Chengdu Ebyte Electronic Technology Co.,Ltd

Wireless Modem

User Manual

E810-DTU(RS232) V2.0



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1. Introduction



E810-DTU(RS232)-V2.0 is a RS232 to Ethernet single serial port server. Realize data transparent transmission between RJ45 network port and RS485/RS232..

The module is equipped with a M0+ series of 32-bit processors, fast and efficient. It has an adaptive network speed (up to 100M full duplex), and has four communication mechanisms: TCP Server, TCP Client, UDP Server, and UDP Client.

The E810-DTU(RS232)-V2.0 is easy to operate. The user can directly configure the parameters of the module through the host computer to easily implement data transmission.

Product specifications and features

No.	Specification	Description
1	Size	66 * 66 *21.6mm
2	Weight	79±1g
3	PCB process	2 layer，SMT, lead-free
4	Connector	RS485/RS232：1*5*3.81mm
5	Supply voltage	8~28V DC，Note：Higher than 28V will cause permanent damage
6	UART standard	1200~256000 bps
7	Serial communication level	3.3V，If connected to 5V, level conversion is required
8	Ethernet specification	RJ45，10/100Mbps
9	Network protocol	IP、 TCP/UDP、 ARP、 ICMP、 IPV4
10	IP Acquisition	Static IP、 DHCP
11	DNS	Available
12	User configuration	PC software , AT command configuration、Web page configuration
13	Simple transparent transmission	TCP Server 、TCP Client 、 UDP Server 、 UDP Client
14	TCP Server connection	Max. 6 channel of TCP connections
15	Software	RF Setting

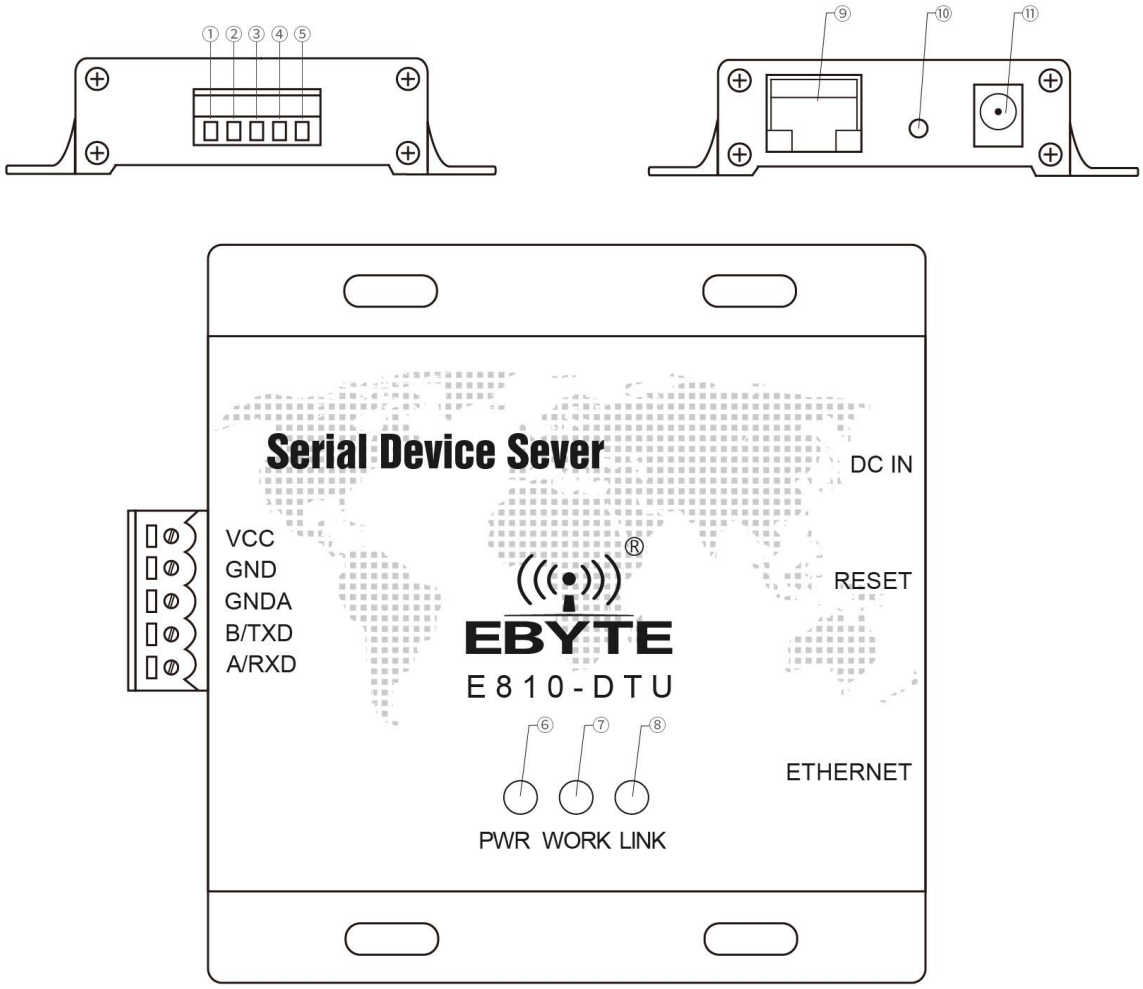
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16	Package mode	200 bytes per package
17	Operating current	77.0314mA@12V(RS485) ， 74.5635mA@12V(RS232)
18	Operating temperature	-40 ~ +85℃
19	Operating humidity	10% ~ 90%， relative humidity, no condensation
20	Storage temperature	-40 ~ +125℃

