

eManager GPRS



eManager 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 and Wi-Fi communications.


eManager GPRS is ideal for fog computing applications where monitoring, control and data sending is required. It is equipped with an ARM Cortex A7 CPU, 256 MB RAM memory and 512 MB NAND flash memory.

In addition, **eManager GPRS** can be expanded with Digital & Analogue I/O, Energy metering, PT-100 inputs, Supercapacitor and many more modules.

TECHNICAL FEATURES


Power circuit	
Input voltage	85 ... 264 Vac / 120 ... 300 Vdc
Frequency	47 ... 63 Hz
Consumption (a.c. / d.c.)	8,8 ... 10,5 VA / 6,4 ... 6,5 W
Unidad de control	
CPU	ARM Cortex-A7 700 MHz
RAM memory	256 MB DDR3
Flash memory	512 MB NAND
Clock	RTC with supercapacitor to backup clock time
Environmental conditions	
Temperature range	-20 +50°C
Humidity range	5 95%
Maximum working altitude	2000 m
Mechanical characteristics	
Enclosure material	UL94 polycarbonate - Self-extinguishing V0
Protection grade	IP20
Unit dimensions (Width x Height x Length)	87,5 x 88,5 x 48 mm (5 DIN rail modules)
Weight	180 g
Mounting	DIN rail 46277 (EN 50022)
Connectors	Pluggable terminals, max. wire section 1,5 mm ²
Characteristics and electrical security	
Electric shock protection	Double insulation 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
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

INSTALLATION

	<p>Disconnect the device from the power supply (device and measuring system power supply) before maintaining, repairing or handling the device's connections. Please contact the after-sales service if you suspect that there is an operational fault in the device.</p>
	<p>The manufacturer of the device is not responsible for any damage resulting from failure by the user or installer to heed the warnings and/or recommendations set out in this manual, nor for damage resulting from the use of non-original products or accessories or those made by other manufacturers.</p>

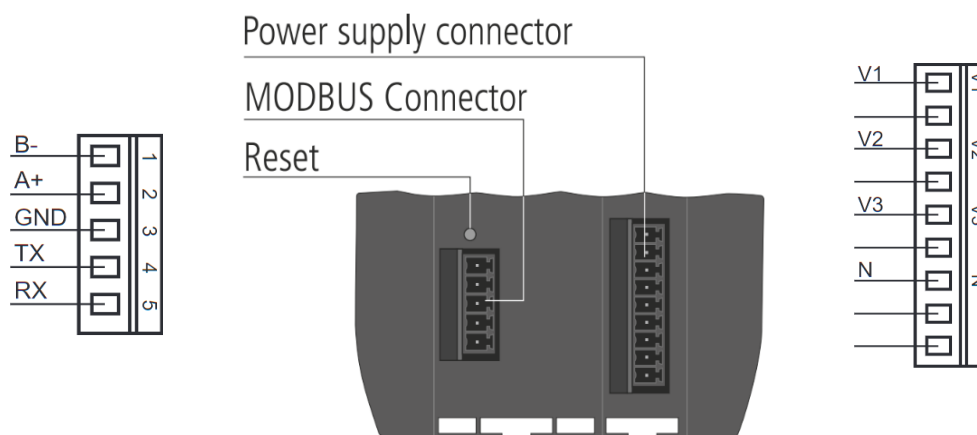
eManager GPRS has been designed for DIN rail mounting.

The unit must be connected to a power circuit that is protected with gl (IEC 269) or M type fuses with a rating of 0.5 to 2 A. It must be fitted with a circuit breaker or equivalent device, in order to be able to disconnect the unit from the power supply network. The power circuit must be connected with cables that have a minimum cross-section of 1mm².

