eManager GPRS ACTIO 1072

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)



10 Digital inputs, 7 Analog inputs and 2 Power relays



Node-RED integrated



Description

eManager GPRS ACTIO 1072 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 1072 GPRS is ideal for fog computing applications where monitoring, control and data sending is required. In addition, eManager GPRS ACTIO 1072 is equipped with 10 digital inputs, 7 analog inputs 0...20mA/4...20mA/0...10V and 2 relays of 6A.

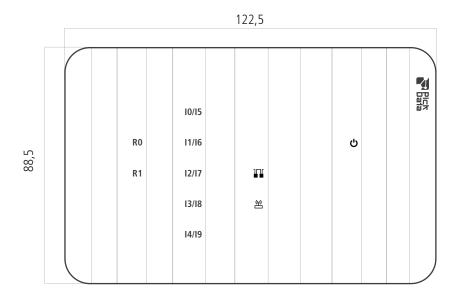
10 Digital inputs

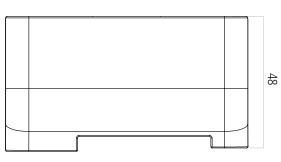
- Configurable as dry contact (w/o internal tension) or wet contact (with internal tension)
- ✓ Inputs activation via external 0-24 VDC signal or internal ±12 VDC power supply (for PNP or NPN sensors)
- Working modes: input, pulse counter and pulse width time counter. Pulse capturing up to 1 ms
- ✓ Pulse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

7 Analog inputs and 2 Power relays

- ✓ Analog inputs with 4096 points of resolution
- ✓ Configurable as 0...10 V / 0...20 mA or 4...20 mA
- Maximum activation current of the relays of 6A
- ✓ Combine actuation with monitoring in the same module

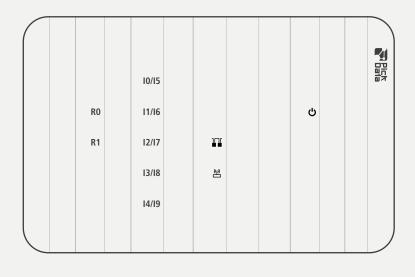
Dimensions





LEDs

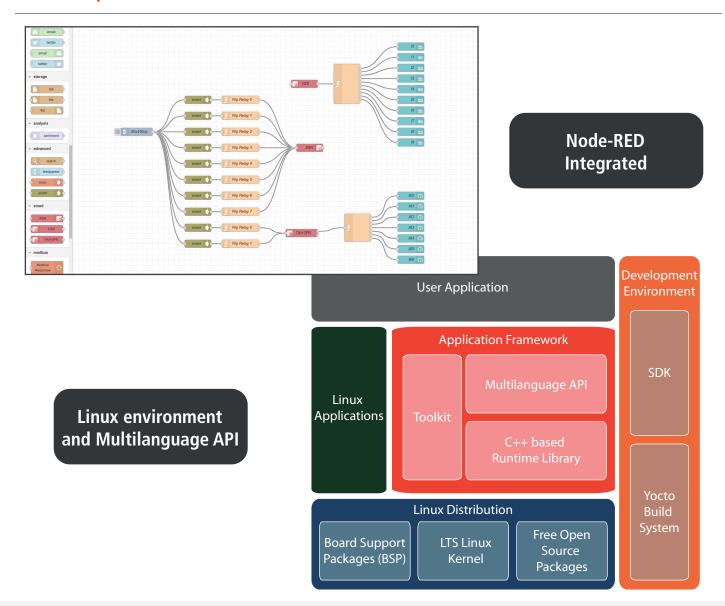
| LED | Name | Description |
|-------|------------|---|
| ტ | Power | Powered: Green |
| III | RS-232/485 | Data transmission: Blue Data reception: Green |
| 왿 | Modem | Connected with good signal: Static green Connected with weak signal: Blinking green Searching for connection / Without connection : Blinking red Modem service stopped: Blinking blue |
| 10/15 | Input 0/5 | Input 0 activated: Blue Input 5 activated: Green Inputs 0 and 5 activated: White |
| I1/I6 | Input 1/6 | Input 1 activated: Blue Input 6 activated: Green Inputs 1 and 6 activated: White |
| 12/17 | Input 2/7 | Input 2 activated: Blue Input 7 activated: Green Inputs 2 and 7 activated: White |
| 13/18 | Input 3/8 | Input 3 activated: Blue Input 8 activated: Green Inputs 3 and 8 activated: White |
| 14/19 | Input 4/9 | Input 4 activated: Blue Input 9 activated: Green Inputs 4 and 9 activated: White |
| R0 | 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 | CPU | 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 characteristics | Enclosure material | UL94 polycarbonate - Self-extinguishing V0 |
| | Protection grade | IP20 (assembled) |
| | Dimensions (Width x High x Length) | 122,5 x 88,5 x 48 mm (7 DIN rail modules) |
| | Weight | 180 g |
| | Mounting | DIN rail 46277 (EN 50022) |
| | Connectors | Pluggable terminals, max. wire section 1,5 mm ² |
| 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 | 10 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 | 10 counters of 32 bits / Freq. max 250 Hz |
| Voltage output | Voltage output | ±12 VCC |
| | Maximum output power | 1 W |
| Analogue inputs | Number, type and range | 7 analog inputs 010 V / 020 mA or 420 mA |
| | Transducer resolution | 12 bits (4096 points) |
| 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 1072 is equipped with a software platform designed for easily developing industrial and edge computing applications. With eManager GPRS ACTIO 1072 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 1072 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