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1. Introduction of hardware parameters and design

2.1 Interface introduction



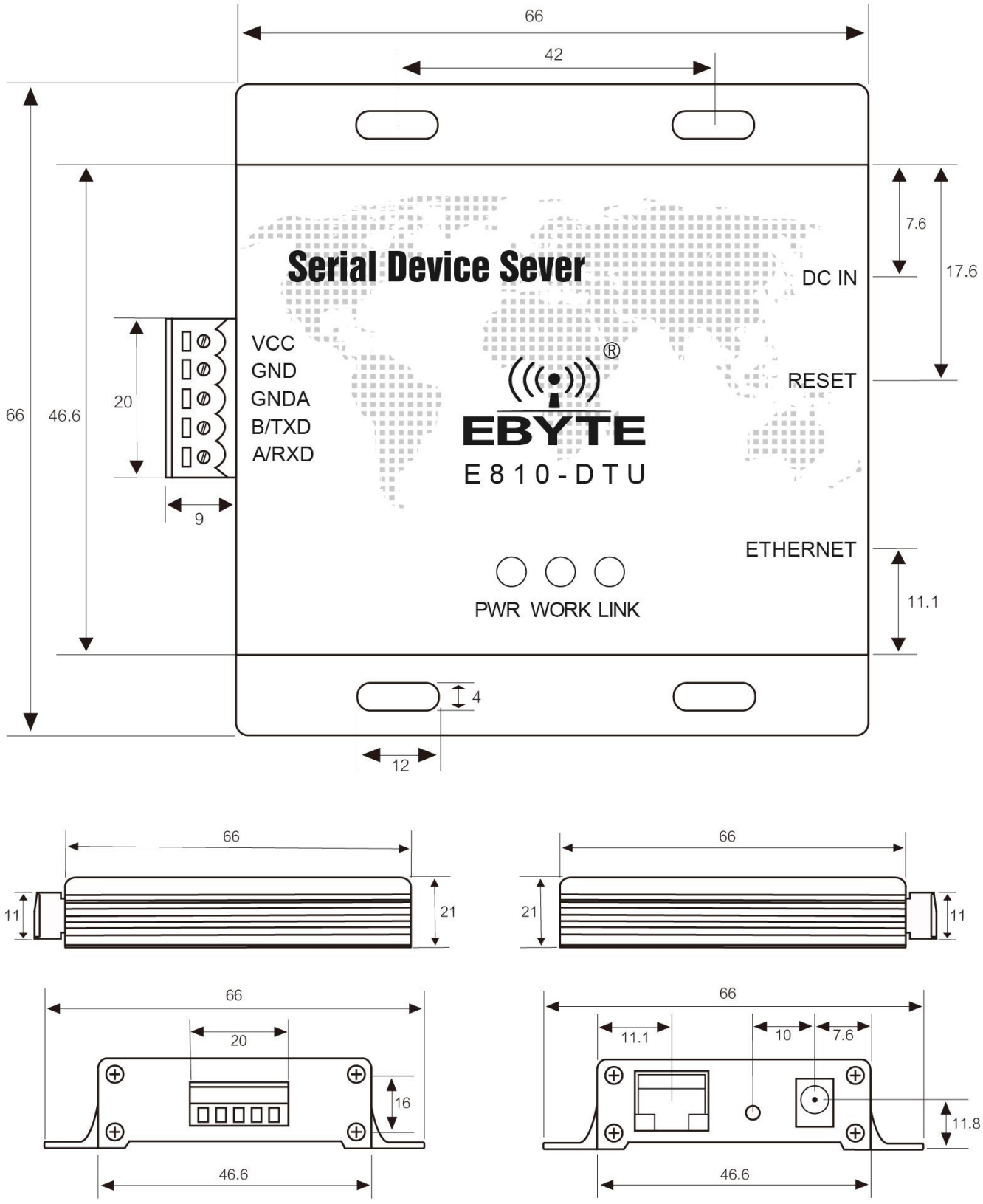
No.	Item	Description
1	VCC	DC power supply, it is recommended to use standard 12V or 24V
2	GND	Ground
3	GNDA	RS232 end for connecting GND of other RS232 device
4	B/TXD	External A / RS232 input of other RS485 devices, or TXD of other RS232 devices
5	A/RXD	External B / RS232 output of other RS485 devices, or RXD of other RS232 devices
6	PWR	Power indicator
7	WORK	UART TX and RX indicator
8	LINK	Indicator for building link remotely
9	INTERNET	RJ45 with network transformer

