



PRODUCT SPECIFICATION

EG8200Mini-5G



Chengdu Zongheng Intelligence
Control Technology Co., Ltd.

前言 PREFACE

Intended Use

This product (EG Series Edge Computing Gateway) is only for use as specified in relevant technical documents. Proper transport, storage, assembly, installation, commissioning, operation, and maintenance are required for safe, reliable operation. Ensure permissible environmental conditions (e.g., temperature, humidity, supply voltage). Observe all notices in this specification and related documents.

Qualified Personnel

Only qualified personnel may operate the products/systems described. Operators must strictly follow the accompanying documents, especially safety and warning notices. With relevant training and experience, qualified personnel can identify potential risks and avoid hazards.

Reliable Grounding and Connection

During operation, the protective earth terminal (PE/M) must be reliably grounded. Improper grounding or connection may cause malfunction, data loss, or injury. Always follow the wiring requirements in this specification and periodically check connection reliability.

Disclaimer

We assume no liability for loss or error arising from use of this document. Consistency with actual hardware and software has been checked, but deviations may exist; complete consistency is not guaranteed. All data tested per regulations. We reserve the right to improve and correct function and performance descriptions in later versions. Watch for document updates.

Revision History

Revision	Date	Description
V1.0	August 2026	First release

Scope of Document

This document applies to Zongheng Intelligent Control EG Series products, mainly including:

- Communication Coupler: EG8200Mini-5G

Specific configuration subject to product model and order number.

Recycling and Disposal

To ensure environmentally compliant recycling, do not dispose of waste equipment with household waste. Contact a certified e-waste disposal service or follow local regulations. Recycle modules containing batteries (e.g., RTC batteries) separately.

产品介绍 PRODUCT INTRODUCTION



- [5G RedCap](#)
- [Extensive Protocol Support](#)
- [Remote O&M](#)
- [Store-and-Forward](#)
- [Visual Programming](#)
- [JavaScript Custom Development](#)

The EG Series is an edge computing gateway from Zongheng Intelligent Control. With **rich hardware interfaces**, **drag-and-drop programming**, a **"zero-code" design philosophy**, and **convenient remote management**, it responds to diverse IoT needs **rapidly, flexibly, accurately**, and **efficiently**.

The EG Series abstracts complex hardware interfaces and industrial network protocols into "nodes." Users can **flexibly use these nodes** by dragging and connecting them, **replacing traditional complex and inefficient coding processes**. This enables customers to focus on business logic and quickly build their own gateway devices. The mission of the EG Series is to continuously develop new nodes to serve industry customers and **adapt to the fragmented demands of the IoT industry**.

产品规格 PRODUCT SPECIFICATION

Model		EG8200Mini-5G
Core Configuration	Processor	3-core A7 @ 1.2 GHz
	RAM	512 MB
	Storage	4 Gb
	Storage Card	Micro SD slot, up to 32 GB
	RTC	√
5G RedCap	Module	Quectel 5G RedCap
	Frequency Bands	5G NR SA: n1/n3/n5/n8/n28/n40/n41/n78/n79 LTE FDD: B1/B3/B5/B8 LTE TDD: B34/B38/B39/B40/B41
	Transmit Power	5G NR n41/n78/n79 HPUE*: Class 2 (26 dBm ±2 dB) 5G NR: Class 3 (23 dBm ±2 dB) LTE B38/B41 HPUE: Class 2 (26 dBm ±2 dB) LTE: Class 3 (23 dBm ±2 dB)
	Bandwidth (theoretical max.)	5G NR SA: 226 Mbps (DL) / 120 Mbps (UL) LTE: 150 Mbps (DL) / 50 Mbps (UL)
Wi-Fi	Standard	802.11a/b/g/n/ac/ax (Wi-Fi 6)
	Band	Dual-band (2.4 GHz + 5 GHz)
	Mode	STA + AP
	Theoretical Speed	433 Mbps
	Optimal Range	10 m
	Max. AP Clients	20
Ethernet	WAN	1 × 10/100 Mbps auto-negotiation
	LAN	1 × 10/100 Mbps auto-negotiation
USB	Type-C	1 port (debug interface)
RS485	Ports	2
	Terminal	A, B
	Baud Rate	2400 – 921600 bps
	Data Bits	7, 8
	Stop Bits	1, 2
	Parity	NONE, EVEN, ODD
	Protection	ESD, surge protection
RS232	Ports	1
	Terminal	RX, TX, GND
	Baud Rate	2400 – 921600 bps
	Data Bits	7, 8
	Stop Bits	1, 2
	Parity	NONE, EVEN, ODD
	Protection	ESD, surge protection

