

ED-IPC2400 Series

Industrial Computer Based on Raspberry Pi CM4

- ◆ Broadcom BCM2711, quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- ◆ Up to 8GB LPDDR4 RAM and 32GB eMMC storage
- ◆ Lan supports up to 1Gbps
- ◆ Support 1 x RS232(options for 2 x RS232 or 3 x RS232) and 2 x RS485(options for 3 x RS485 or 4 x RS485)
- ◆ USB 3.0 supports up to 5Gbps
- ◆ 2.4GHz and 5GHz dual-band Wi-Fi and Bluetooth
- ◆ Support Micro-SD Card, integrated RTC, EEPROM and encryption chip
- ◆ Wide voltage power input range of DC 9V~28V with reverse polarity protection, overvoltage protection and overcurrent protection.
- ◆ High-quality metal case, compatible with DIN-rail installation



Specifications

System	
CPU	Broadcom BCM2711, quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
VPU	H.265(HEVC), up to 4Kp60 decode H.264, up to 1080p60 decode, 1080p30 encode
GPU	OpenGL ES 3.1 & Vulkan 1.0
Memory	Options for 1GB, 2GB, 4GB, 8GB LPDDR4-3200 SDRAM
Storage	<ul style="list-style-type: none"> • Options for 8GB, 16GB, 32GB eMMC storage • Micro-SD card (user storage expansion)

Software	
Operating System	<ul style="list-style-type: none"> • Raspberry Pi OS(Desktop) 32-bit • Raspberry Pi OS(Lite) 32-bit • Raspberry Pi OS(Desktop) 64-bit • Raspberry Pi OS(Lite) 64-bit

Front I/O	
Power	1 x DC IN, DC Jack connector, supporting 9V~28V input.
HDMI	1 x HDMI port, type A connector. It compatibles with HDMI2.1 standard and supports 4K 60Hz.
1000M Ethernet	1 x adaptive 10/100/1000M ethernet port, RJ45 connector. It can be used to access the network. PoE can be supported through expansion module.
COM	1 x RS232 port, DB9 male connector, using the 2, 3 and 5 pins, the corresponding signal is defined as RX/TX/GND.
RS485	2 x RS485 ports, 4-Pin 3.5mm spacing phoenix terminals. The single signal is defined as A/B/GND.
RS485/232	6-Pin 3.5mm spacing phoenix terminals, different numbers of RS232 and RS485 ports can be selected according to actual application. The signal of RS485 is defined as A/B/GND, and the signal of RS232 is defined as TX/RX/GND. <ul style="list-style-type: none"> • ED-IPC2410: 2 x RS485 • ED-IPC2420: 1 x RS232 + 1 x RS485 • ED-IPC2430: 2 x RS232

Side I/O	
USB 2.0	1 x USB 2.0 port, type A connector, which supports up to 480Mbps.
USB 3.0	2 x USB 3.0 ports, type A connector, each channel supports up to 5Gbps.
Antenna	1 x SMA port, which is used to connect Wi-Fi/BT antenna.

Rear I/O	
SD Card Slot	1 x Micro-SD card slot, which is used to install SD card for storing user data.

Buttons and Indicators	
Reset	1 x Reset button, which can reset the device.
PROGRAM	1 x PROGRAMMING button, which is used to flash eMMC for the system.
PWR	1 x red power indicator, using to check the status of device power-on and power-off.
ACT	1 x green system indicator, using to check the working status of device.
USER	1 x green user indicator, user can customize a status according to actual application.
COM1~ COM5	5 x green UART indicators, using to check the communication status of UART port.

Expansion I/O	
12V 1A	1 x DC OUT, 2-Pin 2.0mm spacing WTB connector, which supports 12V 1A output. These pins are defined as GND/12V, reserving to provide power supply for extended LCD.
5V 1A	1 x DC OUT, 3-Pin 2.0mm spacing WTB connector, which supports 5V 1A output. These pins are defined as GND/5V/GND, reserving to provide power supply for extended LCD.
USB 2.0	1 x USB 2.0, 5-Pin 1.27mm spacing WTB connector, which supports to expand USB 2.0 port.

Expansion Performance	
EEPROM	Supports 4K byte storage and improves the ease of use of device.
Crypto Authentication	It can be matched to realize the required upper layer application and improves the security of device.
RTC	Ensure that the system clock is not affected by device power-off. Note: A CR1220 battery is provided by default in China.
Buzzer	A tip or an abnormality can be configured according to actual application, which realizes the alarm function.