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10	RESET	Reset to factory default
11	DC 8-28V	DC power supply, it is recommended to use standard 12V or 24V

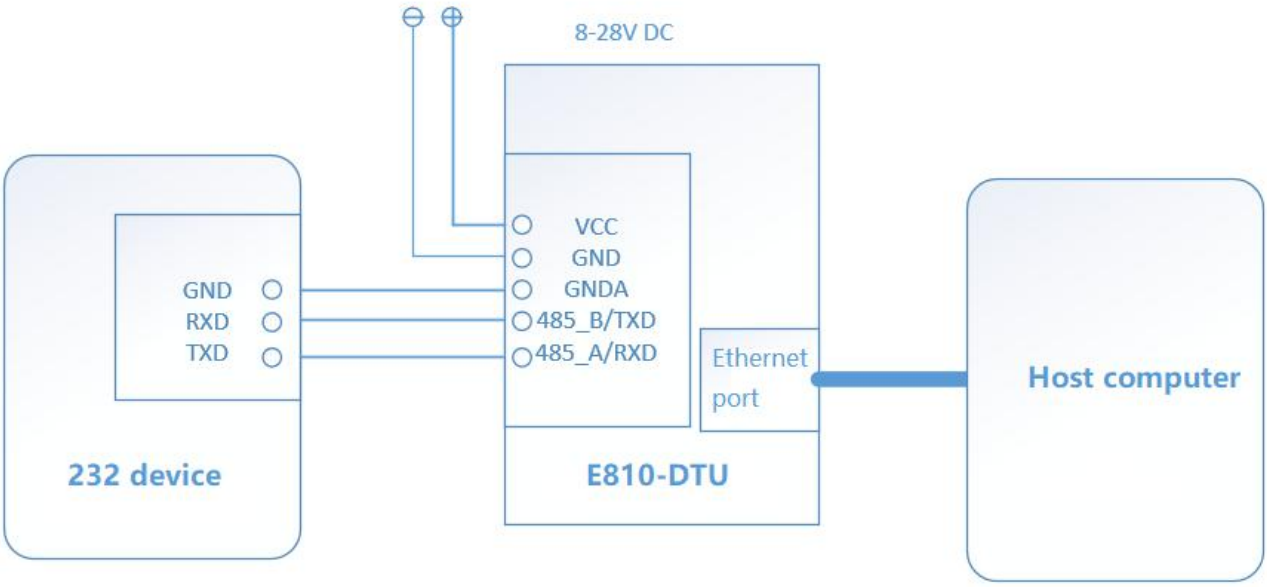
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2.2 Dimension



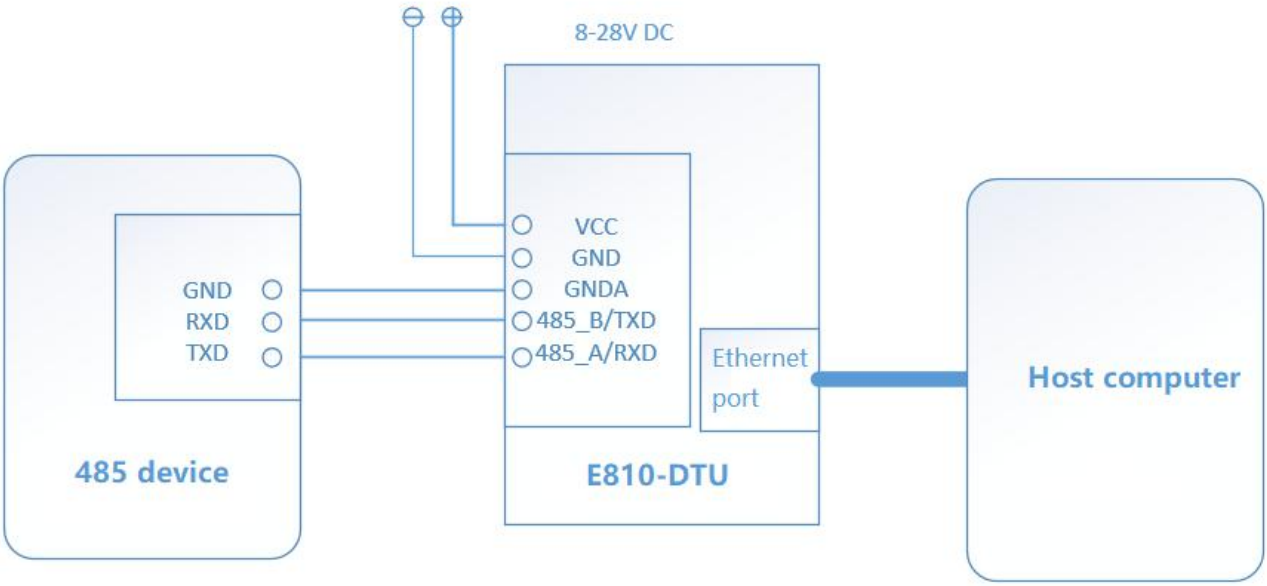
2.3 Connection method

2.3.1 RS232 connection



2.3.2 RS485 connection

In RS485 communication, it should be noted that A and B are matched first. If it is abnormal, 120R resistors should be added between A and B lines.



