

# EMULA Series INTELLIGENT JUNCTION BOXES



# EMULA Series - Intelligent junction boxes

The ever increasing demand for digital technology in weighing operations is a consequence of the significant advantages it provides.

**DATA RELIABILITY:** digital data is extremely reliable thanks to the high level of immunity to disturbance and interference and the ability to transmit data over long distances.

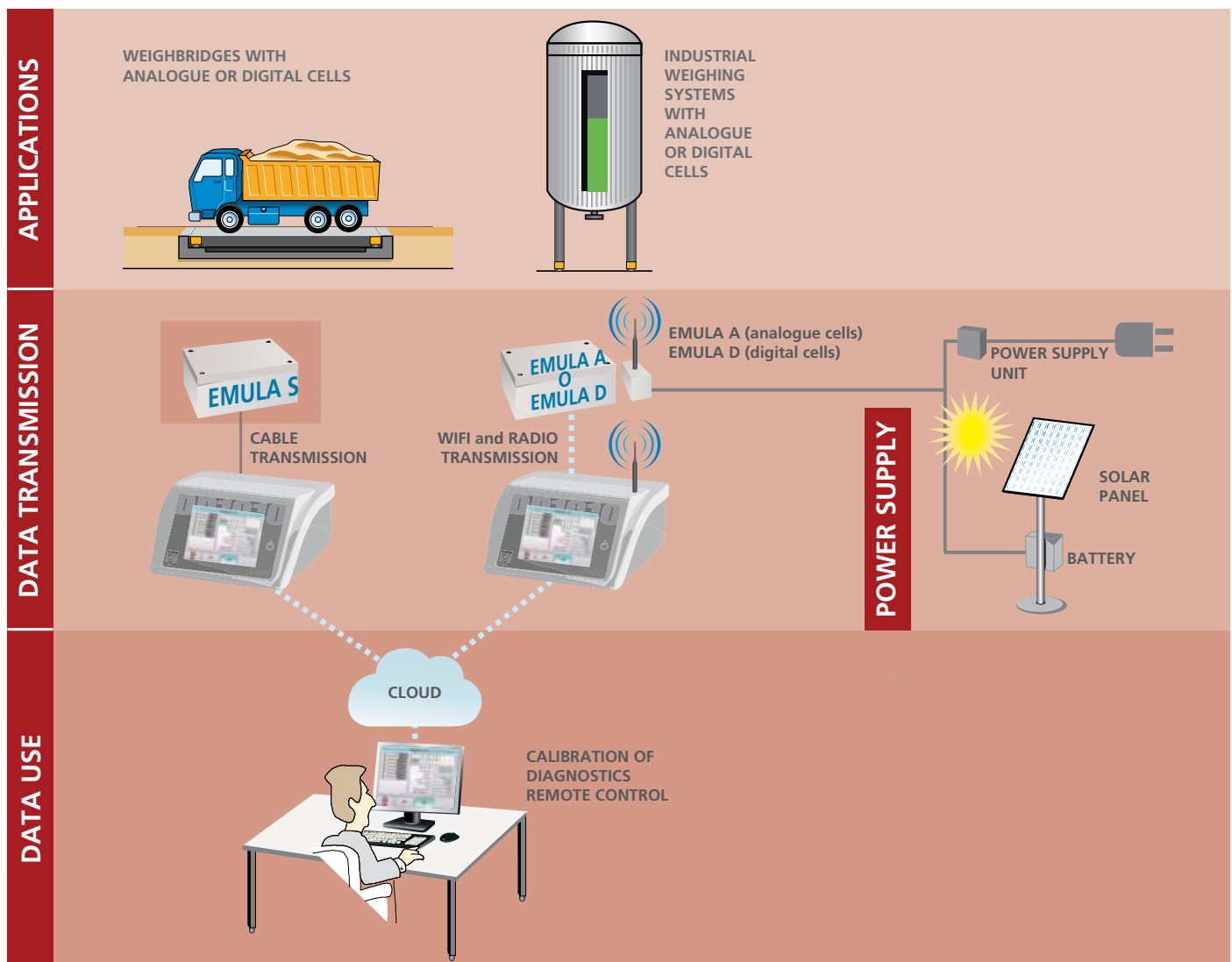
**IDENTIFICATION:** each cell is identified unequivocally by an individual calibration coefficient

## THIS ALLOWS FOR

**RAPID CALIBRATION:** during installation

**INDIVIDUAL DIAGNOSTICS:** each individual cell is monitored allowing faults to be signalled immediately using the weighing terminal

**REMOTE CONTROL:** system operation can be verified remotely allowing system calibration to be performed without on-site intervention



## ACCESSORIES

**RF KIT - electric cabling is no longer a trouble** Use of the RF-KIT allows the radio data transmission of the digital weight up to distances of 200 m thus providing a solution when laying cables is problematic or expensive.

**WIFI KIT - data moves quickly over the network**

This allows the weighing tool to dialogue in existing wireless and/or Ethernet networks. A transmission module is fitted on the weigh station and on the weighing terminal.

**ENERGY 3 KIT**  
**ENERGY 12 KIT**  
**clean energy, a solution without mains power**

EMULA can be powered using photovoltaic panels or a battery unit.

