WCD ED320

Technology
driving results

Driving efficiency and sustainability

ШEG

WCD ED320

Technology **driving results**

Connectivity for data monitoring and processing

The **WCD ED320** was specially developed to make machines and equipment smarter through integration with the WEGnology® IoT platform, enhancing process management with greater agility and efficiency.

Its edge computing capabilities allow for the execution of various calculations and logic based on artificial intelligence and machine learning algorithms, optimizing local data traffic between sensors and machines, and enabling remote availability via software.

The **WCD ED320** operates with the **WEGnology OS** operating system, which offers a wide range of essential features, such as remote and local interface parameterization. In addition, it supports WPA3 Enterprise networks, remote firmware updates with digital certificates, and end-to-end encrypted communication, ensuring greater security and reliability for a wide variety of applications.
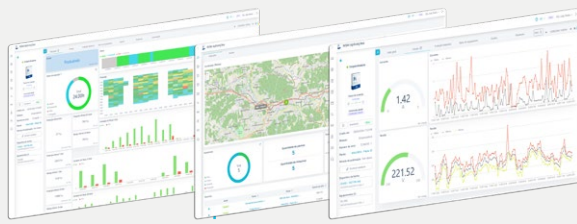
Product with connectivity to WEG's IoT platform.
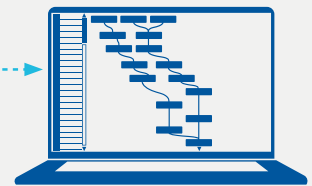
Greater data security

Application

WEGnology®
WEG Smart Machine

Remote access from anywhere in the world

MQTT

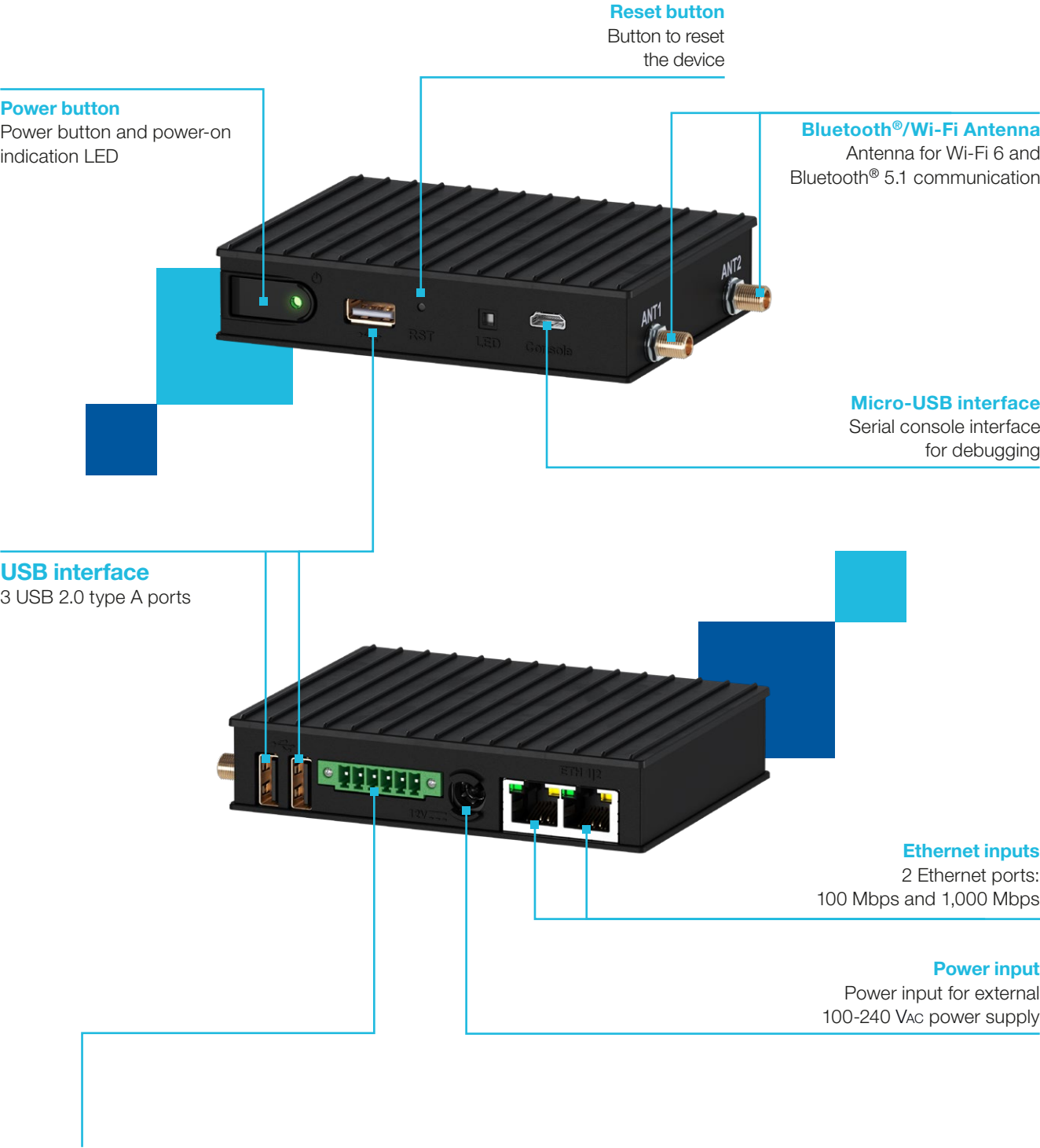## WEG Smart Machine
(*Software as a Service*)

