eCore GPRS Energy
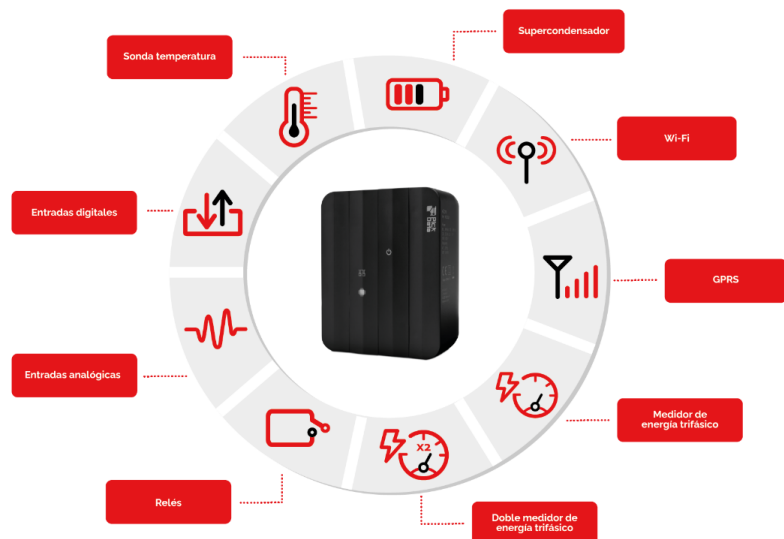
eCore GPRS Energy, ESP32 controller

Code: D102100090000

> Memory: 8 MB | 16 MB
> Módules: 7
> Communications: RS232/485 | Ethernet | Wi-Fi | GPRS
> Power supply: 85 ... 264 V~
> CPU: ESP32 Dual-core 32-bit 240 MHz

Description

Range of controllers designed for applications with real-time needs and strict cost requirements. ESP32 Technology, FreeRTOS Operating System, Modbus RTU/TCP and MQTT built in.

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Specifications

AC power supply

Consumption	8,8 ... 10,5 VA
Frequency	47 ... 63 Hz
Nominal voltage	85 ... 264 V~

DC power supply

Consumption	6,4 ... 6,5 W
Nominal voltage	120 ... 300 Vdc

Electrical characteristics

Isolation level	3 kVac

Mechanical characteristics

Size (mm) width x height x depth	123 x 89 x 48 (mm)
Envelope	Polycarbonate UL94 - Self-extinguishing V2
Fastening	DIN rail 46277 (EN 50022)
Weight (kg)	1

Environmental characteristics

Protection class	IP 20
Relative humidity (without condensation)	5...95 %
Working temperature	-20...+50 °C

Current measurement circuit

Installation category	CAT III 300 V
Nominal current (In)	... / 250 mA
Phase current measuring range	2...120% de In
Maximum pulse current	3 x In A
Minimum current measurement	1 % In

Voltage measurement circuit

Installation category	CAT III 300 V
Input impedance	1 MΩ
Voltage measuring range	5 ... 120 % Un
Nominal voltage	285V Ph-N, 480V Ph-Ph

Communication Network

Technology / Type	Ethernet 10/100 Mbps

Control Unit

Circutor

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Page 2 of 3

eCore GPRS Energy

Code: D102100090000

Clock	RTC
CPU	ESP32 Dual-core 32-bit 240 MHz
PSRAM Memory	8 MB
SPI Flash Memory	16 MB

Standards

Electrical safety, Maximum height (m)	2000
Electrical safety, Installation category	CAT III 300 V
Electrical safety, Contamination level / class	Double-insulated electric shock protection class II (IEC 61010)
Standards	UNE EN 61010-1, UNE-EN 61000-6-2, UNE-EN 61000-6-4

Electrical safety

Insulation	3 kVac

Measurement accuracy

Reactive energy measurement (kvarh)	Class 2
Active energy measurement (kWh)	Class 1

Radio communication –Antenna

	External

Radio communication

Band	850 / 900 / 1800 / 1900 MHz
Technology / Type	GPRS

Serial communication

Technology / Type	RS-232 (full-duplex) / RS-485 (half-duplex)Galvanic isolation

Wireless communication

Band	802.11 b/g/n (2.4 GHz.)
Technology / Type	Wi-Fi

eCore Energy
ESP32 controller

CODE	TYPE	CPU	Memory	Communications	Power supply
eCore Energy					
D102100090000	eCore GPRS Energy	ESP32 Dual-core 32-bit 240 MHz	8 MB	16 MB	RS232/485	Ethernet	Wi-Fi	GPRS	85 ... 264 V~