

ED-CM4SEN

Industrial Computer Based on Raspberry Pi CM4

- ◆ Broadcom BCM2711, quad core ARM Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- ◆ Up to 8GB LPDDR4 RAM and 32GB eMMC storage
- ◆ Support Micro SD card storage expansion
- ◆ 1 x Gigabit Ethernet, 1 x HDMI, 2 x USB 2.0
- ◆ 1 x RS232, 4 x RS485, 1 x CAN
- ◆ 2.4GHz and 5GHz dual-band Wi-Fi, Bluetooth and 4G LTE
- ◆ Wide voltage power input range of DC 8V~28V, built-in RTC and Buzzer
- ◆ 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. |
| RS232 | 1 x RS232 port, 3-Pin 2.5mm pitch phoenix terminals, the signal is defined as GND/TX/RX. |
| CAN | 1 x CAN port, 3-Pin 2.5mm pitch phoenix terminals, the signal is defined as GND/CL/CH. |
| RS485 | 4 x RS485 ports, 12-Pin 2.5mm pitch phoenix terminals. The single signal is defined as GND/A/B. |

| Rear I/O | |
|----------------|---|
| SD Card Slot | 1 x Micro SD card slot, using to install SD card for storing user data. |
| SIM Card Slot | 1 x Nano SIM card slot, using to install SIM card for getting 4G signal. |
| HDMI | 1 x HDMI port, type A connector. It is compatible with HDMI 2.1 standard and supports 4K 60Hz. |
| USB 2.0 | 2 x USB 2.0 ports, type A connector, supporting up to 480Mbps transmission rate. |
| 1000M Ethernet | 1 x adaptive 10/100/1000M ethernet port, RJ45 connector. It can be used to access the network. |

| Side I/O | |
|----------|---|
| Antenna | 2 x SMA ports (optional), using to connect 4G antenna and Wi-Fi/BT antenna. |

| Buttons and Indicators | |
|------------------------|--|
| Power | 1 x red power indicator, which is used to check the status of device power-on and power-off. |
| Status | 1 x green system indicator, which is used to check the working status of device. |

| Internal I/O | |
|--------------|---|
| Micro USB | 1 x Micro USB port, supporting to flash to eMMC for the system. |
| 5V 1A | 1 x DC OUT, 2-Pin 1.0mm pitch connector, support 5V 1A output. These pins are defined as GND/5V. |
| HDMI | 1x FPC HDMI, 40-Pin 0.5mm pitch FPC connector, which can be reserved to connect extended LCD, supports USB/I2C touch screen and backlight adjustment. |
| DSI | 1 x FPC DSI, 30-Pin 0.5mm pitch FPC connector, which can be reserved to connect extended LCD, supports USB/I2C touch screen and backlight adjustment. |

| Expansion Performance | |
|-----------------------|---|
| RTC | RTC with CR1220 battery backup, which can 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. |