产品规格

PRODUCT SPECIFICATION

LED Indicators	LED	6 (2 user-programmable)
Electrical	Certification	CE
	Adapter	12 V / 1 A
	Operating Voltage	DC 9 – 36 V
	Operating Current	150 mA @ 12 V
Environmental	Operating Temperature	–40 – 85 °C
	Storage Temperature	–40 – 85 °C
	Operating Humidity	0 – 95% RH (non-condensing)
	Storage Humidity	0 – 95% RH (non-condensing)
Mechanical	Dimensions	113×82.8×28.8mm
	Enclosure Material	Aluminum Alloy Profile
	Mounting	DIN rail
	Cooling	Passive
	Reset Button	Press 10 s to reset
EMC	ESD	Air: Level 3 ±8 kV Contact: Level 2 ±4 kV
	Surge	Level 2 ±1 kV
	EFT	Level 2 ±1 kV
Software Features	Remote O&M	√
	Remote Management	√
	Remote Upgrade	√
	Virtual Network Port	√
	Virtual Serial Port	√
	Local Database	√
	Visual Programming	√
	PLC Protocols	√
	Industry Protocols	CJ188 / DLT645 / HJ212 / Modbus / OPC UA* / BACnet* / ...
	Network Protocols	MQTT / HTTP / TCP / UDP / WebSocket / Alibaba Cloud IoT Platform / OneNET / ...

附录 APPENDIX

EG Series Supported PLC Protocol Table

This gateway is categorized by Brand → Protocol → Model hierarchy. Representative PLC models have been selected for testing in each category. Additional supported models are based on official documentation.

Note: The gateway supports standard Modbus RTU/TCP protocols, which are supported by mainstream PLCs and are not listed individually (e.g., Hollysys, Haiwell, Yokogawa, Lan Pufeng, etc.).