Cloud-based software designed for the digitalization of machines and equipment, offering a wide range of no-code tools for the simple and intuitive creation of dashboards and alarms. Ideal for monitoring, parameterization, and remote control of machines from anywhere in the world.
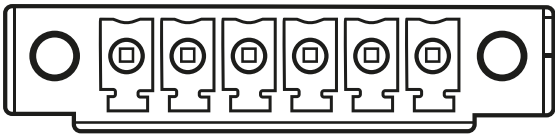Learn more

WCD ED320

Low-code logic running locally on the WCD ED320

WEG Mobile Robot

Various types of machines

Energy meters

Alarms

PLC

Sensors

Inverters

Interfaces

Reset button
Button to reset
the device

Power button
Power button and power-on
indication LED

Bluetooth®/Wi-Fi Antenna
Antenna for Wi-Fi 6 and
Bluetooth® 5.1 communication

Micro-USB interface
Serial console interface
for debugging

USB interface
3 USB 2.0 type A ports

Ethernet inputs
2 Ethernet ports:
100 Mbps and 1,000 Mbps

Power input
Power input for external
100-240 V~ power supply

Pin	RS485 mode	RS232 mode	Pin
1	RS485_NEG	RS232_TXD	6 5 4 3 2 1
2	RS485_POS	RS232_RTS	
3	GND	GND	
4	NC	RS232_CTS	
5	NC	RS232_RXD	
6	GND	GND	

Note: Pinout starts from right to left.

Data sheet

Reference		WCD-ED320
Basic data	**CPU**	Quad-Core ARM Cortex-A53, 1.8 GHz
	Coprocessor	ARM Cortex-M4
	RAM	2 GB, LPDDR4
	Storage	16 GB, eMMC flash
Communication interfaces	**Ethernet**	2 ports (1x100 Mbps + 1x1,000 Mbps), RJ45
	Wi-Fi	Intel Wi-Fi 6, Dual-band 802.11ax
	Bluetooth®	5.1 low energy
	USB port	3 USB 2.0 ports, type A
	Serial ports	1 serial console via UART (micro-USB) 1x RS485 (half duplex, 2 wires) or 1xRS232
	Main protocols	MQTT HTTP Modbus-RTU/TCP
Electrical characteristics	**Power supply**	8 to 36 V$_{DC}$, power supply included[1]
Mechanical characteristics	**Dimensions**	112 x 84 x 25 mm[2]
	Material	Aluminum structure
	Cooling	Fanless (passive cooling)
	Mass	450 grams
	Mounting	DIN rail / horizontal surface
	Protection rating	IP20
Other information	**Warranty**	1 year
	Operating temperature	0 a 60 °C
	Storage temperature	-40 a 85 °C
	Relative humidity	10% to 90%, operation 5% to 95%, storage
Certification	**–**	CE, FCC, ANATEL

Notes: 1) Includes external power supply: 100-240 V$_{AC}$ 50/60 Hz, 36 W.
     2) Antenna dimensions are not considered.