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3 Network basic function introduction

3.1 IP address/Subnet mask/Gateway

1. The IP address is the identity of the module in the LAN. It is unique in the LAN and cannot be duplicated with other devices on the LAN.

E810-DTU(RS232)-V2.0's IP address of E810-DTU is static IP and DHCP.

(1) Static IP

Static IP requires the user to set manually，please note that the IP, subnet mask, and gateway should be written at the same time. Static IP is suitable for scenarios that require IP and device statistics and have a one-to-one correspondence.

Advantage: Devices which cannot automatically assign IP addresses can be searched through the entire LAN.

Disadvantages: Different IP segments in different LANs cannot carry out normal TCP/UDP communication.

(2) DHCP

The main role of DHCP is to dynamically obtain IP address, Gateway address, DNS server address and other information from the gateway host, eliminating the cumbersome steps of setting the IP address. It is suitable for scenarios where there is no requirement for IP and no need for correspondence one by one of IP and modules.

Advantages: When connected routers and other devices with DHCP Server can communicate directly, and reduce the hassles of setting up IP address gateways and subnet masks.

Disadvantages: When connected LANs without DHCP Server，such as computers, E810-DTU(RS232)-V2.0 cannot work.

2. The subnet mask is mainly used to determine the LAN number and host number of the IP address, and indicate the number of subnets, and judge whether the module is within the subnet。The subnet mask have to be set, what we normally use is C type subnet mask: 255.255.255.0, LAN number is the first 24 numbers, host number is the last 8 numbers, and there are 255 subnets, If the module IP is within the 255 subnets, it is considered to be in this subnet.

3. The gateway refers to the LAN number of the LAN where the current IP address of the module is located. If a device such as a router is connected to an external network, the gateway is the router IP address，If the setting is incorrect, the external network cannot be accessed properly，If you do not connect a device such as a router, you do not need to set it, by default.

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4. Software setting



Figure 1 Parameter setting software

3.2 DNS server address

The DNS server is mainly used to convert the domain name into a network-recognizable IP address. DNS server address can be set, it can implement domain name resolution when the local domain name server is not complete. Users can also set specific DNS server addresses as required, E810-DTU(RS232)-V2.0 will submit a resolution request to the configured DNS server when domain name resolution is required, more flexible and reliable.

In static IP mode, the default address of the DNS master server is 61.139.2.69, and the backup DNS server address is 192.168.4.1. In DHCP mode, the DNS server address is automatically obtained. Domain name server address supported by the module can be set.

4 Socket characteristics

The Socket operating mode of E810-TTL is divided into TCP Client, TCP Server, UDP Client, and UDP Server., it can be set with the host computer software, the setting interface is as follows:

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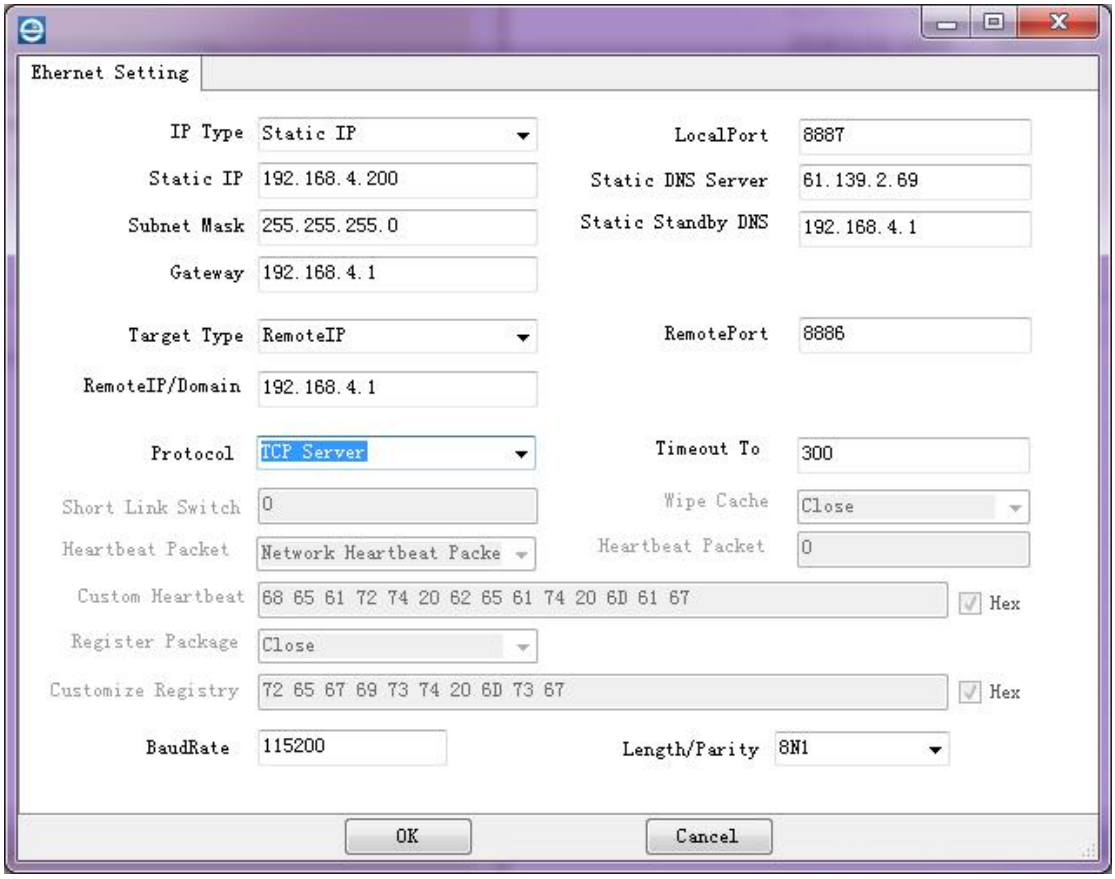


