

ED-CM4SEN

Datasheet

by EDA Technology Co., Ltd

built: 2026-08-18

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	Options for 8GB, 16GB, 32GB eMMC storage Micro SD card (user storage expansion)

Software	
Operating System	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 (5.5x2.1mm), supporting 8V~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 Micro SD card for storing user data.
SIM Card Slot	1 x Nano SIM card slot, using to install Nano SIM card for getting 4G signal.
HDMI	1 x HDMI port, Type-A connector. It is compatible with HDMI 2.0 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.

Expansion Functions	
RTC	RTC with 1F SuperCAP backup, which can ensure that the system clock is not affected by device power-off. We also provide a battery base, and you can buy a CR1220 battery backup for RTC.
Buzzer	A tip or an abnormity can be configurated according to actual application, which realizes the alarm function.

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

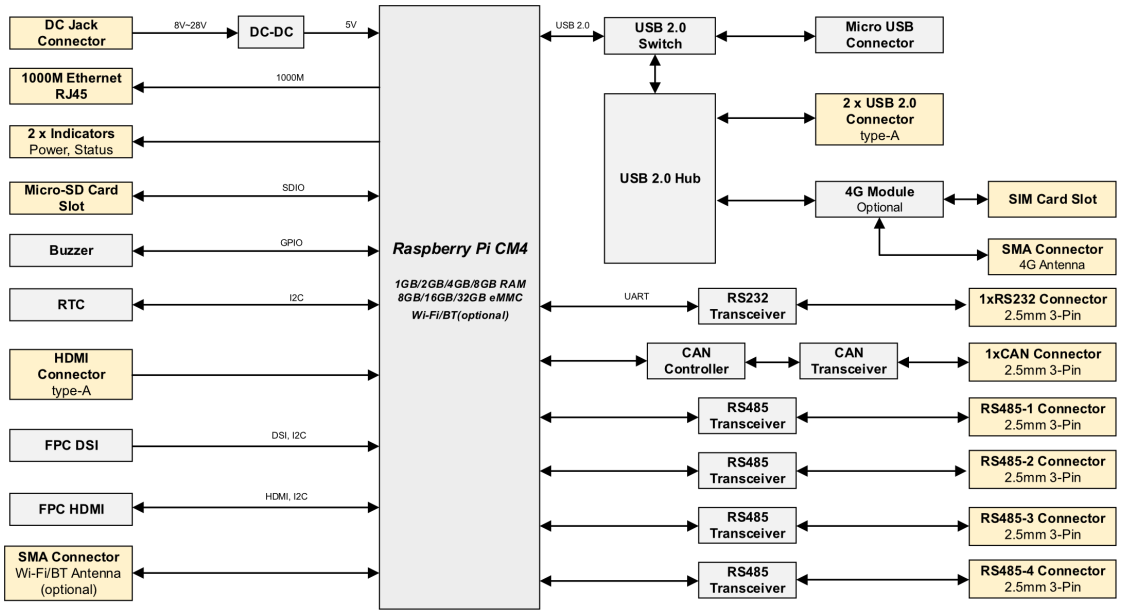
Mechanical Characteristics	
Dimensions	102mm x 73mm x 35.2mm (WxDxH, DIN-rail bracket and antenna are not included.)
Weight	500g
Installation	DIN-rail installation

Wireless	
Wi-Fi/Bluetooth (optional)	2.4GHz & 5GHz dual-band Wi-Fi and Bluetooth with antenna. • 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)	Connect with various 4G LTE modules through the Mini PCIe interface, with antenna. • 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: 900/1800MHz ◦ GPS/GLONASS/BDS/Galileo/QZSS (optional) • EC25-AFX Module (North America) ◦ LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 ◦ LTE TDD ◦ WCDMA: B2/B4/B5 ◦ GSM/EDGE ◦ GPS/GLONASS/BDS/Galileo/QZSS • 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 ◦ GPS/GLONASS/BDS/Galileo/QZSS • 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 ◦ GPS/GLONASS/BDS/Galileo/QZSS • EC25-EFA Module (Europe/Middle East/Africa/South-East Asia) ◦ LTE FDD: B1/B3/B7/B8/B20/B28 ◦ LTE TDD: B38/B40/B41 ◦ WCDMA: B1/B5/B8 ◦ GSM/EDGE: B3/B8 ◦ GPS/GLONASS/BDS/Galileo/QZSS