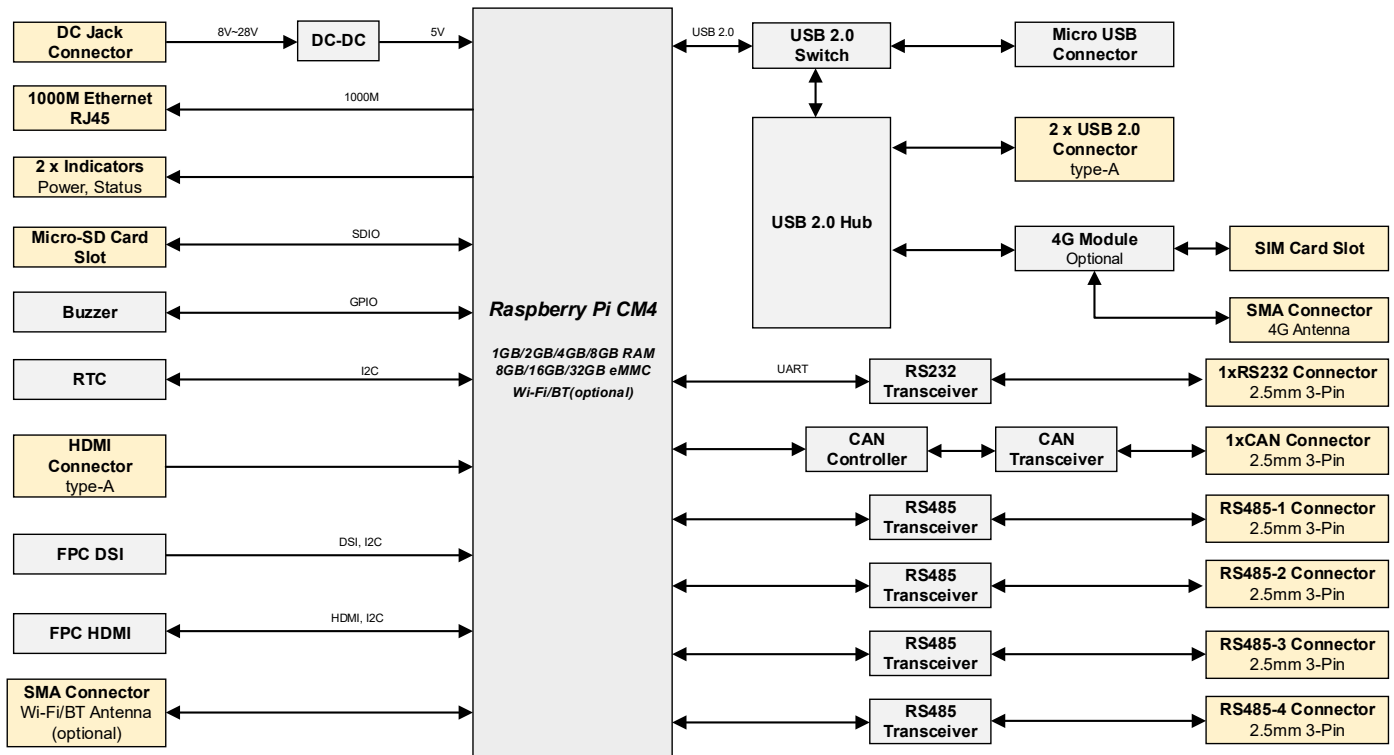
| Electrical Characteristics | |
|----------------------------|-------------|
| Input Voltage | 8V ~ 28V DC |
| Power Consumption | 18W (Max) |

| Mechanical Characteristics | |
|----------------------------|---|
| Dimensions | 102mm x 73mm x 35.2mm (WxDxH, DIN-rail bracket and antenna are not included.) |
| Weight | 500g |
| Installation | DIN-rail installation |

