



# PRODUCT SPECIFICATION

## EG2000



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     | September 2024 | First release                                           |
| V2.0     | July 2026      | Processor: 2-core A7 → 3-core A7<br>Add LoRaWAN version |

### Scope of Document

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

- Communication Coupler: EG2000

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



- [LoRa Wireless Communication](#)
- [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              |                                      | EG2000-LoRa                                                              | EG2000-LoRaWan                                              |
|--------------------|--------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------|
| 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                                  | √                                                                        |                                                             |
| 4G (Optional)      | Module                               | Quectel Cat.1 (4G)                                                       |                                                             |
|                    | Frequency Bands                      | LTE-FDD: B1/B3/B5/B8<br>LTE-TDD: B34/B38/B39/B40/B41                     |                                                             |
|                    | Transmit Power                       | LTE-FDD: Class 3 (23 dBm ±2 dB)<br>LTE-TDD: Class 3 (23 dBm ±2 dB)       |                                                             |
|                    | Bandwidth (theoretical max.)         | LTE-FDD: DL ≤10 Mbps, UL ≤5 Mbps<br>LTE-TDD: DL ≤8.96 Mbps, UL ≤3.1 Mbps |                                                             |
| LoRa               | Frequency Band (multi-band optional) | 410.125–493.125 MHz<br>850.125–930.125 MHz                               | ×                                                           |
|                    | Air Rate                             | 2400/4800/9600/19200/<br>38400/62500 bps                                 | ×                                                           |
|                    | Transmit Power                       | 30/27/24/21 dBm                                                          | ×                                                           |
|                    | Communication Distance               | 10 km (open environment; depends on antenna and conditions)              | ×                                                           |
| LoRaWan            | Frequency Band (multi-band optional) | ×                                                                        | 470/868/915 MHz                                             |
|                    | Air Rate                             | ×                                                                        | 0.3–50 kbps<br>(varies with SF and BW configuration)        |
|                    | Transmit Power                       | ×                                                                        | 27 dBm                                                      |
|                    | Communication Distance               | ×                                                                        | 10 km (open environment; depends on antenna and conditions) |
| Ethernet           | WAN/LAN                              | 1 × 10/100 Mbps auto-negotiation                                         |                                                             |
| RS485              | Ports                                | 1                                                                        |                                                             |
|                    | Terminal                             | A, B                                                                     |                                                             |
|                    | 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

|                   |                       |                                                                                 |
|-------------------|-----------------------|---------------------------------------------------------------------------------|
| Electrical        | Certification         | CE                                                                              |
|                   | Adapter               | 12 V / 1 A                                                                      |
|                   | Operating Voltage     | 9 – 36 V                                                                        |
|                   | Operating Current     | 180 mA @ 12 V                                                                   |
| Environmental     | Operating Temperature | –40 to 85 °C                                                                    |
|                   | Storage Temperature   | –40 to 85 °C                                                                    |
|                   | Operating Humidity    | 0 – 95% RH (non-condensing)                                                     |
|                   | Storage Humidity      | 0 – 95% RH (non-condensing)                                                     |
| Mechanical        | Dimensions            | 127 × 116 × 27.5 mm                                                             |
|                   | Enclosure Material    | Galvanized steel                                                                |
|                   | Mounting              | Wall-mount / Desktop                                                            |
|                   | Cooling               | Passive                                                                         |
|                   | Reset Button          | Press 10 s to reset                                                             |
| EMC               | ESD                   | Air: Level 3 ±8 kV<br>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    | √                                                                               |
|                   | Industry Protocols    | CJ188 / DLT645 / HJ212 / Modbus / OPC UA* / BACnet* / ...                       |
|                   | Network Protocols     | MQTT / HTTP / TCP / UDP / WebSocket / Alibaba Cloud IoT Platform / OneNET / ... |