Environmental & Regulatory	
Operating Temperature	-25°C ~ 60°C
Storage Temperature	-25°C ~ 60°C
Ambient humidity	5% ~ 95% (non-condensing)
Certifications	

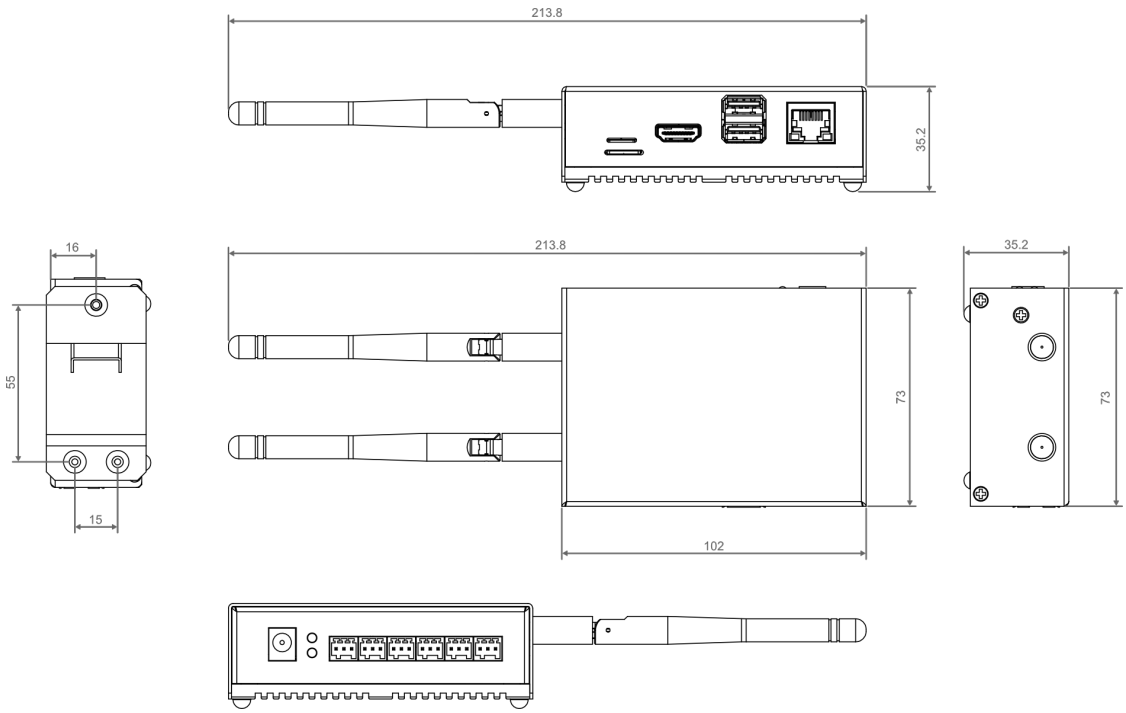
Environmental & Regulatory	
	• FCC ◦ FCC 47 CFR Part 15 Subpart B • CE ◦ EN IEC 62368-1:2020+A11:2020 ◦ EN IEC 62311:2020 ◦ ETSI EN 301 489-1 V2.2.3 (2019-11)/ETSI EN 301 489-3 V2.3.2 (2023-01) ETSI EN 301 489-17 V3.2.4 (2020-09)/ETSI EN 301 489-52 V1.2.1 (2021-11) EN 55032:2015 + A11:2020/EN 55035:2017 + A11:2020 EN IEC 61000-3-2:2019 + A1:2021/EN 61000-3-3:2013 + A1:2019 + A2:2021 ◦ ETSI EN 300 328 V2.2.2 (2019-07)/ETSI EN 301 893 V2.1.1 (2017-05) ETSI EN 300 440 V2.2.1 (2018-07)/ETSI EN 301 511 V12.5.1 (2017-03) ETSI EN 301 908-1 V15.2.1 (2023-01)/ETSI EN 301 908-2 V13.1.1 (2020-06) ETSI EN 301 908-13 V13.2.1 (2022-02)