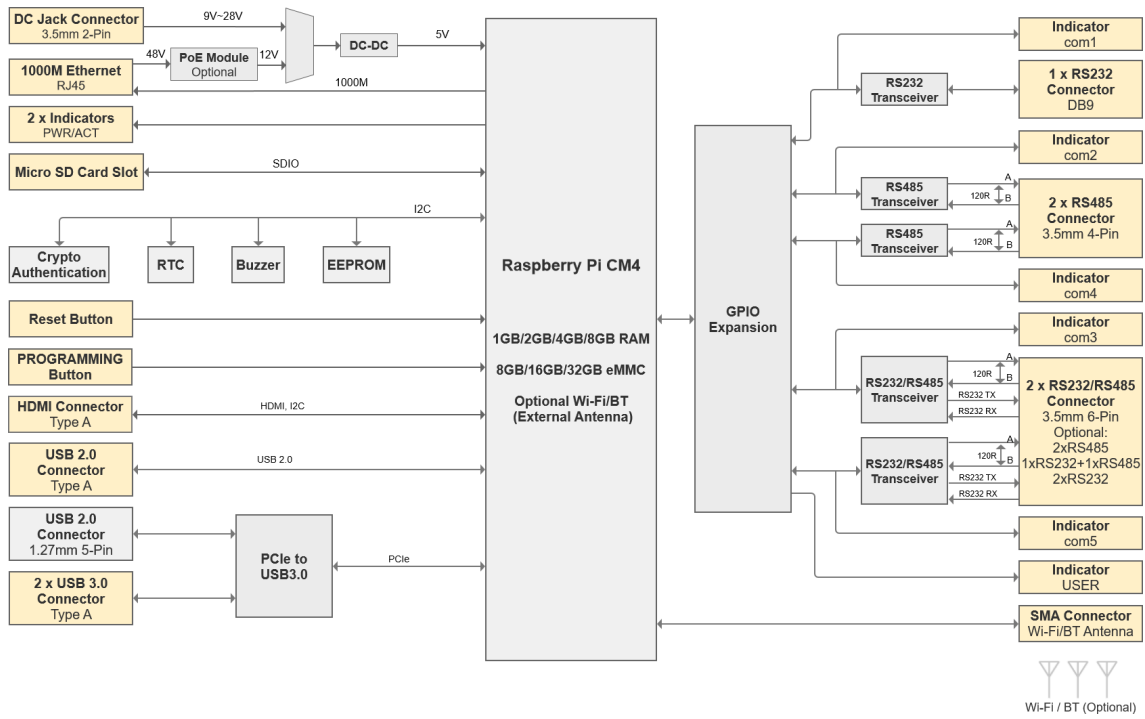
Electrical Characteristics	
Input Voltage	9V ~ 28V DC
Maximum Power Consumption	18.5W

Mechanical Characteristics	
Dimensions	103mm x 80.5mm x 50mm (WxDxH, antenna and DIN-rail bracket are not included.)
Weight	500g
Installation	DIN-rail installation