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## EMULA-S model INTELLIGENT JUNCTION BOX

The EMULA\_S junction box transforms analogue weighing systems into modern digital ones. At very low cost EMULA\_S can be connected to a Dialogica or Diade series terminal to obtain all the benefits of digital technology without having to change existing weighing cells.

## EMULA-A model INTELLIGENT JUNCTION BOX

The EMULA-A junction box converts signals from the analogue weighing cells into digital data. The software installed on the device processes the data from each individual cell to produce a weight in compliance with reference recommendations norms and which can therefore be transmitted to the weight indicator using a cable or radio connection.

The wireless connection with the weight indicator can also be made legal systems for trade for data exchange with third parties thanks to the CE-certified transmission protocol in compliance with Welmec guides.

## EMULA-D model INTELLIGENT JUNCTION BOX

The signal from the digital loading cells is processed into a weight value and transferred using a wifi or radio connection to the weight indicator.

This means the connection between the weighing platform and weight indicator is wireless.

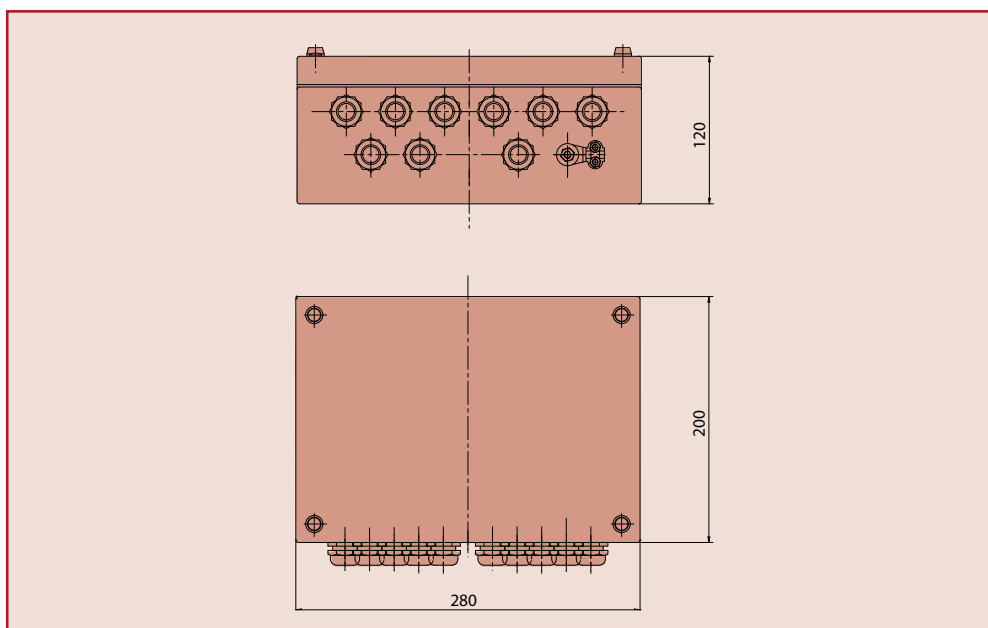
All sampling and diagnostic operations are performed using the weight indicator or directly on the device itself.



Example of a diagnostics page

		Emula-S	Emula-A	Emula-D
<b>CELL TYPE</b>	analogue	•	•	
	digital			•
<b>TRANSMISSION</b>	radio		•	•
	wifi		•	•
	cable	•		
<b>CALIBRATION AND DIAGNOSTICS</b>	calibration coefficient checks	•	•	•
<b>DIAGNOSTICS</b>	eccentric load correction	•	•	•
	cell power supply checks	•	•	•
	reset, operating parameter, etc. checks	•	•	•
	cell temperature			•
	error logging	•	•	•
<b>POWER SUPPLY</b>	mains	•	•	•
	solar panel	•	•	•

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## JUNCTION BOX TECHNICAL SPECIFICATIONS

<b>Power supply</b>	<b>from 10 to 18 V DC</b>
<b>Maximum number of load cells</b>	<b>8</b>
<b>Maximum number of divisions</b>	<b>6000 for individual field tools 3x3000 for multi-field tools, CE approval</b>
<b>Transmission</b>	<b>RS485 cable, wireless</b>
<b>Container</b>	<b>Stainless steel 280x200x120 mm</b>
<b>Protection rating</b>	<b>IP 67</b>

### ENERGY 3 KIT

#### Kit composition

- 120 W solar panel
- 1 support post
- 1 charge regulator
- 1 40 A/h battery
- 1 electrical panel

#### Technical specifications

- maximum applicable load 2 A at 12 V DC
- Operation during non-daylight hours  
1.5 days (permanently ON) 500 mA (EMULA+8 cells+radio)  
3 days (8 operating hours/day) 500 mA (EMULA+8 cells+radio)
- Battery recharging  
4.5 h of direct sunlight 500 mA of applied load

### ENERGY 12 KIT

#### Kit composition

- 2 120 W solar panels
- 1 support post
- 1 charge regulator
- 1 110 A/h battery
- 1 electrical panel

#### Technical specifications

- maximum applicable load 5 A at 12 V DC
- Operation during non-daylight hours  
4 days (permanently ON) 500 mA (EMULA+8 cells+radio)  
12 days (8 operating hours/day) 500 mA (EMULA+8 cells+radio)
- Battery recharging  
4.5 h of direct sunlight 500 mA of applied load