System Diagram

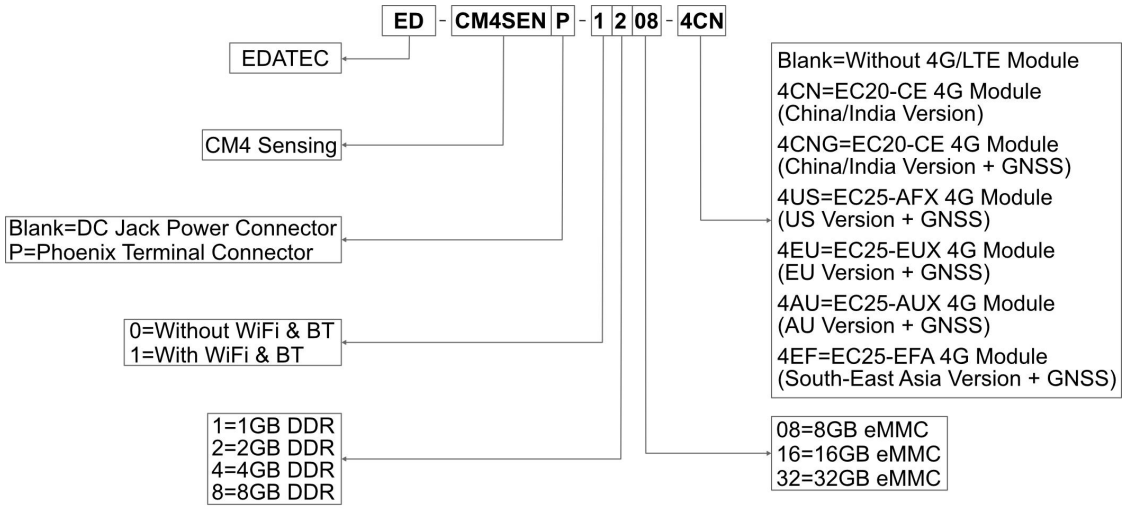


Dimensions

Unit: mm



Ordering Code



Example

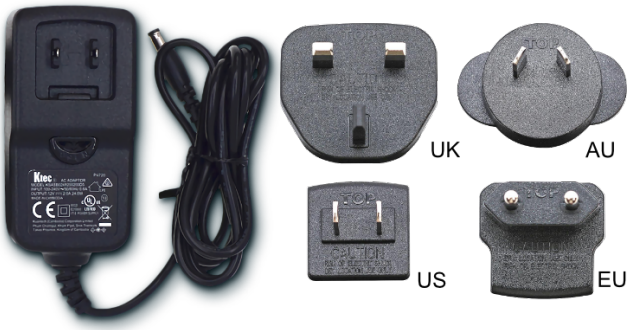
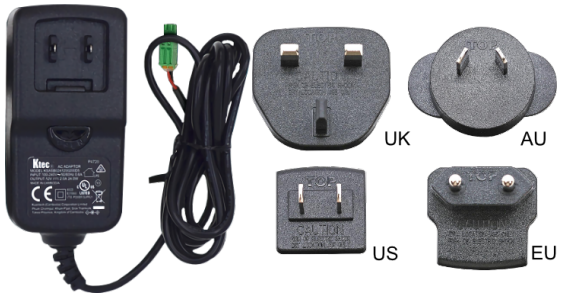
P/N: **ED-CM4SEN-1208-4CN**

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	

Model	Description	Picture
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