Brand	Protocol	Interface	PLC Model
SIEMENS	<i>Tips:</i>		<i>All current Siemens series support S7 protocol communication. Using S7 protocol is recommended.</i>
	S7	Ethernet	S7-200 SMART, S7-200 series, S7-300 series, S7-400 series, S7-1200 series, S7-1500 series
	PPI	Serial	S7-200 series
Mitsubishi (MELSEC)	<i>Tips:</i>		<i>Mitsubishi primarily uses MC protocol for communication. FX5, FX3, Q series etc. have been tested.</i>
	EtherNet/IP	Ethernet	FX5-ENET/IP series, RJ71EIP91 series, QJ71EIP71 series
	MC-1E / MC-3E	Ethernet	FX5 series, RJ71EN71 series, RnENCPU series, LJ71E71 series, QJ71E71 series, QnUCPU series, FX3 series
	Modbus TCP	Ethernet	FX5 series, RJ71EN71 series, RnENCPU series, LJ71E71 series, QJ71E71 series
	MC-3C	Serial	FX5 series, RJ71C24 series, LJ71C24 series, QJ71C24 series
	Modbus RTU	Serial	FX5 series, RJ71C24 series, LJ71C24 series, QJ71C24 series, FX3 series
	FxLinks (Computer Link)	Serial	FX3 series, FX2 series, FX1 series, FX0 series
	FxSerial (Programming Communication)	Serial	FX3 series, FX2 series, FX1 series, FX0 series
OMRON	<i>Tips:</i>		<i>OMRON primarily uses Fins protocol for communication.</i>
	EtherNet/IP	Ethernet	NX7 series, NX1 series, NX1P series, NJ series, CJ1W-EIP21
	Fins	Ethernet	CP series, CS series, CJ series, CV series
	HostLink	Serial	CP series, CS series, CJ series, CV series, C series
LSis (LS Electric)	<i>Tips:</i>		<i>LS mainly uses FEnet/Cnet protocols for communication.</i>
	XGB FEnet	Ethernet	XGB series (XBC/XEC U, XBL-EMTA)
	XGK FEnet	Ethernet	XGT series (XGL-EFMT, XGL-EFMF, XGL-EH5T)
	XGB Cnet	Serial	XGB series (XBC/XEC U, XBL-C21A, XBL-C41A)
	XGK Cnet	Serial	XGT series (XGL-CH2A, XGL-C21A, XGL-C41A)
Allen-Bradley (Rockwell Automation)	<i>Tips:</i>		<i>Rockwell Automation primarily uses CIP and DF1 protocols for communication.</i>
	EtherNet/IP	Ethernet	EtherNet/IP (Ethernet): ControlLogix series, CompactLogix series, Micro800 series (820, 850, 870)
	DF1	Serial	ControlLogix series, CompactLogix series (5069-SERIAL module), Micro800 series (820, 830, 850, 870), SLC series (500, 5/03, 5/04, 5/05), MicroLogix series (1000, 1100, 1200, 1500)

附录 APPENDIX

Brand	Protocol	Interface	PLC Model
Beckhoff	<i>Tips:</i>		<i>Beckhoff primarily uses ADS protocol for communication.</i>
	ADS	Ethernet	CX series, TwinCAT2, TwinCAT3
Inovance	<i>Tips:</i>		<i>Inovance mainly uses Modbus protocol.</i>
	Modbus TCP	Ethernet	AC series, AM series, H5U series, H3U series
	Modbus RTU	Serial	AC series, AM series, H5U series, H3U series, H1U series
Keyence	<i>Tips:</i>		<i>Keyence primarily uses KV protocol.</i>
	MC-3E	Ethernet	KV-8000 series, KV-7000 series, KV-5500 series, KV-5000 series, KV-EP21V, KV-LE21V, KV-LE20V, KV-LE20A Ethernet units
	KV (Upper Link Protocol)	Ethernet	
	KV (Upper Link Protocol)	Serial	KV-7300, KV-3000, KV-1000, KV-700, KV Nano, KV-L21V, KV-L20V
Panasonic	<i>Tips:</i>		<i>Panasonic primarily uses Mewtocol protocol.</i>
	MC-3E	Ethernet	FP7 series, FP0H series, FP-XH series
	Mewtocol	Ethernet	FP7 series, FP0H series, FP-XH series
	Mewtocol	Serial	FP7 series, FP0H series, FP-XH series, FP-X0 series, FP0R series
Delta	<i>Tips:</i>		<i>Delta mainly uses Modbus protocol.</i>
	Modbus TCP	Ethernet	AH series, AS series, AX-3 series, DVP series (built-in Ethernet)
	Modbus RTU	Serial	AH series, AS series, AX-3 series, DVP series
XinJE	<i>Tips:</i>		<i>XinJE mainly uses Modbus protocol.</i>
	Modbus TCP	Ethernet	CCSD series, XA series, XS series, XG series, XL series
	Modbus RTU	Serial	CCSD series, XA series, XS series, XG series, XL series, XC series, XD series
MegMeet	<i>Tips:</i>		<i>MegMeet mainly uses Modbus protocol.</i>
	Modbus TCP	Ethernet	MC5100 series, MC280 series, MC200 series, MC100 series, MC80 series
	Modbus RTU	Serial	MC5100 series, MC280 series, MC200 series, MC100 series, MC80 series
Yaskawa	<i>Tips:</i>		<i>Yaskawa primarily uses Memobus protocol (supports S7).</i>
	Memobus	Ethernet	GL120/130 series, GL60 series, MP3000 series, MP2300 series, Z1000 series
Fatek	<i>Tips:</i>		<i>Fatek primarily uses Fatek protocol.</i>
	Fatek	Serial	FBs series
Vigor	<i>Tips:</i>		<i>Vigor primarily uses VS private protocol.</i>
	VS	Serial	VS series
Fuji	<i>Tips:</i>		<i>Fuji primarily uses SPH/SPB protocols.</i>
	SPH	Ethernet	SPH series
	SPB	Serial	SPB series