Figure 2 Setting interface

4.1. TCP Server characteristics

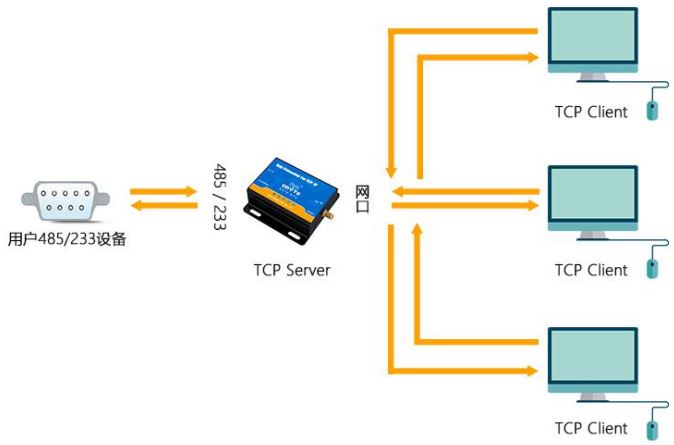


Figure 3 TCP Server

(1) In TCP Server mode, E810-DTU(RS232)-V2.0 monitors the local port, receiving and establishing a connection

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for data communication when a connection request is sent. When the E810-DTU(RS232)-V2.0 serial port receives data, it will transmit data to all client devices which established a connection with the E810-DTU(RS232)-V2.0.

(2) It is usually used for communication with TCP clients in the LAN. Suitable for scenarios where there is no server in the LAN and there are many computers or cellphones requesting data from the server. There is difference between connection and disconnection like TCP Client to ensure the reliable exchange of data.

(3) When the E810-DTU(RS232)-V2.0 is a TCP Server, it can connect at most six clients, the local port number is a fixed value and cannot be set to 0.

4.2. TCP Client characteristics



Figure 4 TCP Client

(1) TCP Client provides Client connectivity for TCP network services. Proactively initiates connection requests to the server and establishes connections for the interaction of serial data and server data. According to the relevant TCP protocol, there is difference between connection and disconnection to ensure the reliable exchange of data. It is normally used for data exchange between devices and servers and it is the most commonly used networking communication method.

(2) In TCP Client mode, when the E810-DTU(RS232)-V2.0 attempts to connect to the server and the local port is 0, it initiates a connection with a random port each time.

(3) This mode supports short connection function。

(4) In the same LAN, if the E810-DTU(RS232)-V2.0 is set to static IP, please keep the E810-DTU(RS232)-V2.0 IP and gateway in the same network segment and set the gateway IP correctly, otherwise it cannot communicate normally.

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4.3. UDP Server characteristics

