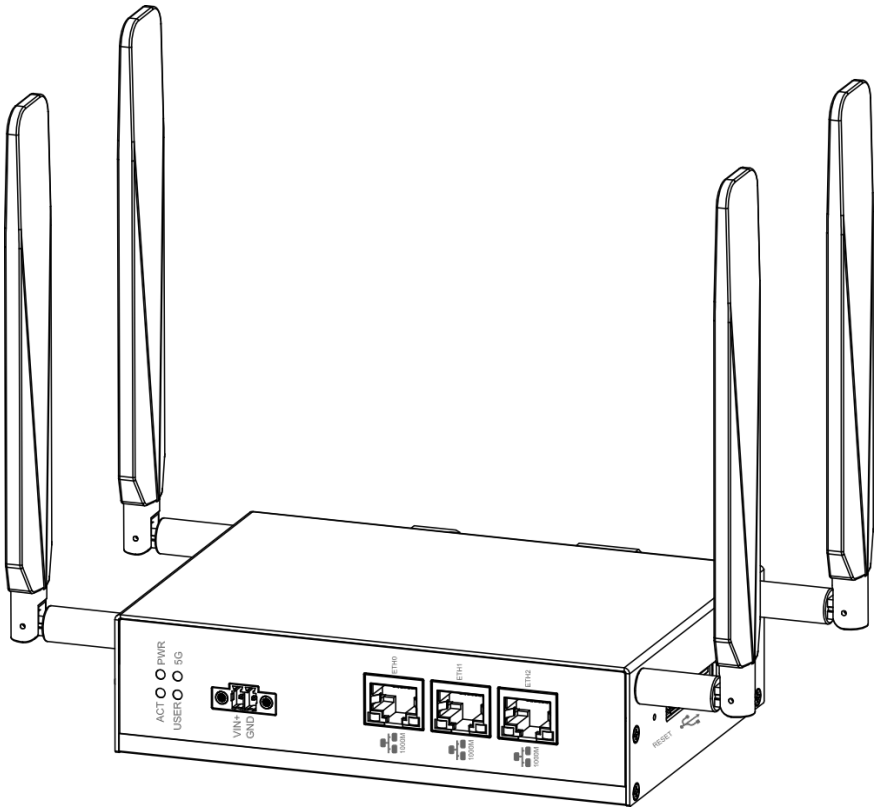


ED-IPC2500

Datasheet

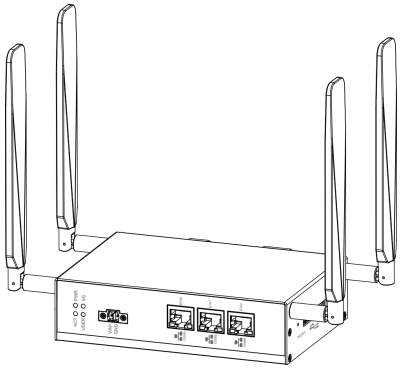
by EDA Technology Co., Ltd

built: 2026-05-21

ED-IPC2500

5G 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
- Support mSATA SSD storage expansion
- 3 x Gigabit Ethernet ports, 2 x USB 2.0 ports, 1 x HDMI
- Integrated 5G communication module with antenna
- Wide voltage power input range of DC 9V~36V with reverse polarity protection, overvoltage protection and overcurrent protection
- Integrated supercapacitor (backup power supply, optional), RTC, Watchdog, EEPROM and crypto authentication
- Wide temperature range of -20℃~60℃ for working environment
- High-quality metal case



Specifications

System	
CPU	Broadcom BCM2711, quad core Arm 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 mSATA SSD (optional)

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, 2-Pin 3.5mm pitch phoenix terminals with screw holes. It supports 9V~36V input, the signal is defined as VIN+/GND.
1000M Ethernet	3 x adaptive 10/100/1000M ethernet ports, RJ45 connector. It can be used to access the network.