产品总览 PRODUCT OVERVIEW



EG8200Mini-5G
Front View



EG8200Mini-5G
Right View

产品总览 PRODUCT OVERVIEW



EG8200Mini-5G
Rear View



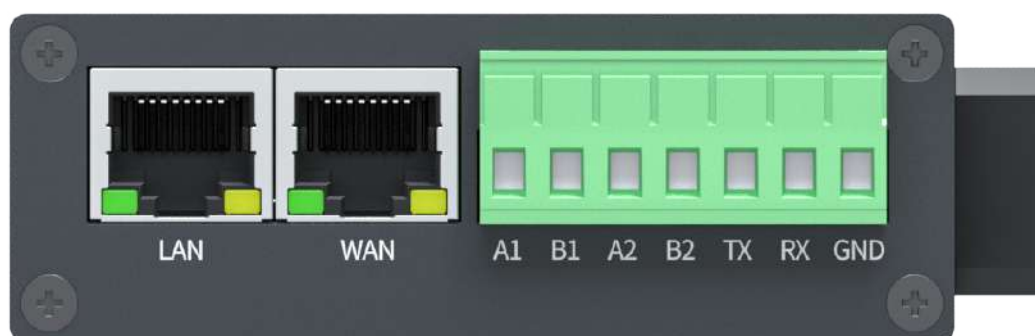
EG8200Mini-5G
Left View

产品总览 PRODUCT OVERVIEW



EG8200Mini-5G

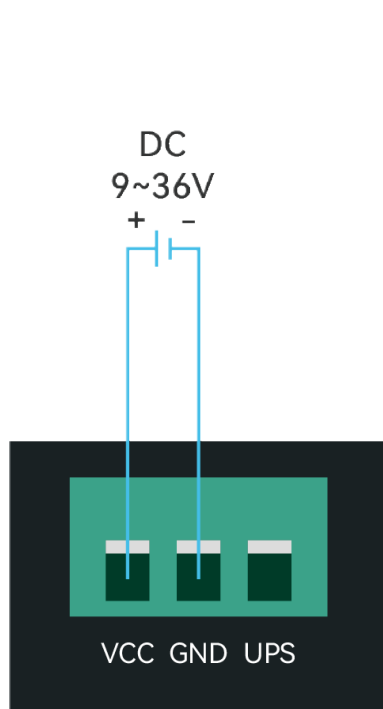
Top View



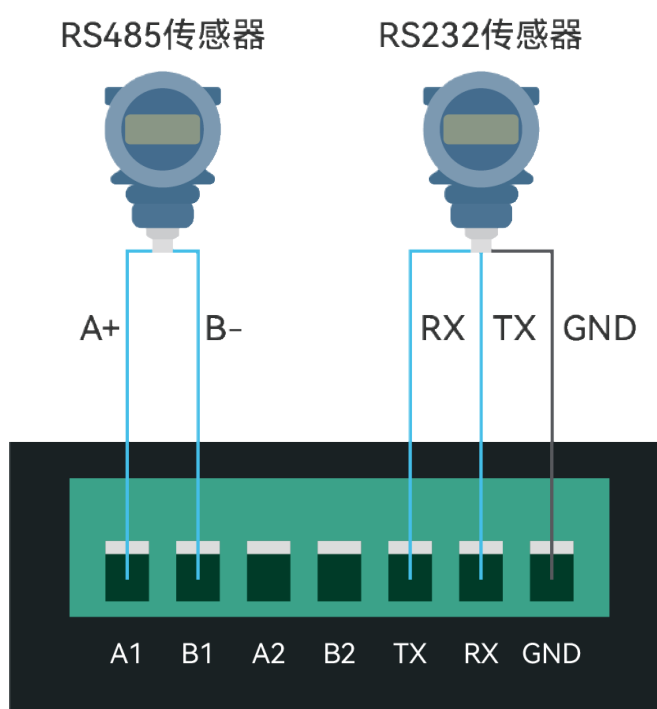