## 产品总览 PRODUCT OVERVIEW



EG2000-LoRa Front View

## 产品总览 PRODUCT OVERVIEW



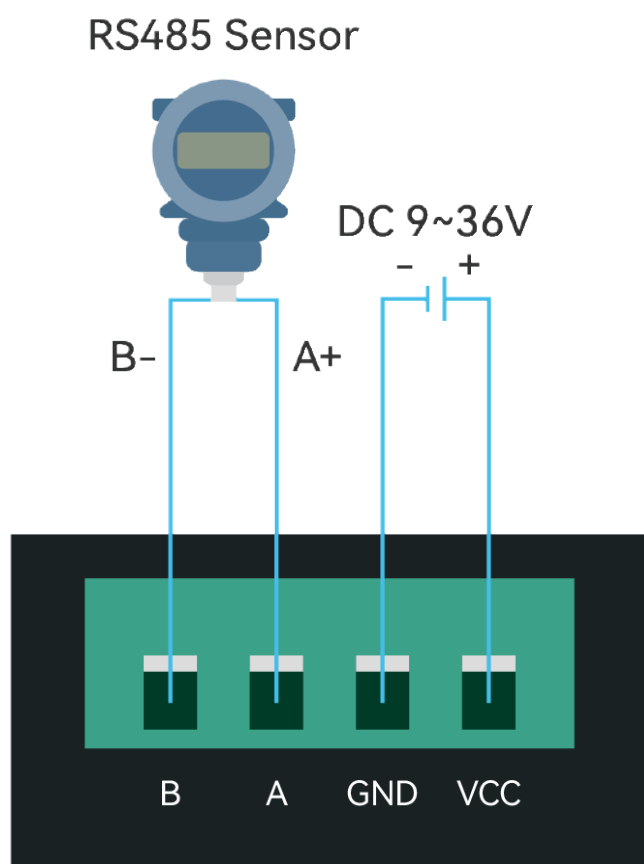
EG2000-LoRaWAN Front View

## 产品总览 PRODUCT OVERVIEW



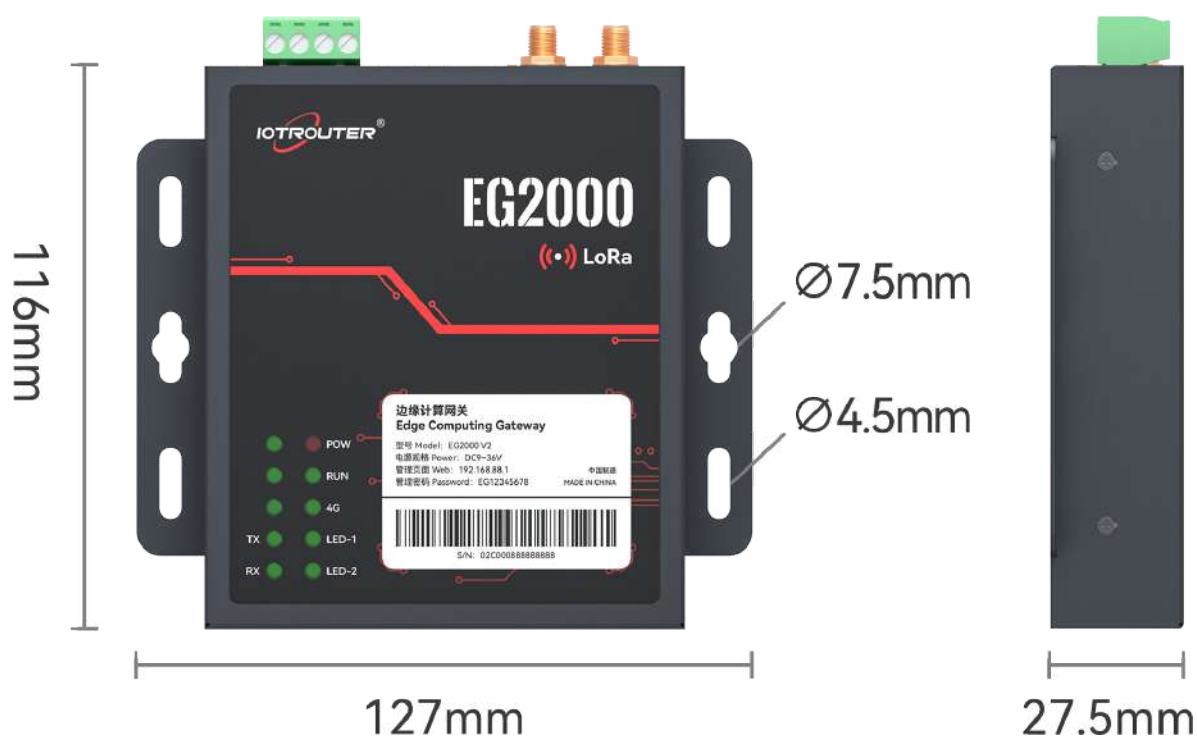
EG2000-LoRa/LoRaWAN Top View

## 接线说明 WIRING INSTRUCTION



Power & RS48 Wiring Diagram

# **安装说明** INSTALLATION INSTRUCTION



Product Dimensions

# A LEADING PROVIDER OF INTEGRATED IT AND OT PRODUCTS

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