 mm. Weight with packaging: 11.0 kg.



	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-510 H S. Steel	LCD Segment	Receipts	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M101C2SIE
M-510 H S. Steel	LCD Segment	Receipts	5,000	70x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M201C2SIE

(M) optional

<sup>\*</sup> Using the Shift key and those of Vendor.



## Flat Format

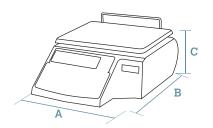


## **Dimensions**

#### DATA IN mm

A 375 B 470 C 180

Plate dimensions: L360 x W260 mm. Weight with packaging: 11.7 kg.





	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-515 F	LCD Segment	Labels (or Receipts)	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M151P2LGE
M-525 F	LCD Segment	Labels (or Receipts)	5,000	40x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M251P2LGE



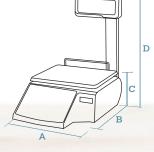
 $<sup>\</sup>ensuremath{^*}$  Using the Shift key and those of Vendor.







## **Dimensions**



## DATA IN mm

Α	375
В	470
C	180
D	565

Plate dimensions: L360 x W260 mm. Weight with packaging: 12.6 kg.

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	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-515 P	LCD Segment (d	Labels or Receipts)	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M151T2LGE
M-525 P	LCD Segment (d	Labels or Receipts)	5,000	70x2+9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M251T2LGE



<sup>\*</sup> Using the Shift key and those of Vendor.



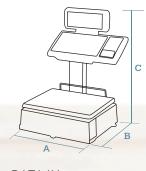
## Double Body Format





Cassette included.

## **Dimensions**



## DATA IN mm

Α	375	
В	470	
С	547	

Plate dimensions: L360 x W280 mm. Weight with packaging: 15.0 kg.



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	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-515 DB	LCD Segment	Labels (or Receipts)	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M151D2LGE
M-525 DB	LCD Segment	Labels (or Receipts)	5,000	70x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M251D2LGE

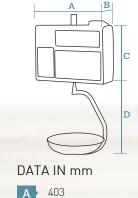


 $<sup>\</sup>ensuremath{^*}$  Using the Shift key and those of Vendor.

## ABS Hanging Format



## **Dimensions**



В	190
С	327
D	415

Plate dimensions: Ø 310 mm. Weight with packaging: 13.0 kg.



	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-515 H ABS	LCD Segment	Labels (or Receipts)	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M151C2SGE
M-525 H ABS	LCD Segment	Labels (or Receipts)	5,000	70x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M251C2SGE

**M** optional

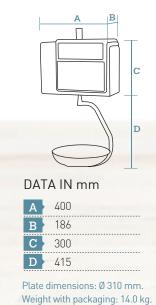
<sup>\*</sup> Using the Shift key and those of Vendor.



## S. Steel Hanging Format



## **Dimensions**





	Displays	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-515 H S. Steel	LCD Segment	Labels (or Receipts)	2,000	45x2 +4x2*	5	Mains	6 kg / 2 g -15 kg / 5 g	7M151C2SIE
M-525 H S. Steel	LCD Segment	Labels (or Receipts)	5,000	70x2 +9x2*	10	Mains	6 kg / 2 g -15 kg / 5 g	7M251C2SIE

(M) optional

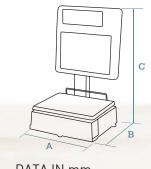
<sup>\*</sup> Using the Shift key and those of Vendor.

## 1 LABEL PRINTER

## Self-Service Format



## **Dimensions**



## DATA IN mm

A	375
В	375
C	680

Plate dimensions: L360 x W280 mm. Weight with packaging: 16.0 kg.



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	Front Display	Back Display	Printer	PLUs	Direct PLUs	Vendors	Power	Capacity / Accuracy	Reference
M-525 SS - 1 DISP.	LCD Segment	-	Labels	5.000	100	-	Mains	6 kg / 2 g -15 kg / 5 g	7M251A2LGE
M-525 SS - 2 DISP.	LCD Segment	LCD Segment	Labels	5.000	100	10	Mains	6 kg / 2 g -15 kg / 5 g	7M251B2LGE

(M) optional



## **Options**





> Graphic display (W134 x H41 mm).

> Built-in scanner in scale

Option	Characteristics	Ref.
Capacity 15 kg / 5 g	Mono-range (3,000 divisions).	N(*)
Capacity 30 kg / 10 g	Mono-range (3,000 divisions).	Y(*)
Capacity 15 kg / 5 g - 30 kg / 10 g	Multi-range (3,000 divisions).	F(*)
Capacity 12 kg / 2 g	Mono-range (6,000 divisions).	V(*)
Capacity 30 kg / 5 g	Mono-range (6,000 divisions).	P(*)
Graphic displays (W134 x H41 mm)	LCD matrix graphic display for buyer and vendor. For M-520, M-520 B and M-525.	Consult
Linerless	Label or receipt on continuous adhesive paper without supporting paper (in label printer for M-525).	Consult
Wi-Fi	Wireless communications (IEEE 802.11n).	Consult
Anti-blackout	Anti-blackout internal battery 24 V + external battery connector 24 V.	Consult
Built-in scanner in the scale	1D and 2D barcodes. Only for double body format.	Consult
		7340F1U1
DEG C (r	Scale configuration, receipt of sales data for processing with other IT	7340FNU1
DFS Software	applications, data backup (LBS), and labels and receipts graphic design (DLD). (See section on software).	7340D1U1
		7340DNU1
Technical DWS Firmware	For the remote configuration of the scale. (See section on software).	7340W101
Full DWS Firmware	For the remote configuration of the scale and processing of the information generated. (See section on software).	7340WN01
Metrological verification (M)	According to EU weighing directives. (See section on equipment metrological verification).	Consult

## **Accesories**



Small Italian plate L357 x W235 x H55 mm.



Large Italian plate L407 x W284 x H60 mm.



**Flat plate for hanging scales** L360 x W280 mm, instead of the semi deep plate.



**Deep plate for hanging scales** Ø310 x H70 mm, instead of the semi deep plate.



Interconnection switch

For M-510 B and M-520 B scales with rechargeable internal battery.



**Battery for the switch** 

Power battery for the BHN99 interconnection switch.





#### **Barcode scanner**

Includes connection cable to the scale (for models M-520, M-520 B and M-525). (For built-in scanner, consult options).



Adapter for receipt printing in label printer

Required for standard size receipt rolls.

#### Note:

- The references correspond to standard models: Dark gray ABS plastic or stainless steel casing (depending on the format), backlit LCD segment display, stainless steel flat plate in counter scales (semi deep stainless steel plate in hanging scales), cash drawer connector, queueing system connector in hanging scales and TCP/IP Ethernet communications. Capacity/Accuracy: 6 kg / 2 g - 15 kg / 5 g.