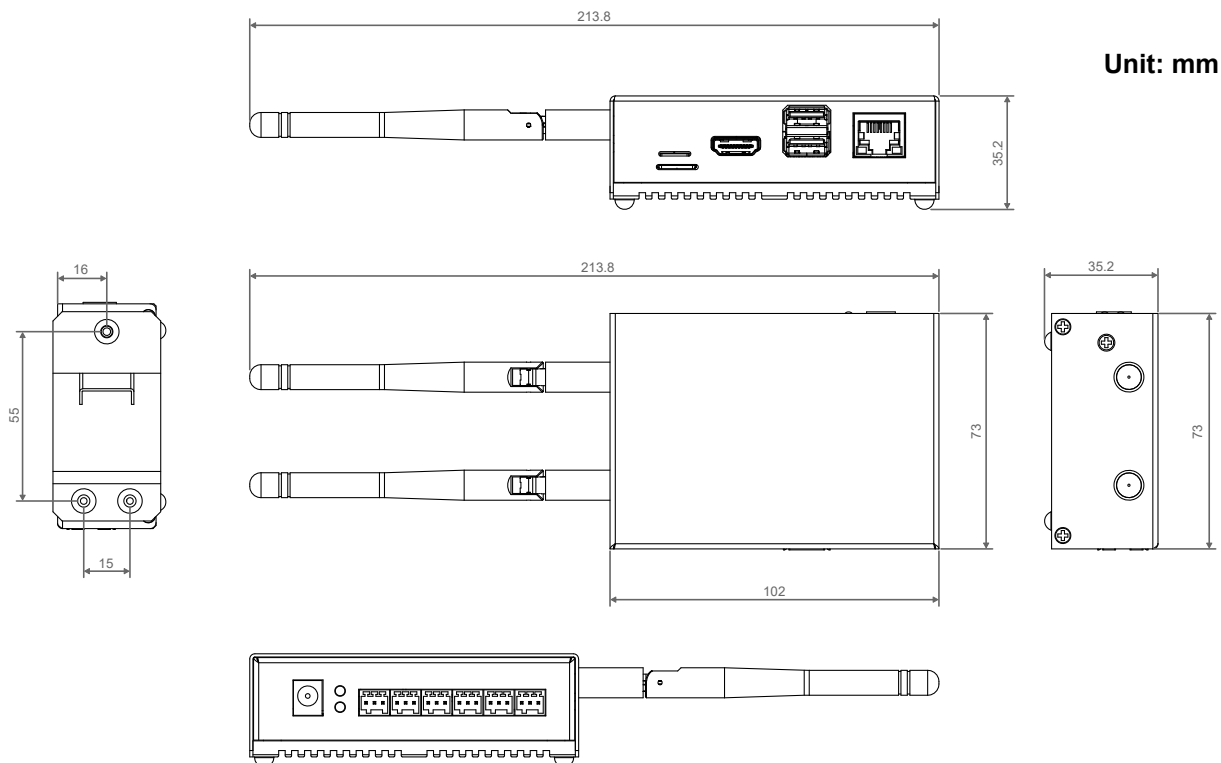
| Wireless | |
|----------------------------|---|
| Wi-Fi/Bluetooth (optional) | <p>2.4GHz & 5GHz dual-band Wi-Fi and Bluetooth with antenna.</p> <ul style="list-style-type: none"> • 2.4GHz Wi-Fi: Compatible with IEEE 802.11 b/g/n • 5GHz Wi-Fi: Compatible with IEEE 802.11 a/n/ac • The Bluetooth supports 2402MHz ~ 2480MHz frequency |
| 4G (optional) | <p>Connect with various 4G LTE modules through the Mini PCIe interface, with antenna.</p> <ul style="list-style-type: none"> • EC20-CE Module (China/India) LTE FDD: B1/B3 LTE TDD: B38/B39/B40/B41 TDSCDMA: B34/B39 WCDMA: B1 CDMA 1x/EVDO: BC0 GSM: 900/1800MH • EC25-AFX Module (North America) LTE-FDD: B2/B4/B5/B12/B13/B14/B66/B71 LTE-TDD WCDMA: B2/B4/B5 GSM/EDGE • EC25-AUX Module (Latin America/Australia/New Zealand) LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE-TDD: B40 WCDMA: B1/B2/B4/B5/B8 GSM/EDGE: B2/B3/B5/B8 • EC25-EUX Module (Europe/Middle East/Africa/Thailand) LTE-FDD: B1/B3/B7/B8/B20/B28A LTE-TDD: B38/B40/B41 WCDMA: B1/B8 GSM/EDGE: B3/B8 |

| Environmental & Regulatory | |
|----------------------------|---|
| Operating Temperature | -25°C ~ 60°C |
| Storage Temperature | -25°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 |