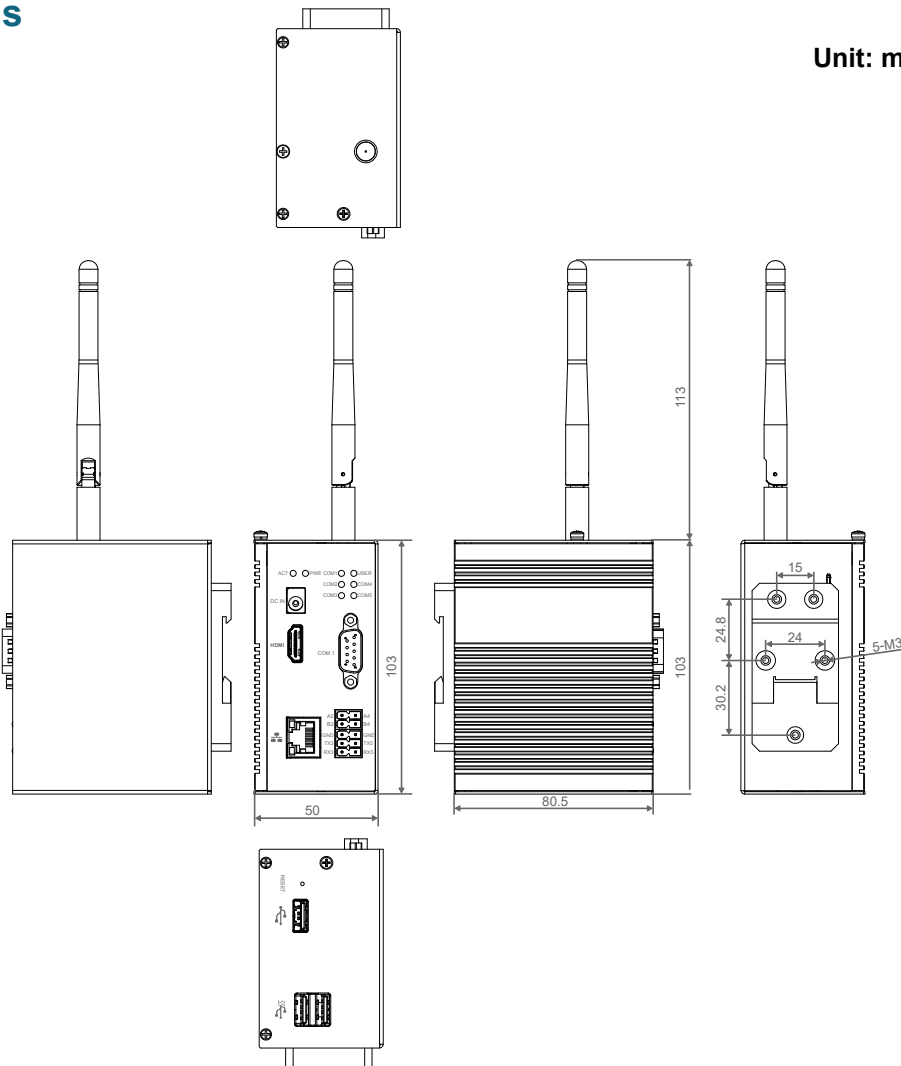
Wireless	
Wi-Fi/BT (optional)	<p>2.4GHz and 5GHz dual-band Wi-Fi with antenna.</p> <ul style="list-style-type: none"> • 2.4GHz Wi-Fi: Compatible with IEEE 802.11 b/g/n • 5GHz Wi-Fi: Compatible with IEEE 802.11 a/n/ac <p>Bluetooth 5.0 with antenna, compatible with 2402MHz ~ 2480MHz frequency.</p>

Environmental & Regulatory	
Operating Temperature	0°C ~ 50°C
Storage Temperature	-10°C ~ 60°C
Ambient Humidity	5% ~ 95% (non-condensing)
Certifications	<ul style="list-style-type: none"> • FCC FCC 47 CFR Part 15 Subpart B • CE EN IEC 62368-1/EN IEC 62311/EN IEC 61000-3-2/EN IEC 61000-3-3 EN 55032/EN 55035/ EN 301 489-1/EN 301 489-3/EN 301 489-17/EN 301 489-52 EN 301 328/EN 301 440/EN 301 511/EN 301 908-1/EN 301 908-2

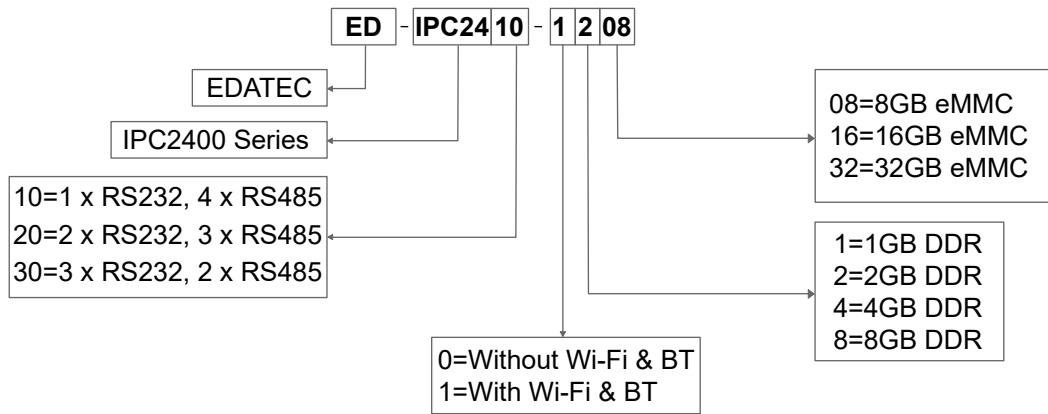
System Diagram



Dimensions



Ordering Code



Example

P/N: **ED-IPC2410-1208**

Configuration: Industrial Computer Based on Raspberry Pi CM4, with Wi-Fi & Bluetooth, 2GB DDR, 8GB eMMC, 1 x RS232 and 4 x RS485.

Packing List

- 1 x ED-IPC2400 Unit (with a DIN-rail bracket)
- **[Wi-Fi/BT Version - optional]** 1 x 2.4GHz/5GHz Wi-Fi/BT Antenna