Rear I/O	
Micro SD Card Slot	1 x Micro SD card slot, this interface is non-functional and reserved for future use only.
Nano SIM Card Slot	1 x Nano SIM card slot, which is used to install SIM card for getting 5G signal.
Micro USB	1 x Micro USB port, which supports to flash to eMMC for the system.

Side I/O	
HDMI	1 x HDMI, Type-A connector, compatible with HDMI 2.0 standard, supporting 4K resolution at 60Hz.
USB 2.0	2 x USB 2.0 ports, Type-A connector, each supports up to 480Mbps.
Antenna	4 x SMA ports, which is used to connect 5G antenna.

Buttons and Indicators	
RESET	1 x RESET button, which can reset the device.
PWR	1 x red power indicator, using to check the status of device power-on and power-off.
5G	1 x green 5G indicator, which is used to check the status of 5G signal.
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.

Internal I/O	
40-Pin GPIO	1 x GPIO, 2x20-Pin 2.54mm pitch header, using to lead out the GPIO ports of CM4.
mSATA	1 x mSATA, mini PCIe connector, which supports to connect mSATA SSD.

Expansion Functions	
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	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.
Watchdog	Implementing the Watchdog function based on RTC Alarm.

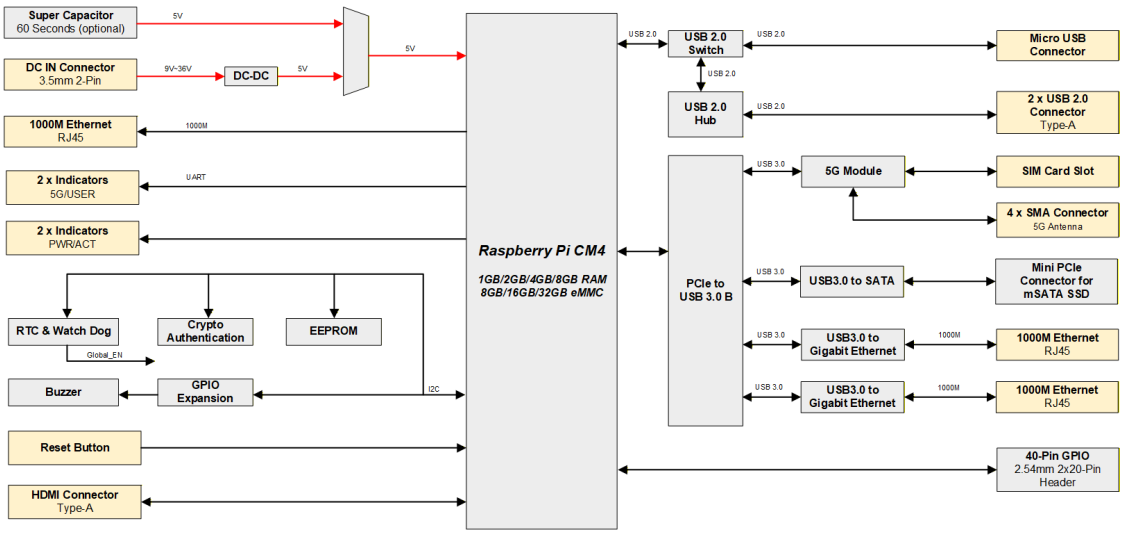
Electrical Characteristics	
Input Voltage	9V ~ 36V DC
Power Consumption	24W (Max)

Mechanical Characteristics	
Dimensions	142.2mm x 100mm x 37.4mm (WxDxH, DIN-rail bracket and antennas are not included.)
Weight	About 850g
Installation	DIN rail mounting

