

eCore GPRS Energy

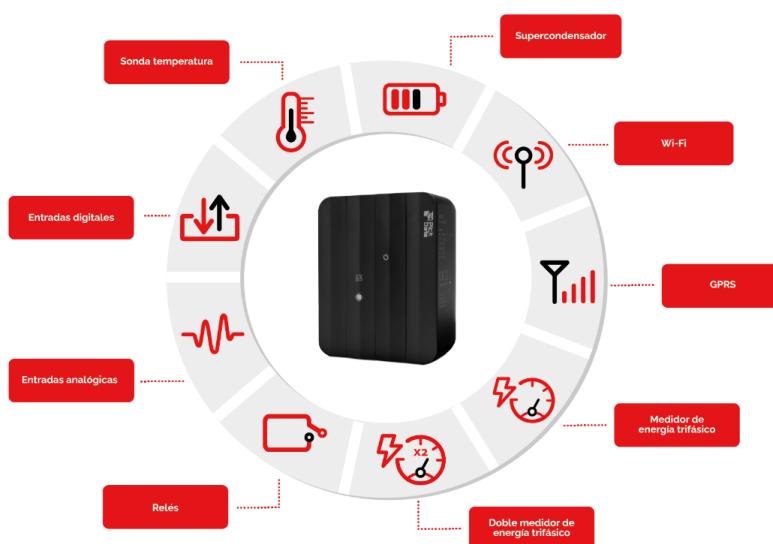
eCore GPRS Energy, ESP32 controller

Code: D102100090000

- > Memory: 8 MB | 16 MB
- > Módulos: 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 / Interface | Ethernet 10/100 Mbps |
|------------------------|----------------------|

Control Unit



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| | |
|------------------|--------------------------------|
| 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~ |