Dimensions

Front view

Back view
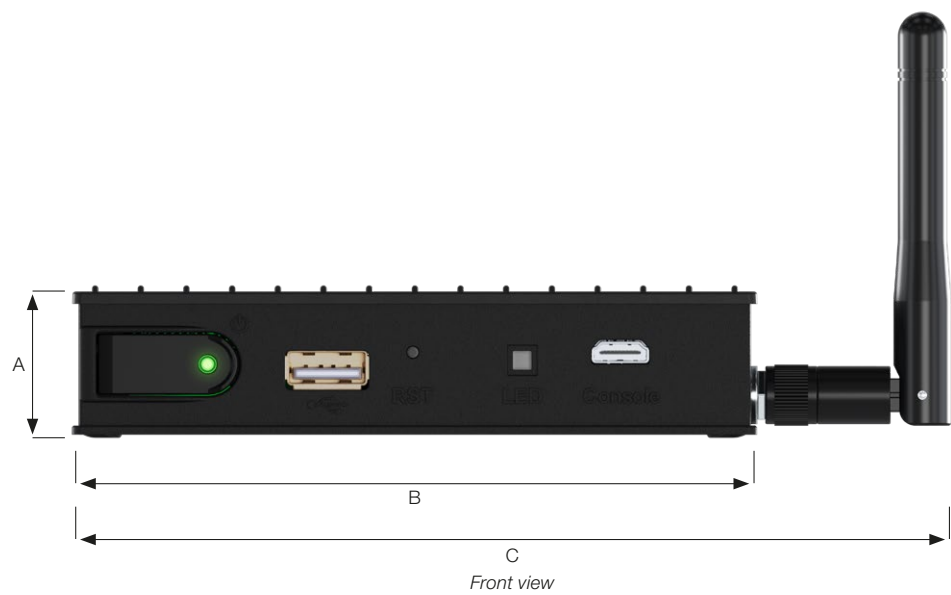
Dimension reference	A	B	C	D	E
Dimensions in mm	25	112	147	65	93

Certification

Accessories

The WCD ED320 is supplied with the components listed below:

Reference	Description	Illustrative images
Wi-Fi Antenna/Bluetooth®	■ 802.11ax Wi-Fi antenna and Bluetooth® 5.1 (dual band) ■ Dual band 2.4 GHz / 5 GHz	
RS485/RS232 connector	■ 6-pin plug terminal connector	
Power supply	■ External power supply ■ Input: 100–240 V$_{AC}$, 50/60 Hz, 36 W ■ 12 V$_{DC}$ output, 3 A	
Antenna adapter	■ An SMA male and female adapter connector to other antenna models	
DIN rail	■ DIN rail mounting via metal mounting bracket and relay lock clip	

The Wi-Fi extension antenna accessory is offered separately, as listed below:

Reference	Description	Illustrative images
Wi-Fi range extender antena	■ Omni-directional Wi-Fi extension antenna ■ Gain: 5 dBi, Length: 3 m ■ Magnetic base	

Notes

Global presence
is essential, as much as understanding your needs.

Global Presence

With more than 47,000 employees worldwide, WEG is one of the largest electric motors, electronic equipments and systems manufacturers. We are constantly expanding our portfolio of products and services with expertise and market knowledge. We create integrated and customized solutions ranging from innovative products to complete after-sales service.

WEG's know-how guarantees our **WCD ED320** are the right choice for your application and business, assuring safety, efficiency and reliability.