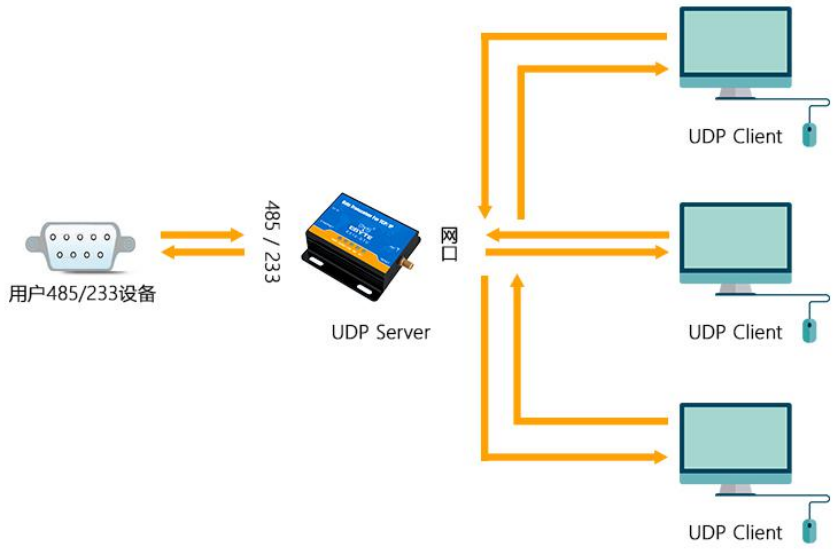


Figure 5 UDP Server

(1) UDP Server means that the source IP address is not verified on the basis of normal UDP. After each UDP packet is received, the target IP is changed to the data source IP and port number, when the data is transmitted, it will be sent to the IP and port number which was the nearest communication one.

(2) This mode is normally used for multiple network devices which need to communicate with the module, and do not want to use TCP's data transmission due to fast speed and frequency.

4.4. UDP Client characteristics



Figure 6 UDP Client

(1) UDP Client is a connectionless transmission protocol that provides a simple, unreliable information transfer service, without connection establishment and disconnection, only IP and port are needed to send data. Generally used for data transmission scenarios where packet loss rate is not required, data packets are small and the frequency is fast,

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and data is transmitted to a specified IP.

(2) In UDP Client mode, the E810-DTU(RS232)-V2.0 will only communicate with the target IP's target port, if the data is not from this channel, it will not be received by the E810-DTU(RS232)-V2.0.

(3) In UDP Client mode, if the target address is set to 255.255.255.255, it will broadcast within the whole UDP network segment, and it can also receive broadcast data， E810-DTU(RS485)-V2.0 supports broadcast within the supporting network segment, such as the mode of xxx.xxx.xxx.255.

5 Special function

5.1 Short connection

The use of short connections is mainly to save server resources, and is generally applied to multipoint-to-point scenarios. Short connections is to ensure that existing connections are useful connections and do not require additional controls for filtering.

The short connection function is applied in the TCP Client mode. After the short connection function is enabled, when sending data. If no data is received from the serial port or network port within the setting time, the connection will be automatically disconnected. The short connection function is turned off by default, and the disconnection time can be set after the function is turned on, the range is 2~255S.

5.2 Registration packet mechanism

In the network transparent transmission mode, users can make the module send registration packets to the server. The registration packet is for the server to identify the data source device, or as a password to obtain server authorization.

E810-DTU(RS232)-V2.0 has 4 registration packet mechanisms:

Sending MAC when connecting: The module will send the its own MAC address to the device when the connection is established.

Sending user-defined data when connecting: The module sends a user-defined data to the device when the connection is established

Each packet of data sending MAC: The module will add its MAC address in front of each frame of data sent.

Each packet of data sending user-defined data: The module will add its user-defined data in front of each frame of

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data sent.



Figure 7 Sending MAC when connecting



Figure 8 Sending user-defined data when connecting



Figure 9 Each packet of data sending MAC



Figure 10 Each packet of data sending user-defined data

Sending a registration packet when establishing a connection are mainly used to connect to a server that requires registration. Data-carrying registration packets refers to accessing registration packets at the head of data in sending data, which is mainly used for protocol transmission. The user-defined data packet defaults to hexadecimal data (ASCII code optional) and the maximum packet length is 40 bytes.

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5.3 Heartbeat mechanism

In the network transparent transmission mode, users can make the module send heartbeat packets to the server. Heartbeat packets can be sent to the web server or sent to the serial device, they cannot run at the same time.

Network heartbeat pocket: The heartbeat packet is sent to the network, in the heartbeat transmission cycle, the module sends heartbeat packet data to the network server to maintain the connection with the network server. It only runs in the TCP Client and UDP Client modes。

Serial data packet: In the set heartbeat sending cycle, the module sends heartbeat packet data to the serial port, users can do corresponding processing after the serial port receives the heartbeat data.

In an application in which a server sends a fixed inquiry command to a device, in order to reduce communication traffic, users can choose to send a heartbeat packet (inquiry command) to the serial device side instead of sending a inquiry command from the server.

User-defined data packet defaults to hexadecimal data (ASCII code optional), E810-DTU(RS232)-V2.0 module supports custom heartbeat packet content up to 40 bytes.

5.4 Overtime restart

Overtime restart (no data restart) function is mainly used to ensure long-term stability of E810-DTU(RS232)-V2.0. When the network port cannot receive data for a long time, or if the network does not receive data for a long time, the E810-DTU(RS232)-V2.0 will restart after exceeding the set time, thus avoiding the influence of abnormal conditions on the communication. The normal working time of this function is set to 60~65535S, default 300S. When the setting time is less than 60S, the default setting is zero, that is, the function is turned off.