EG8200Mini-5G

Bottom View

接线说明 WIRING INSTRUCTION

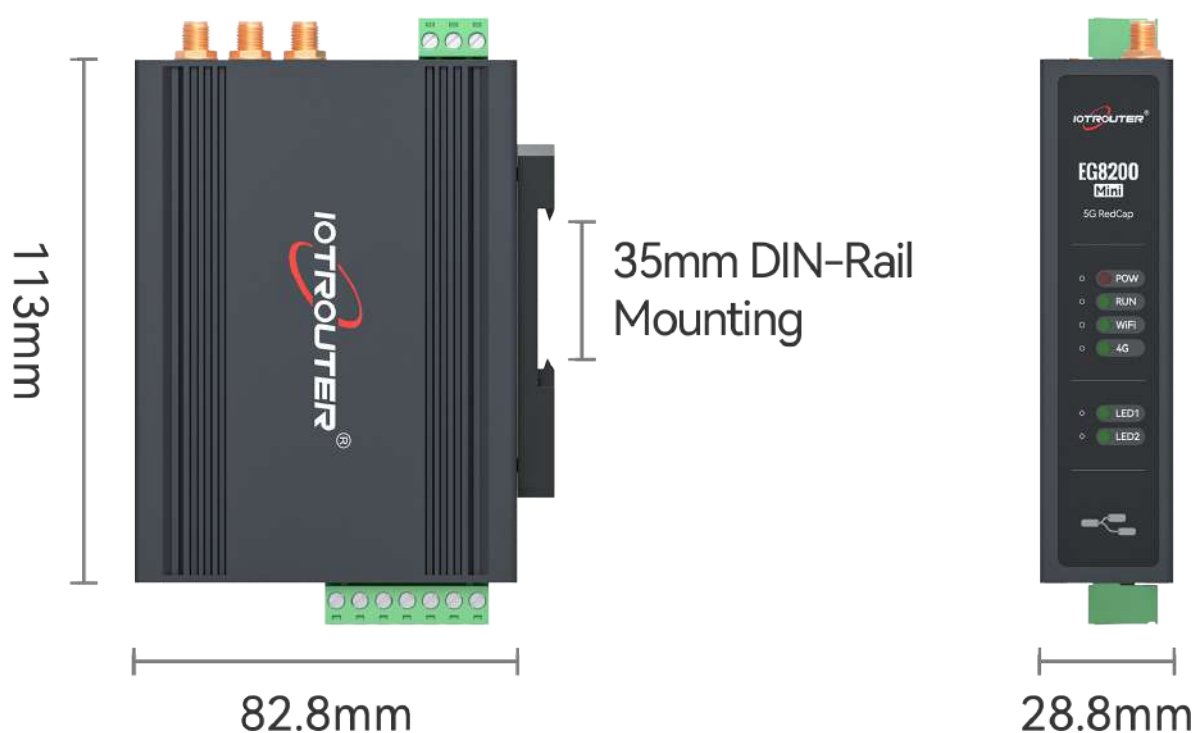


Power Wiring Diagram



Serial Port Wiring Diagram

安装说明 INSTALLATION INSTRUCTION



Product Dimensions

A LEADING PROVIDER OF INTEGRATED IT AND OT PRODUCTS

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