Availability is to have a global support network

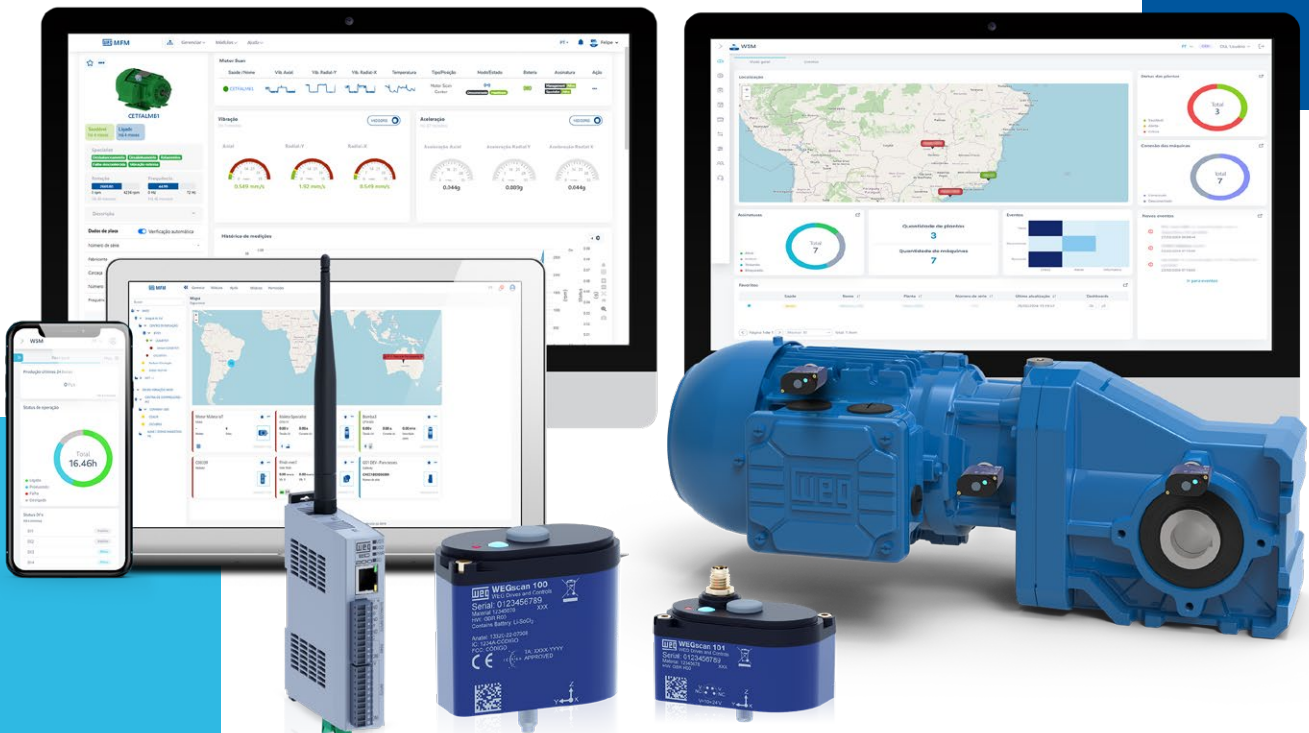**Partnership** is to create solutions that suits your needs

Competitive edge is to unite technology and inovation
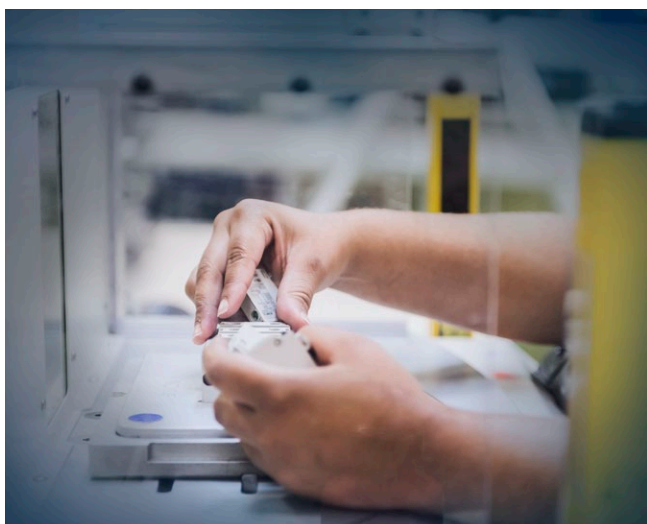
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High performance and reliable products to improve your production process.

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