

# eManager Pro GPRS

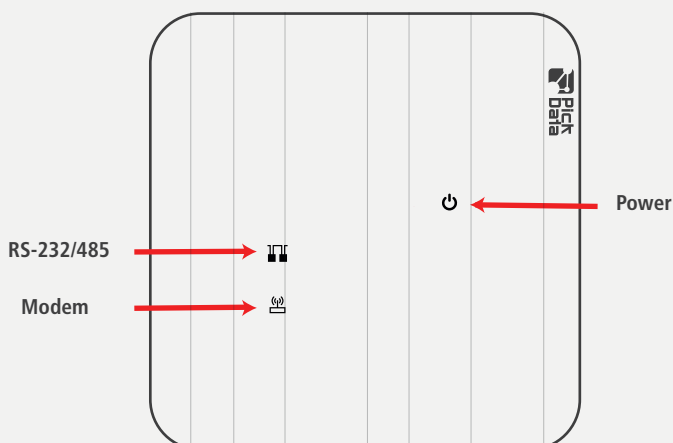
## Main features

- ✓ High performance embedded system with Linux Yocto integrated (other on request)
- ✓ CPU, RAM and Flash memory ready to be the core of any Smart Project
  - ARM CORTEX-A7 800 Mhz
  - 512 MB DDR3 memory
  - 8 GB eMMC flash memory
- ✓ GPRS, Wi-Fi and BT (optional)
- ✓ Digital & Analogue I/O, Energy metering and many more expansion modules
- ✓ Node-RED integrated



## Description

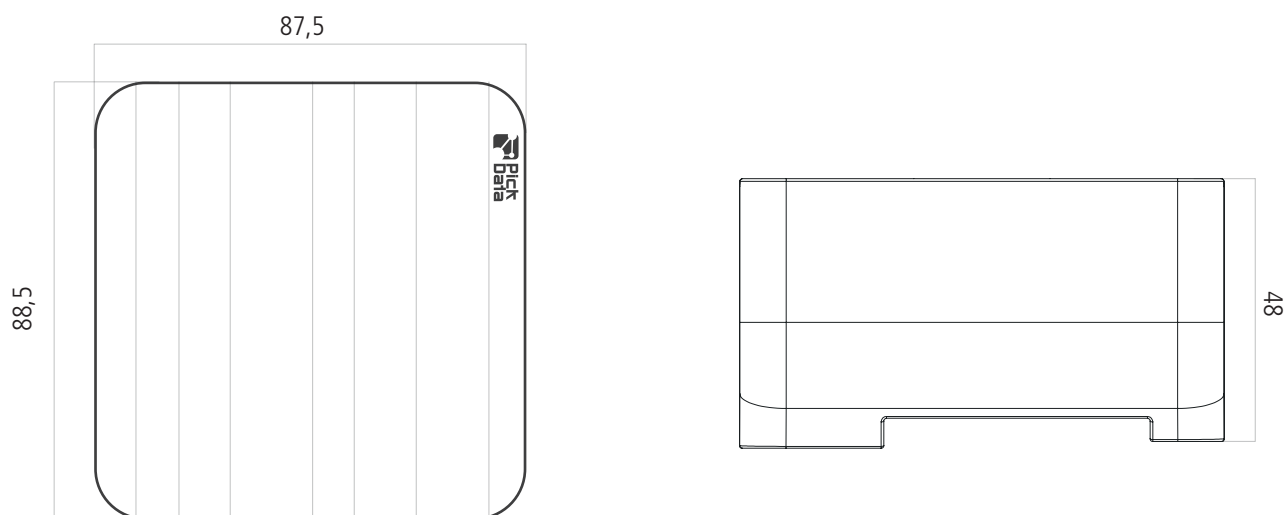
eManager Pro GPRS is an OEM industrial controller which is equipped with a high-performance control unit with a Linux Yocto embedded and Node-RED software integrated. The device includes RS-232/485 serial communications, an Ethernet 10/100 port, a Wi-Fi interface and GPRS communications. eManager Pro GPRS has been designed for the most challenging monitoring and control applications, where datalogging and storage is required. In addition, eManager Pro GPRS can be expanded with Digital & Analogue I/O, Energy metering and many more modules.



## LEDs

| LED | Name       | Description  |
|-----|------------|--|
|     | Power      | Powered: Green   |
|     | RS-232/485 | Data transmission: Blue<br>Data reception: Green   |
|     | Modem      | Connected with good signal: Static green<br>Connected with weak signal: Blinking green<br>Searching for connection / Without connection : Blinking red<br>Modem service stopped: Blinking blue |