Wireless	
5G	Connection to the 5G module (RM520N-GL) is realized through an M.2 B Key interface, with 4 antennas included. • 5G NR SA ◦ n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/ n38/n40/n41/n48/n66/n70/n71/n75/n76/n77/n78/n79 ◦ DL 4 × 4 MIMO: n1/n2/n3/n7/n25/n30/n38/n40/n41/n48/n66/n70/n77/n78/n79 ◦ UL 2 × 2 MIMO: n38/n41/n48/n77/n78/n79 • 5G NR NSA ◦ n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/ n38/n40/n41/n48/n66/n70/n71/n75/n76/n77/n78/n79 ◦ DL 4 × 4 MIMO: n1/n2/n3/n7/n25/n30/n38/n40/n41/n48/n66/n70/n77/n78/n79 • LTE ◦ FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/ B25/B26/B28/B29/B30/B32/B66/B71 ◦ TDD: B34/B38/B39/B40/B41/B42/B43/B46(LAA)/B48 ◦ DL 4 × 4 MIMO: B1/B2/B3/B4/B7/B25/B30/B38/B40/B41/B42/B43/B48/B66 • WCDMA: B1/B2/B4/B5/B8/B19

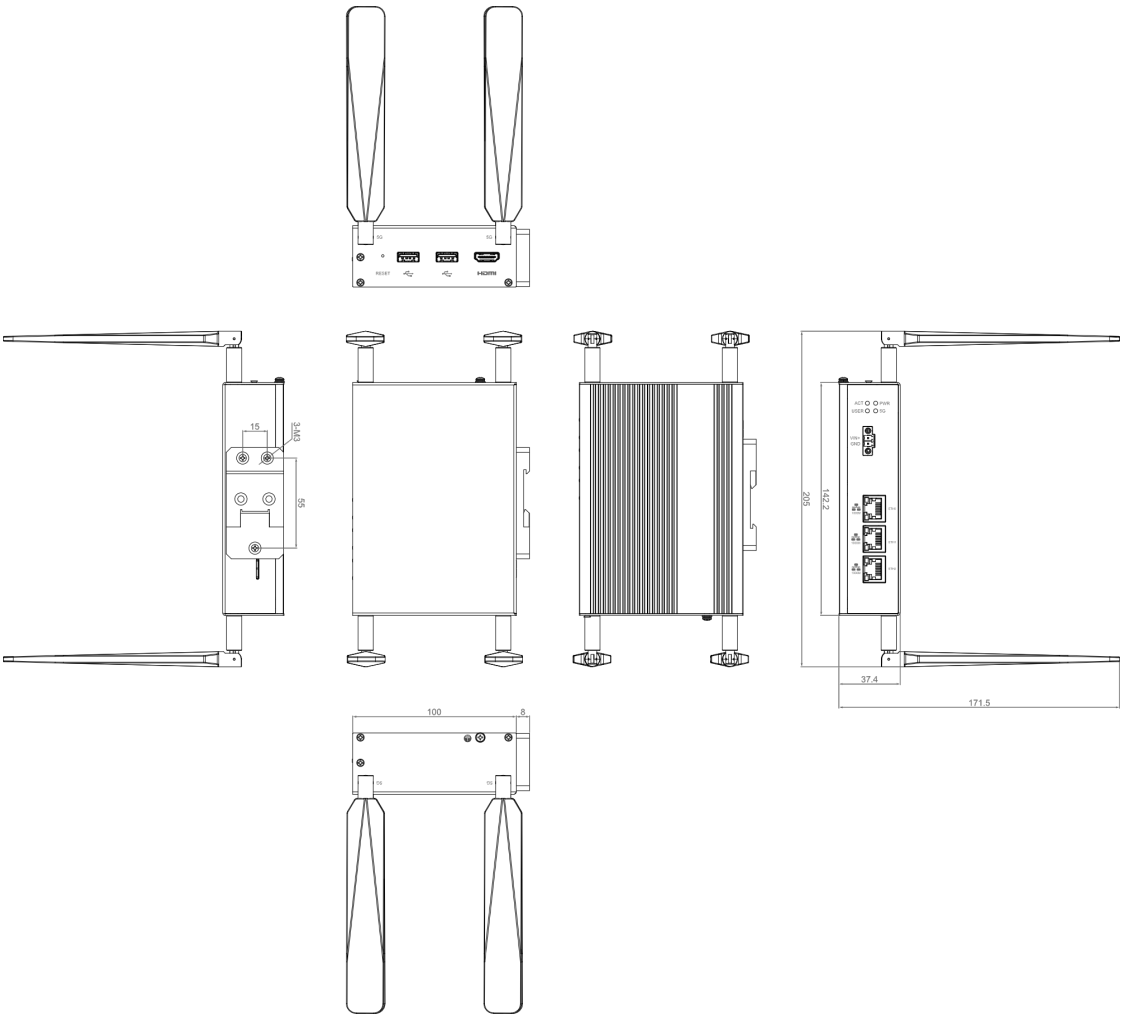
Environmental	
Operating Temperature	-25°C ~ 60°C
Storage Temperature	-25°C ~ 60°C
Ambient humidity	5% ~ 95% (non-condensing)

