



eManager Pro 4G Energy X2

eManager Pro 4G Energy X2, ARM controller

Code: D302200080000

- > Memory: 512 MB | 8 GB eMMC
- > Modules: 7
- > Communications: RS232/485 | Ethernet | Wi-Fi | 4G EMEA
- > System: 2 xThree-phase / 6 xSingle-phase
- > Power supply: 85 ... 264 V~
- > CPU: ARM Cortex A7 800 MHz

Description

eManager Energy is an industrial IoT controllers product range with integrated three-phase energy metering. eManager Energy centralizes power network analyzer features with datalogging and communications.

The energy module is able to measure up to one three-phase circuit or three single-phase circuits. It integrates 4 quadrant monitoring, including the main electrical parameters for single-phase and three-phase. Measurement accuracy is Class 1 Active and Class 2 Reactive; and the secondary current is 1 A.

In addition, a custom Node-RED node is available to facilitate the data collecting and displaying with a local real-time dashboard that can be accessed via their own Wi-Fi network.



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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) | 0,31 |

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) | ... / 1A |
| Phase current measuring range | 2...120% de In |

Voltage measurement circuit

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

Communication Network

| | |
|------------------------|----------------------|
| Technology / Interface | Ethernet 10/100 Mbps |
|------------------------|----------------------|

Control Unit

| | |
|--------------|-----------------------|
| Clock | RTC |
| CPU | ARM Cortex A7 800 MHz |
| PSRAM Memory | 512 MB |



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SPI Flash Memory

8 GB eMMC

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

| | |
|-------------------|--|
| Band | LTE-FDD B1/B3/B7/B8/B20/B28A, WCDMA B1/B8 & GSM/EDGE B3/B8 |
| Technology / Type | 4G EMEA |

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 |

eManager Energy

IoT programmable controllers with integrated energy metering

| CODE | TYPE | CPU | Memory | Communications | Power supply |
|------------------------|---------------------------|-----------------------|--------------------|--|---------------|
| eManager Energy | | | | | |
| D302200080000 | eManager Pro 4G Energy X2 | ARM Cortex A7 800 MHz | 512 MB 8 GB eMMC | RS232/485 Ethernet Wi-Fi 4G EMEA | 85 ... 264 V~ |