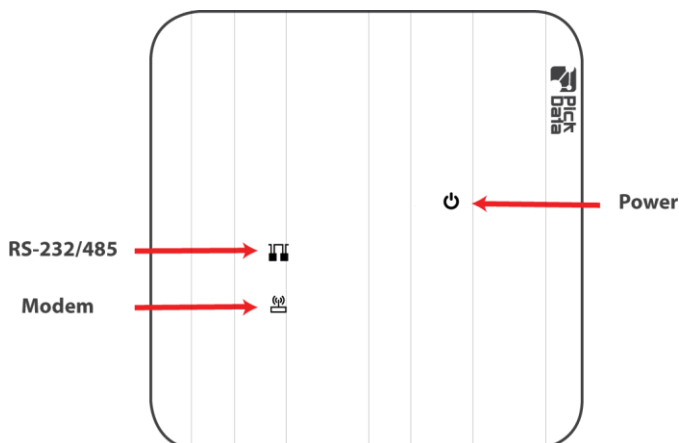
	<p>IMPORTANT</p> <p>Consider that when the device is connected, the terminals may be hazardous to the touch, and opening the covers or removing elements may provide access to parts that are dangerous to the touch. Do not use the device until it is fully installed</p>
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CONNECTIONS

eManager GPRS can be powered with a single voltage phase, via the connectors V3 and N, or as a three-phase power supply using all the voltage connectors.

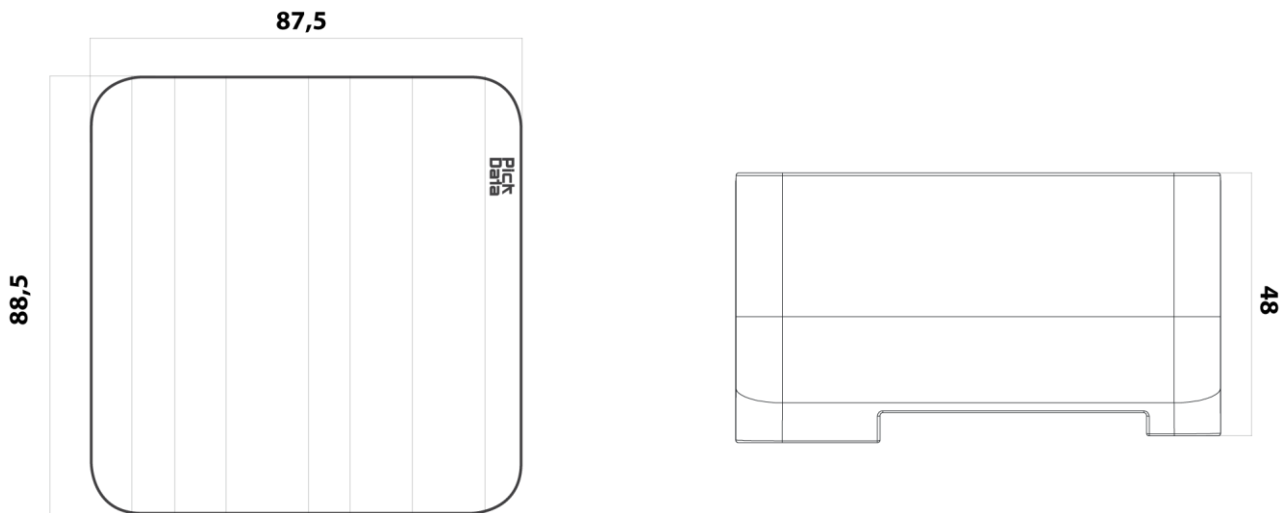


LEDS



Led	Description
Power	Powered: Green
RS-232/485	Data transmission: Red Data reception: Green
Activity	Data transmission: Red Data reception: Green