5.5 TCP multi-connection function

TCP multi-connection function is mainly to solve that in the TCP Sever mode, the user has multiple clients to connect E810-DTU(RS232)-V2.0 and send and receive data at the same time. When E810-DTU(RS232)-V2.0 is used as a TCP Server, up to 6 connections can be established at the same time, the TCP Server sends data to multiple (up to 6) TCP clients on the connection at the same time. When the number of established connections exceeds six, the connection established at the beginning will be actively disconnected, that is, the old connection will be kicked off.

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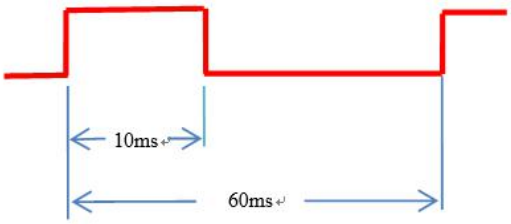
5.6 Clearing cached data

When the TCP Client connection is not established, the data received by the serial port will be placed in the buffer area, the E810-DTU(RS232)-V2.0 serial port receive buffer is 400 bytes. When the connection is established, the serial port buffer data can be set whether to clear according to customer needs.

5.7 Link and data transfer instructions

Link indicates the network connection status of the module. In TCP mode, when the network is not connected, the link goes out. When the connection is established, the link is always on. Link indicator is on in UDP mode.

The other is the data transmission indication, which shows the data transmission status of the serial port of the module. When there is no data transmission on the serial port, the data transmission indicator is extinguished. When there is data transmission on the serial port, the flashing indicates that the period is 60ms and the indicator lit 10ms.



5.8 Web page configuration

Users can enter the IP address and port of the module through any browser (the default port of the browser is 80) and enter the web page after successful login. As shown in the picture:

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Select one or more pages according to specific requirements for parameter browsing and configuration (take serial port parameters as an example).

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After filling in the parameters correctly, click save Settings



The page will automatically jump to the module management page. After clicking the restart module, the module

will restart and the set parameters will take effect.



5.9 Keep-Alive function

Keep-Alive is a mechanism for detecting dead connections in TCP connections. When the user does not send any data, the TCP link will periodically send "Keep-Alive" information to maintain the idle link and avoid dead connections consuming unnecessary system resources. This setting is valid under TCP. Users can customize the Keep-Alive switch and other parameters.

Keepalive parameters:

time: How many seconds after the TCP link has no data message transmitted to start a probe message;

intv: the time interval between the previous probe message and the next probe message;

probes: The maximum number of probe failures. When the sniffing fails to this number, the TCP connection will be disconnected.

5.10 Modbus TCP to RTU function

The device supports the conversion between Modbus RTU and Modbus TCP. After the function is turned on, the

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device receives the data and checks whether the data meets the requirements of the Modbus RTU (Modbus TCP) protocol. After the verification is successful, the Modbus RTU data will be converted to Modbus TCP, and the Modbus TCP data will be converted to Modbus RTU data.

5.11 Factory reset

There are two methods to restore the factory settings of the module: software to factory settings and hardware to factory settings. In the hardware restore factory setting mode, pull down to restore the factory setting Restore pin for 5s to 15s, and then pull it high to restore the factory setting parameters.

5.12. Internet of things features

It enables access to the MQTT platform of ali, baidu and ONENET, and realizes the establishment of a secure two-way connection between the device and the cloud, and then carries out publish/subscribe transmission of messages, so as to quickly realize the Internet of things. Users do not need to care about the protocol itself, only need to send and receive data for processing.Note: when the Internet of things platform is enabled, the parameters of socket A will become invalid and cannot be used. If the Internet of things platform is not used, please choose to close the Internet of things. Its cloud platform data communication, maximum supports 1000 bytes.

5.12.1 Ali cloud

Login to the web page, in the advanced Settings of the main menu of the Internet of things platform, select aliyun.Product key: product key can be obtained by creating products and devices in the console of aliyun Internet of things platform. Such as: A1Ve0iJW6z1Device name: the device name entered when adding the device. Note: the input length cannot exceed 20 bytesClient ID: user defined input, it is recommended to use the device's SN code. Note: the input length cannot exceed 20 bytesDevice key: in the console of aliyun Internet of things platform, create products and devices, and obtain the device key. Such as: AHlmNjuaMCGJ1bFOjC4EZMZmHSUhzSEQAddress: access to ali iot domain name. Such as: A1Ve0iJW6z1.iot-as-mqtt.cn-shanghai.aliyuncs.comPort: ali Internet of things port. Such as: 1883Subscribe to topics such as: /A1Ve0iJW6z1/MQTT_TEST/user/getPublish topics such as: /A1Ve0iJW6z1/MQTT_TEST/user/updateRelease message level: Qos:0 or Qos:1

