Serial Device Server
EBS-T04 Product Manual

KINGNEN

SHENZHEN KINGNEN TECHNOLOGY CO., LTD

Chapter 1: Product Introduction

The EBS-T04 Serial Device Server is designed for data acquisition and monitoring of small-scale surveillance systems with low data collection requirements. It is a compact, universal communication device. The device features 2 Ethernet ports, 4 RS485 ports, and supports 3G/4G communication as well as LoRa communication. It boasts high resistance to interference and an aesthetically pleasing design. Internally, it utilizes high-reliability single-board hardware modules, offering both sleek aesthetics and easy system installation and maintenance.

Chapter 2: Features

1. Utilizes a high-performance, high-reliability, low-power embedded hardware platform to ensure the stability and wide temperature operation of the product,
with industrial-grade components, high-level electrical design, and densely integrated circuit structure, providing outstanding electrical isolation and electromagnetic shielding performance, greatly enhancing device interference resistance and reliability assurance.
2. Supports IP and MAC address filtering to ensure security.
3. Real-time monitoring of serial port and Ethernet port status.
4. Supports back-to-back cascading.
5. Automatic reconnection of Ethernet port interrupts.
6. Supports web-based remote configuration management.

Chapter 3: Technical Parameters

Name	Standard parameters	Description
The main parameters		
CPU	Cortex A7 800MHz	ARM Cortex-A7 Architecture, industrial-grade temperature range
Memory	512MByte DDR3	industrial-grade temperature range: -40℃ ~+85℃)
NandFash	512MB NandFlash	industrial-grade temperature range: -40℃ ~+85℃)

Common Exported Interface Parameters

Name	Standard parameters	Description
Gigabit Ethernet interface	2 channels	2 channels 10/100 Adaptive network interface
RS485 Port	4 channels	Industrial-grade EMC protection
RTC clock	High-precision clock chip (internal)	Adopt high-precision RX8025 clock chip and backup battery to ensure that time is not lost when power is off
LED Indicator	14 PCS	1 power light, 1 operation light, 1 error light, 2 network port status lights, 4 serial port communication status lights
User Buttons	1 PC	User reset

Electrical Characteristics

Name	Standard parameters	Description
Input voltage	9~36V DC	Recommend 12V DC
Power Consumption	5W ~15W	The average power consumption is 5W
Operating temperature	-20℃~+75℃	industrial-grade temperature range
Working humidity	5% ~ 95%	
MTBF	>=50,000 Hours	
Anti-interference index	ESD Level 3	IEC-61000-4-2 Level 3
	Impact Surge Level 3	IEC-61000-4-5 Level 3
	Insulation test: Power supply to chassis 2000VAC Communication signal to chassis 500V	
Chassis size	166(W)*115(H)*44(D)	

Chapter 4 Assembly Instructions

1) Product Image

Figure 4-1 Appearance 1

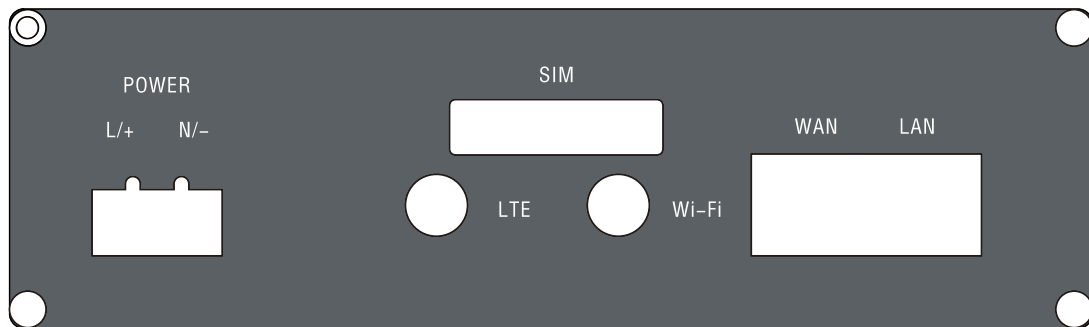## 2) Wiring terminal diagram and description
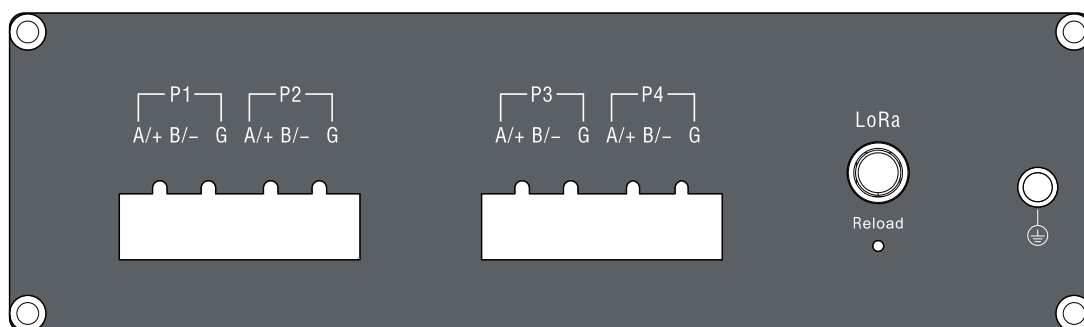

Figure 4-2 Wiring terminal diagram 1

Figure 4-2 Wiring terminal diagram 2

Table-1 Wiring terminal instructions

No.	Terminal name	Terminal Definition	Application
1	POWER	3PIN Phoenix Terminal	Input 85~305V AC
5	WAN	Ethernet interface	Connect to the device network via a switch
6	LAN	Ethernet interface	Directly connect to device network
7	P1~P4	6PIN Phoenix Terminal*2	4 channels RS485 interface
9	ReLoad	Device reset button	Used to restore the device to factory defaults