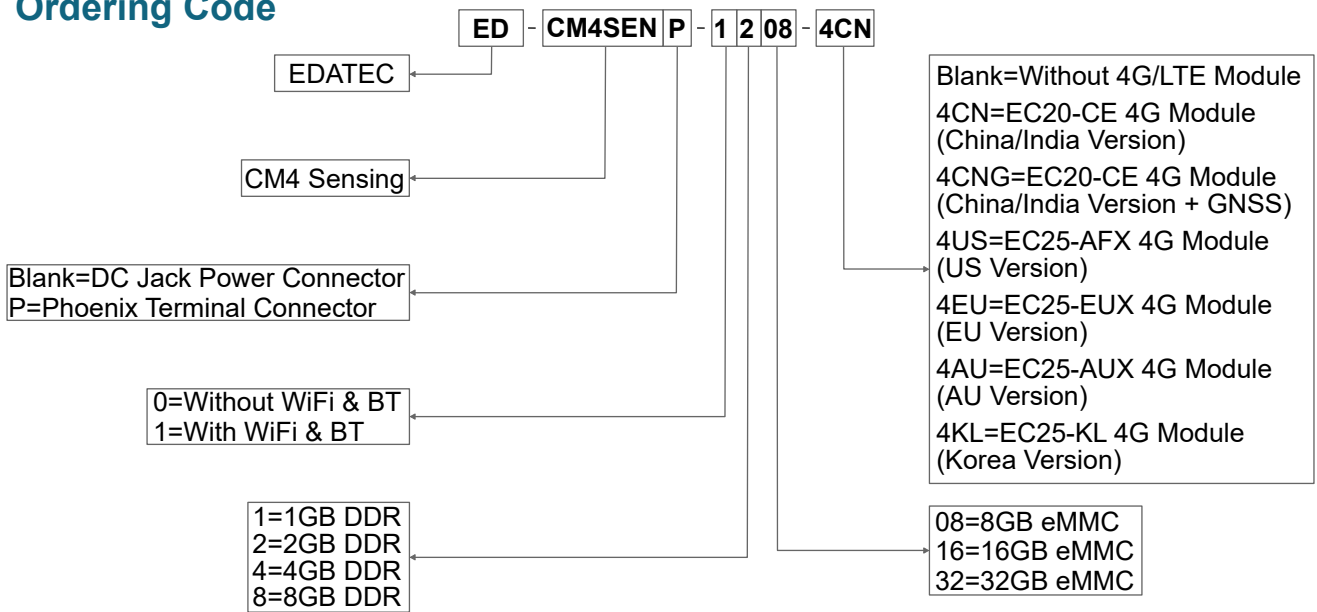
System Diagram



Dimensions



Ordering Code



Example

P/N: **ED-CM4SEN-1208-4CN**

Configuration: Industrial Computer Based on Raspberry Pi CM4, with DC jack power connector, Wi-Fi & Bluetooth, 4G (EC20-CE Module), 2GB DDR, 8GB eMMC, 4 x RS485, 1 x CAN and 1 x RS232.

Optional Accessory

You can choose a power adapter according to actual needs.

| Model | Description | Picture |
|--------------------|--|---------|
| ED-PSU1202-UK | 100~240VAC to 12VDC/2A Adapter, with UK AC plug, 5.5mm DC plug | |
| ED-PSU1202-US | 100~240VAC to 12VDC/2A Adapter, with US AC plug, 5.5mm DC plug | |
| ED-PSU1202-AU | 100~240VAC to 12VDC/2A Adapter, with AU AC plug, 5.5mm DC plug | |
| ED-PSU1202-EU | 100~240VAC to 12VDC/2A Adapter, with EU AC plug, 5.5mm DC plug | |
| ED-PSU1202-UK-2.5P | 100~240VAC to 12VDC/2A Adapter, with UK AC plug, 2.5mm Pitch Phoenix | |
| ED-PSU1202-US-2.5P | 100~240VAC to 12VDC/2A Adapter, with US AC plug, 2.5mm Pitch Phoenix | |
| ED-PSU1202-AU-2.5P | 100~240VAC to 12VDC/2A Adapter, with AU AC plug, 2.5mm Pitch Phoenix | |
| ED-PSU1202-EU-2.5P | 100~240VAC to 12VDC/2A Adapter, with EU AC plug, 2.5mm Pitch Phoenix | |

NOTE: Each model contains only one of the UK, US, AU and EU plugs.

Packing List

- 1 x ED-CM4SEN Unit
- [WiFi/BT Version - optional] 1 x 2.4GHz/5GHz WiFi/BT Antenna
- [4G Version - optional] 1 x 4G/LTE Antenna