



# EG5200

robustOS Pro

Industrial Edge Computing Gateway

5 x Ethernet ports + 3 x USB + 1 x HDMI

+ WiFi 6 & Bluetooth 5.2(Optional)



## INTRODUCTION

Robustel's EG5200 is a new generation of industrial edge computing gateway supporting global 4G/3G/2G networks for cellular backhaul, with a fully-fledged Debian 11(bullseye) based operating system able to support thousands of existing or new ARMv8 (Raspberry Pi compatible) based applications.

EG5200 supports Docker for easy deployment of applications and benefits from '**RobustOS Pro**' – Robustel's latest operating system with enhanced cybersecurity, advanced GUI and a myriad of software features including VPNs, Smart Roaming, SMS remote control and more.

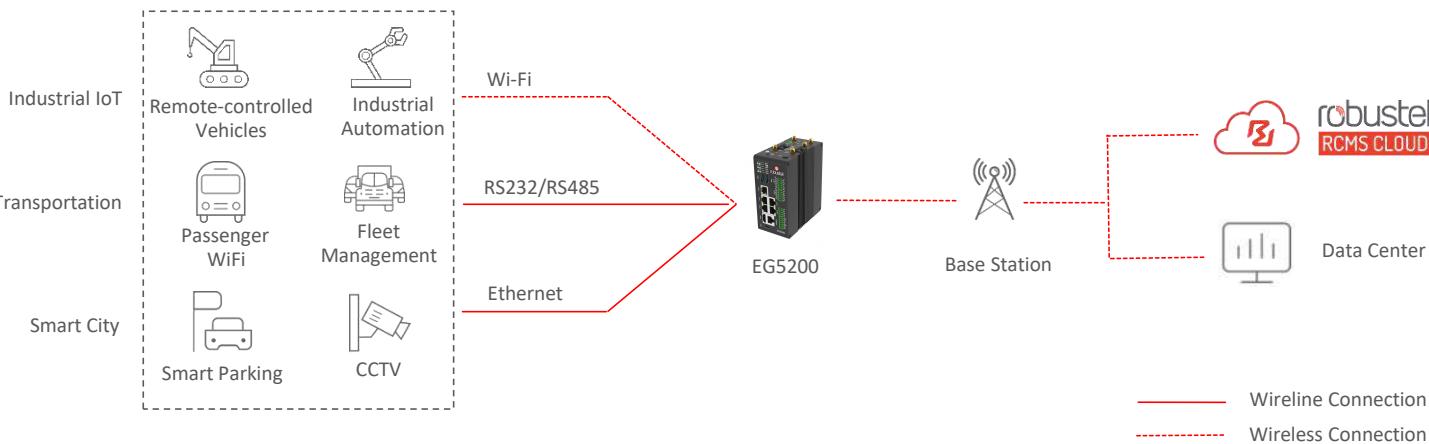
With a quad core 1.6 GHz Cortex A53 CPU and an integrated NPU of 2.3 TOPS that greatly accelerate machine learning inference, EG5200 will take the compute power to the next level, best for the edge computing and edge AI applications, can also be used as a combination of cellular router + embedded PC in all the industrial field.

**RCMS** is Robustel's device monitoring service that is fully compatible with the EG5200. It allows customers to see a location overview of their routers quickly and simply on a map plus features such as data usage, signal strength, current network and much more can then be viewed on a per router/gateway basis. Over-the-air updates are supported for Firmware, router configuration and Apps serving as essential "insurance" if anything was not quite right during deployment.



