# eManager GPRS ACTIO 52

#### **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 700 Mhz

256 MB DDR3 memory

512 MB NAND flash memory

GPRS, Wi-Fi and BT (optional)

5 Digital inputs and 2 Power relays

Node-RED integrated



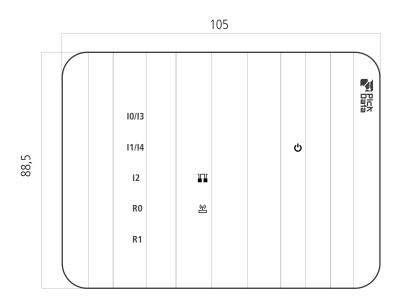
## Description

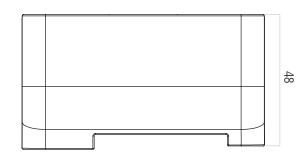
eManager GPRS ACTIO 52 is an OEM industrial controller which is equipped with a high-performance control unit with a Linux Yocto embedded and Node-RED software integrated. The device includes RS-232/485 serial communications, an Ethernet 10/100 port, a Wi-Fi interface and GPRS communications. eManager GPRS ACTIO 52 GPRS is ideal for fog computing applications where monitoring, control and data sending is required. In addition, eManager GPRS ACTIO 52 is equipped with 5 digital inputs and 2 relays of 6A.

### **5 Digital inputs and 2 Power relays**

- Configurable as dry contact (w/o internal tension) or wet contact (with internal tension)
- $\checkmark$  Inputs activation via external 0-24 VDC signal or internal ±12 VDC power supply (for PNP or NPN sensors)
- Working modes: input, pulse counter and pulse width time counter. Pulse capturing up to 1 ms
- ✓ Maximum activation current of the relays of 6A

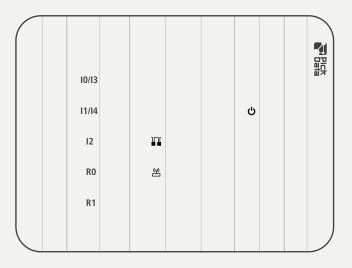
# Dimensions





## LEDs

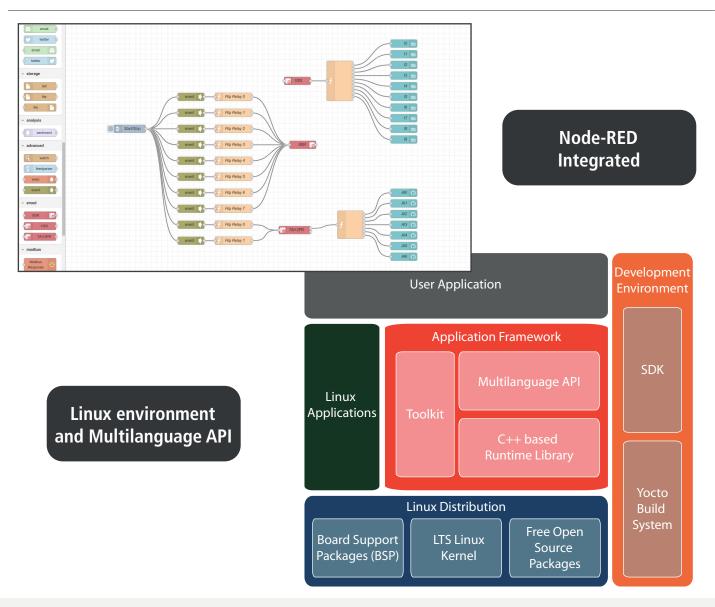
LED	Name	Description
	Power	Powered: Green
	RS-232/485	Data transmission: Blue Data reception: Green
<u>ම</u>	Modem	Connected with good signal: Static green Connected with weak signal: Blinking green Searching for connection / Without connection : Blinking red Modem service stopped: Blinking blue
10/13	Input 0/3	Input 0 activated: Blue Input 3 activated: Green Inputs 0 and 3 activated: White
11/14	Input 1/4	Input 1 activated: Blue Input 4 activated: Green Inputs 1 and 4 activated: White
12	Input 2	Input 2 activated: Blue
RO	Relay 0	Activated: Blue No activated: None
R1	Relay 1	Activated: Blue No activated: None



## **Technical features**

Category	Parameters	Value
Power circuit	Power supply	85 264 Vac / 120 300 Vdc
	Frecuency	47 63Hz
	Consumption (a.c. / d.c.)	8,8 10,5 VA / 6,4 6,5 W
Control unit	СРИ	ARM Cortex-A7 700 Mhz
	RAM Memory	256 MB DDR3
	Flash Memory	512 MB NAND
	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	Enclosure material	UL94 polycarbonate - Self-extinguishing V0
characteristics	Protection grade	IP20 (assembled)
	Dimensions (Width x High x Length)	105 x 88,5 x 48 mm (6 DIN rail modules)
	Weight	160 g
	Mounting	DIN rail 46277 (EN 50022)
	Connectors	Pluggable terminals, max. wire section 1,5 mm <sup>2</sup>
Electrical and	Electric shock protection	Double-insulated class II
safety features	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	Туре	Quad-band GSM/GPRS
	Frequency bands	850 / 900 / 1800 / 1900 MHz
	Antenna	External
	Connector	SMA
Serial interface	Туре	RS-232 (full-duplex) / RS-485 (half-duplex). Galvanic isolation
	Baud rate	9600115200 bps
Network interface	Туре	Ethernet
	Working speed	10/100 Mbps
Digital inputs	Type, number and voltage	5 digital inputs 0-24 Vdc
	Minimum voltage and current	0 Vdc / 160 μA
	Maximum voltage and current	30 Vdc / 12 mA
	Input sensitivity	0-7 Vdc : 0; 8-30 Vdc : 1
	Minimum pulse duration	1 ms
	Counters	5 counters of 32 bits / Freq. max 250 Hz
Voltage output	Voltage output	±12 VCC
	Maximum output power	1 W
Relay outputs	Туре	NO
	Max. operating parameters	6 A, 250 VCA, cos=1, 70°C
Standards	Standards	UNE EN 61010-1, UNE-EN 61000-6-2, UNE-EN 61000-6-4

## Software platform



### Description

eManager GPRS ACTIO 52 is equipped with a software platform designed for easily developing industrial and edge computing applications. With eManager GPRS ACTIO 52 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 ACTIO 52 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