System Diagram

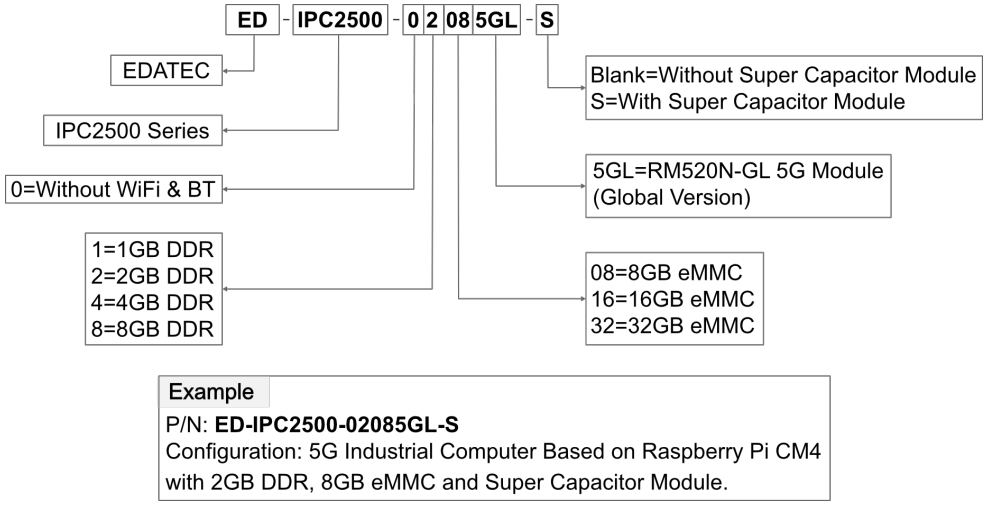


Dimensions

Unit: mm



Ordering Code



Example

P/N: **ED-IPC2500-02085GL-S**
Configuration: 5G Industrial Computer Based on Raspberry Pi CM4 with 2GB DDR, 8GB eMMC and Super Capacitor Module.

Optional Accessory

You can choose a power adapter according to actual needs.

Model	Description	Picture
ED-PSU1202-UK-3.5PL	100~240VAC to 12VDC/2A Adapter, with UK AC plug, 3.5mm pitch phoenix plug with lock	
ED-PSU1202-US-3.5PL	100~240VAC to 12VDC/2A Adapter, with US AC plug, 3.5mm pitch phoenix plug with lock	
ED-PSU1202-AU-3.5PL	100~240VAC to 12VDC/2A Adapter, with AU AC plug, 3.5mm pitch phoenix plug with lock	
ED-PSU1202-EU-3.5PL	100~240VAC to 12VDC/2A Adapter, with EU AC plug, 3.5mm pitch phoenix plug with lock	
NOTE: Each model contains only one of the UK, US, AU and EU plugs.		

Packing List

- 1 x ED-IPC2500 Unit
- 4 x 5G Antennas