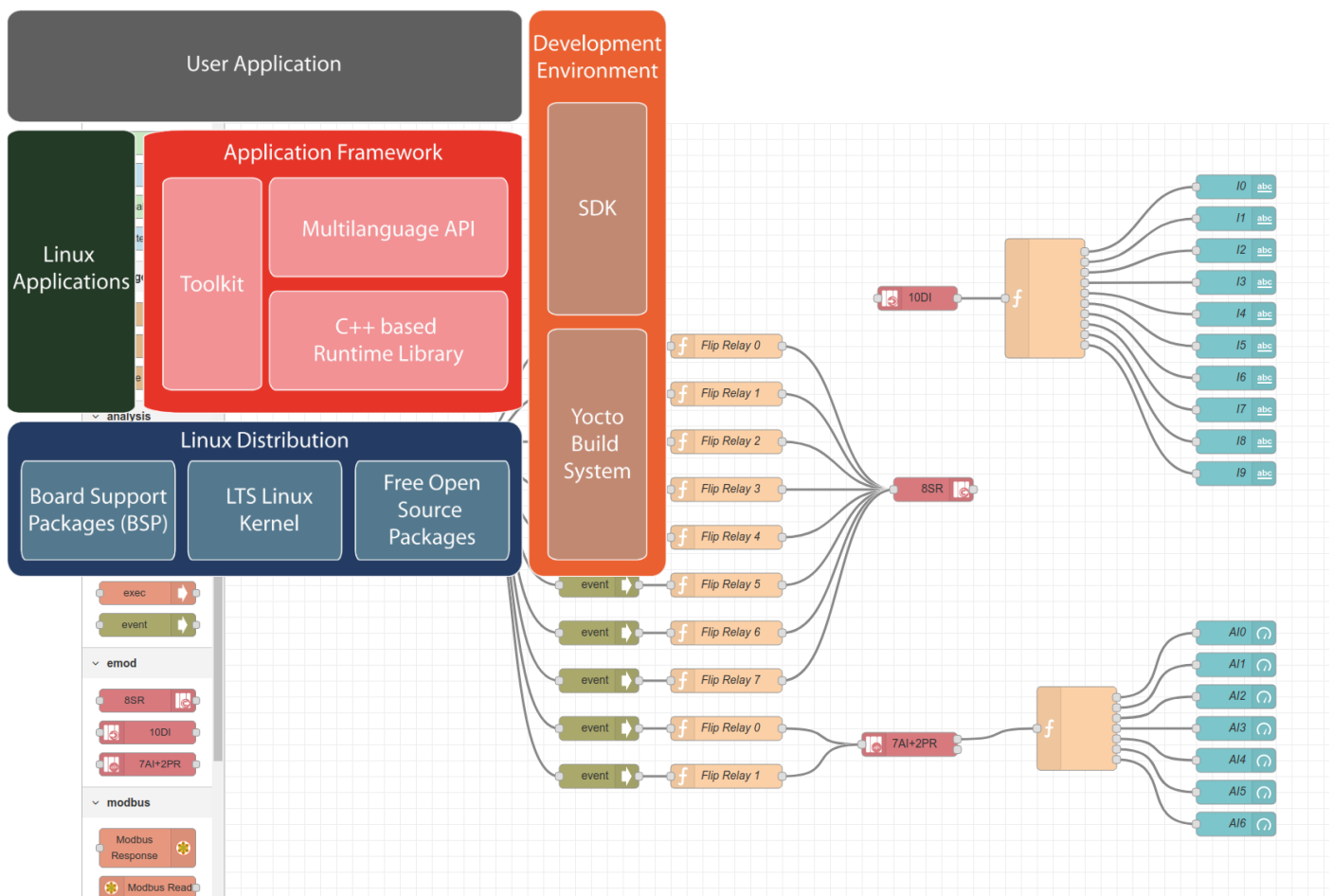
DIMENSIONS



SOFTWARE PLATFORM

eManager GPRS is equipped with a software platform designed for easily developing industrial and edge computing applications. With **eManager GPRS** 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 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.

If you want to learn more about how to work with **eManager** product range, access to <https://docs.pickdata.net>



MODEL REFERENCE


Model	Reference	Communication
eManager GPRS	MODM007	RS-232/485, Ethernet, Wi-Fi & GPRS

EXTERNAL ANTENNA REFERENCE

In case that an external antenna with cable is needed:

Model	Reference	Cable length	Connector type
Antenna wall-mounted indoor	E001	2 meters	SMA Male
Antivandal antenna IP67 multi-band 2G/LoRa/4G	E032	1 meter	SMA Male

SAFETY PRECAUTIONS

	<p>DANGER</p> <p>Warns of a risk, which could result in personal injury or material damage caused by an incorrect handling or installation of the unit. In particular, handling with voltages applied may result in electric shock, which may cause death or serious injury to personnel. Defective installation or maintenance may also lead to the risk of fire. Read the manual carefully prior to connecting the unit. Follow all installation and maintenance instructions throughout the unit's working life. Pay special attention to the installation standards of the National Electrical Code.</p>
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DISCLAIMER

PickData, SL reserves the right to make modifications to the device or the unit specifications set out in this instruction manual without prior notice.

PickData, SL on its web site, supplies its customers with the latest versions of the device specifications and the most updated manuals.

MAINTENANCE AND TECHNICAL SERVICE

The device doesn't require maintenance.

In the case of any query in relation to unit operation or malfunction, please contact the PickData, SL technical support service.

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