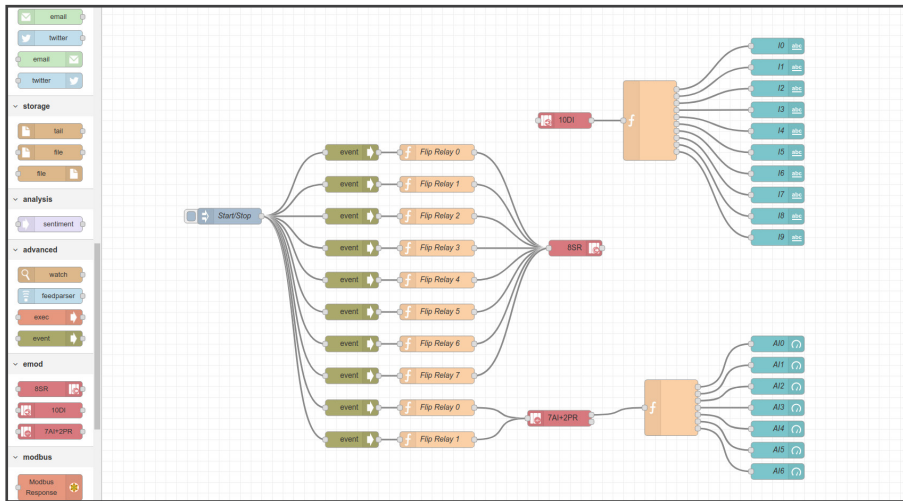
## Dimensions



## Technical features

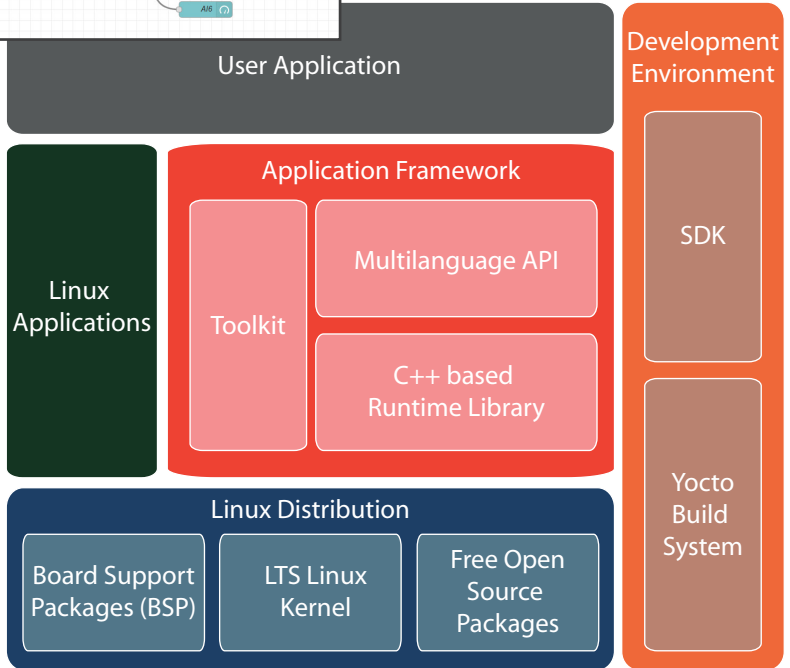
| Category                       | Parameters                         | Value   |
|--------------------------------|------------------------------------|---|
| Power circuit                  | Power supply                       | 85 ... 264 Vac / 120 ... 300 Vdc                                |
|                                | Frequency                          | 47 ... 63Hz   |
|                                | Consumption (a.c. / d.c.)          | 8,8 ... 10,5 VA / 6,4 ... 6,5 W                                 |
| Control unit                   | CPU                                | ARM Cortex-A7 800 Mhz   |
|                                | RAM Memory                         | 512 MB DDR3   |
|                                | Flash Memory                       | 8 GB eMMC   |
|                                | Clock                              | RTC with supercap to backup clock time                          |
| Environmental conditions       | Operating temperature              | -20 ... +50 °C  |
|                                | Relative humidity                  | 5 ... 95 %  |
|                                | Maximum working altitude           | 2000 m  |
| Mechanical characteristics     | Enclosure material                 | UL94 polycarbonate - Self-extinguishing V0                      |
|                                | Protection grade                   | IP20 (assembled)  |
|                                | Dimensions (Width x High x Length) | 87,5 x 88,5 x 48 mm (5 DIN rail modules)                        |
|                                | Weight                             | 90 g  |
|                                | Mounting                           | DIN rail 46277 (EN 50022)                                       |
|                                | Connectors                         | Pluggable terminals, max. wire section 1,5 mm <sup>2</sup>      |
| Electrical and safety features | Electric shock protection          | Double-insulated class II                                       |
|                                | Insulation                         | 3 kVac  |
|                                | Installation category              | CAT III 300 V   |
| Wireless interface             | Wi-Fi                              | 802.11 b/g/n (2.4 GHz)  |
|                                | BT (optional)                      | 4.2   |
| Radio interface                | Type                               | Quad-band GSM/GPRS  |
|                                | Frequency bands                    | 850 / 900 / 1800 / 1900 MHz                                     |
|                                | Antenna                            | External  |
|                                | Connector                          | SMA   |
| Serial interface               | Type                               | RS-232 (full-duplex) / RS-485 (half-duplex). Galvanic isolation |
|                                | Baud rate                          | 9600...115200 bps   |
| Network interface              | Type                               | Ethernet  |
|                                | Working speed                      | 10/100 Mbps   |
| Standards                      | Standards                          | UNE EN 61010-1, UNE-EN 61000-6-2, UNE-EN 61000-6-4              |

## Software platform



**Node-RED  
Integrated**

**Linux environment  
and Multilanguage API**



## Description

eManager Pro GPRS is equipped with a software platform designed for easily developing industrial and edge computing applications. With eManager Pro you can smoothly develop your application with our multilanguage API which include the most popular programming language for IoT applications (C, C++, Python, Go, Java...). In addition, eManager Pro GPRS fully integrates Node-RED which includes protocols such as Modbus, BACNET, MQTT, OPC-UA, together with easy communication with platforms like Amazon WBS, Microsoft Azure, Google Cloud and more.

## Main features



**IoT open  
software tools**



**Multilanguage  
API**



**Public protocols  
libraries**