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RCMS CLOUD

## APPLICATION EXAMPLE



# SPECIFICATIONS

Hardware System		WiFi&Bluetooth (Optional)	
CPU	Quad core Cortex-A53, 1.6 GHz	WiFi	Wi-Fi 2.4 GHz/5 GHz, 2 x 2 + 2 x 2 MIMO
NPU	2.3 TOPS		IEEE 802.11a/b/g/n/ac/ax
RAM	4 GB DDR4	Bluetooth	Bluetooth 5.2 compliant
Flash	32 GB eMMC		
Cellular Interface		HDMI	
Version	4G	HDMI	1 x HDMI 2.0
Number of antennas	3		
Connector	SMA-K	Others	
SIM	2 x Mini SIM (2FF)	SD	1 x microSD
Ethernet Interface		Reset button	1 x RST
Ports	5 x RJ45, 10/100/1000Mbps, compliance with 1000BAST-T, LAN or WAN	LED indicators	1 x RUN, 1 x MDM, 2 x USR, 1 x Signal, 1 x VPN
Magnet isolation protection	1 KV	Watchdog	External
Serial Interface		Software (Basic features of RobustOS Pro)	
Type	2 x RS232/RS422/RS485 (software configurable)	Network protocols	PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, HTTP, DNS, NTP, SMTP, Telnet, VLAN, HTTPS, ARP, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.
Connector	2 x 5-pin 3.5 mm terminal block	VPN tunnel	IPsec, OpenVPN, GRE
ESD protection	8 KV Air, 4 KV Contact	Firewall	DMZ, anti-DoS, Filtering (IP/Domain name/MAC address), Port Mapping, Access Control
Baud rate	300 bps to 115200 bps	Remote management	Web, CLI, SMS
Signal	RS232: TXD, RXD, GND, CTS, RTS   RS485: Data+ (A), Data- (B), GND RS422: RX+, RX-, TX+, TX-, GND	Serial port	Transparent, TCP Client/Server, UDP, Modbus RTU Gateway
Console Interface		Others	Smart Reboot, Data Guard, Smart Roaming
Type	1 x RS232		
Connector	RJ45		
Baud rate	115200 bps		
Signal	TXD, RXD, GND		
DI Interface		SDK	
Ports	2 x DI, wet contact	Operating System	RobustOS Pro (Based on Debian 11(bullseye))
Connector	4-pin 3.5 mm terminal block	Supported programming languages	C, C++, Python, Java, Node.js etc.
Isolation	Bi-directional optocoupler	Debian Repository available	(for users to develop own applications)
Absolute maximum VDC	+ 30V DC	Flash available for SDK	30GB
Absolute maximum ADC	100 mA	RAM available for SDK	2.5 GB
Signal definition	DI1+, DI1-, DI2+, DI2-		
Relay Output Interface		App Center (Available Apps for RobustOS Pro)	
Ports	2 x Relay Output	Apps*	L2TP, PPTP, DMVPN, VRRP, QoS, SNMP, Language, RCMS, Dynamic route, Captive Portal, Modbus Master, etc.
Connector	6-pin 3.5 mm terminal block		
Absolute maximum VDC	+ 48V DC		
Absolute maximum ADC	100 mA		
Signal definition	NC1, NO1, COM1, NC2, NO2, COM2		
USB Interface		*Request on demand. For more Apps please visit <a href="http://www.robustel.com">www.robustel.com</a> .	
Ports	2 x USB 3.0 (host), Type A, 5V 900mA 1 x USB 2.0 (OTG), Type C	Power Supply and Consumption	
		Connector	2-pin 3.5 mm terminal block with lock
		Input voltage	9 ~ 60V DC
		Power consumption	Idle: 8.76W Data link: 25.44W (peak)
GNSS Interface		Physical Characteristics	
Number of antennas	1	Ingress protection	IP30
Connector	SMA-K	Housing & Weight	Metal, 622g
		Dimensions	58 x 111 x 128 mm
		Installations	Desktop, wall mounting and 35 mm DIN rail mounting
		Operating temperature	-30 ~ +70 °C
		Storage temperature	-40 ~ +85 °C
		Relative humidity	5 ~ 95% RH

## ORDERING INFORMATION

Model	PN	WiFi&BLE	Cellular	Frequency Bands*	Country/Region	Certification (*In progress)
EG5200-A5ZAZ-NU	B120001	-	-	-		CE*, RCM*, UKCA*, CB*
EG5200-A5CAZ-NU	B120002	✓	-	-		
EG5200-A5AAZ-4L-A06GL	B120004	-	4G	4G: LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/ B20/B25/B26/B28 LTE TDD: B34/B38/B39/B40/B41 3G: WCDMA: B1/B2/B4/B5/B6/B8/B19 2G: GSM: B2/B3/B5/B8	Global	
EG5200-A5BAZ-4L-A06GL	B120006	✓				

\*For more information about frequency bands in different countries, please contact your Robustel sales representative.