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5.12.2 Baidu cloud

Login to the web page, in the advanced Settings under the main menu of the Internet of things platform, select baidu cloud. Device name: the name entered when creating a shadow. Note: the input length cannot exceed 20 bytes User name: name in the object shadow connection configuration. Such as: Un2d6cs/E810MQTTKey: key in the object shadow connection configuration. Such as: s9mMzByp4MpryphqAddress: access to baidu Internet of things domain name. Such as: Un2d6cs.mqtt.iot.gz.baidubce.comPort: baidu Internet of things port. Such as: 1883Subscribe to topics such as $baidu/iot/general/getRelease subject: e.g. $baidu/iot/general/updateRelease message level: Qos:0 or Qos:1

5.12.3 Ebyte cloud

The function of transshipment cloud mainly solves the open data interaction between device and device, device and upper computer, and device and server. Users can turn on the function of cloud transmission through instructions, and register and interact with data according to the relevant usage methods of Ebyte cloud platform. Please refer to "Ebyte cloud platform transmission guide" for details.

5.12.4 ONENET

Log on to the web page, and in the main menu of advanced Settings for the Internet of things platform, select ONENET. Note: onenet creates product options for multiprotocol access. Device ID: such as: 511986588Product ID: such as: 286258Authentication information: custom input when creating the device. Such as: ebyte Address: domain name for ONENET Internet of things. Such as: mqtt.heclouds.comPort: ONENET Internet of things port. Such as: 6002Subscribe to topics such as iot/general/get Release topics such as iot/general/update Release message level: Qos:0 or Qos:1

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6 Quick instructions

6.1 Parameter setting instruction

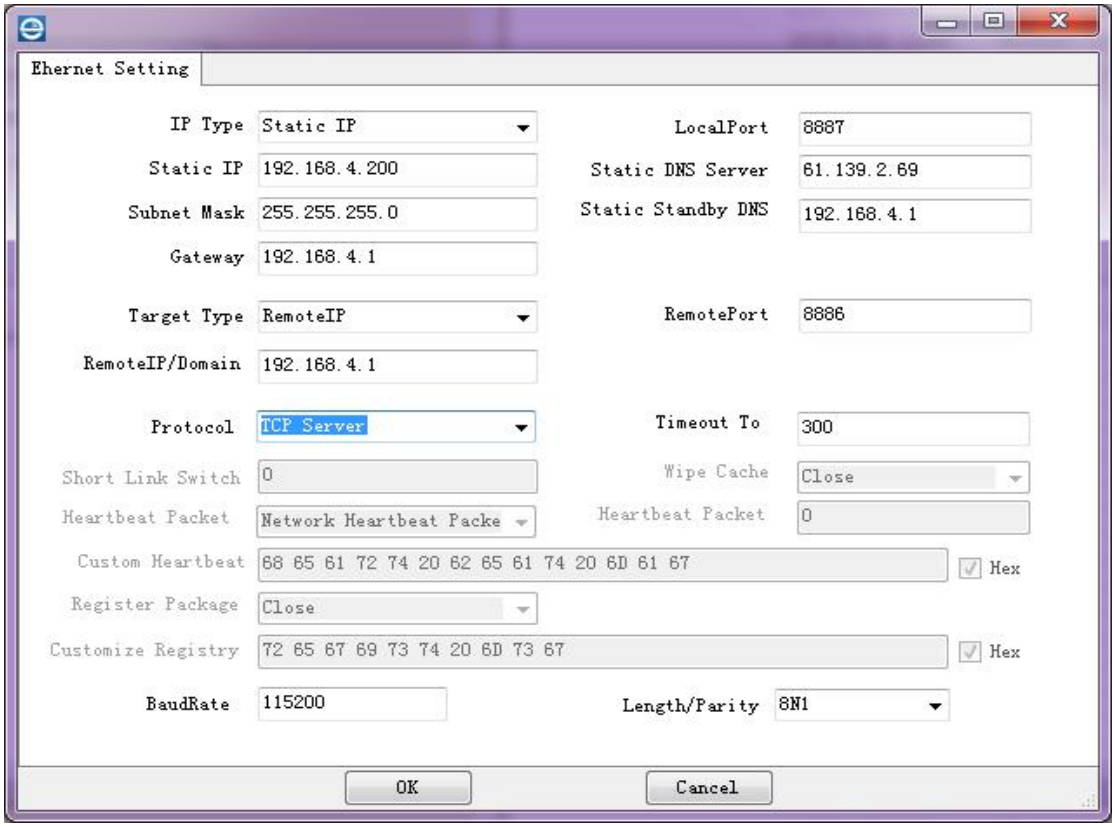


Figure 11 Parameter setting instructions

6.2 Socket instructions

6.2.1 TCP Server instructions

(1) Connect two E810-DTU(RS232)-V2.0 cable to the PC. Open the network configuration software and search for the device. The searched device will be displayed in the device list. Double-click the device to be configured in the list, enter the setting interface, and set the module to TCP Server mode, Set the module IP address to 192.168.4.101, 192.168.4.102, set the module's local port to 8886, set the RF parameters. After the setting is complete, click the OK button, then restart the device and search again to see if the parameter modification was successful.

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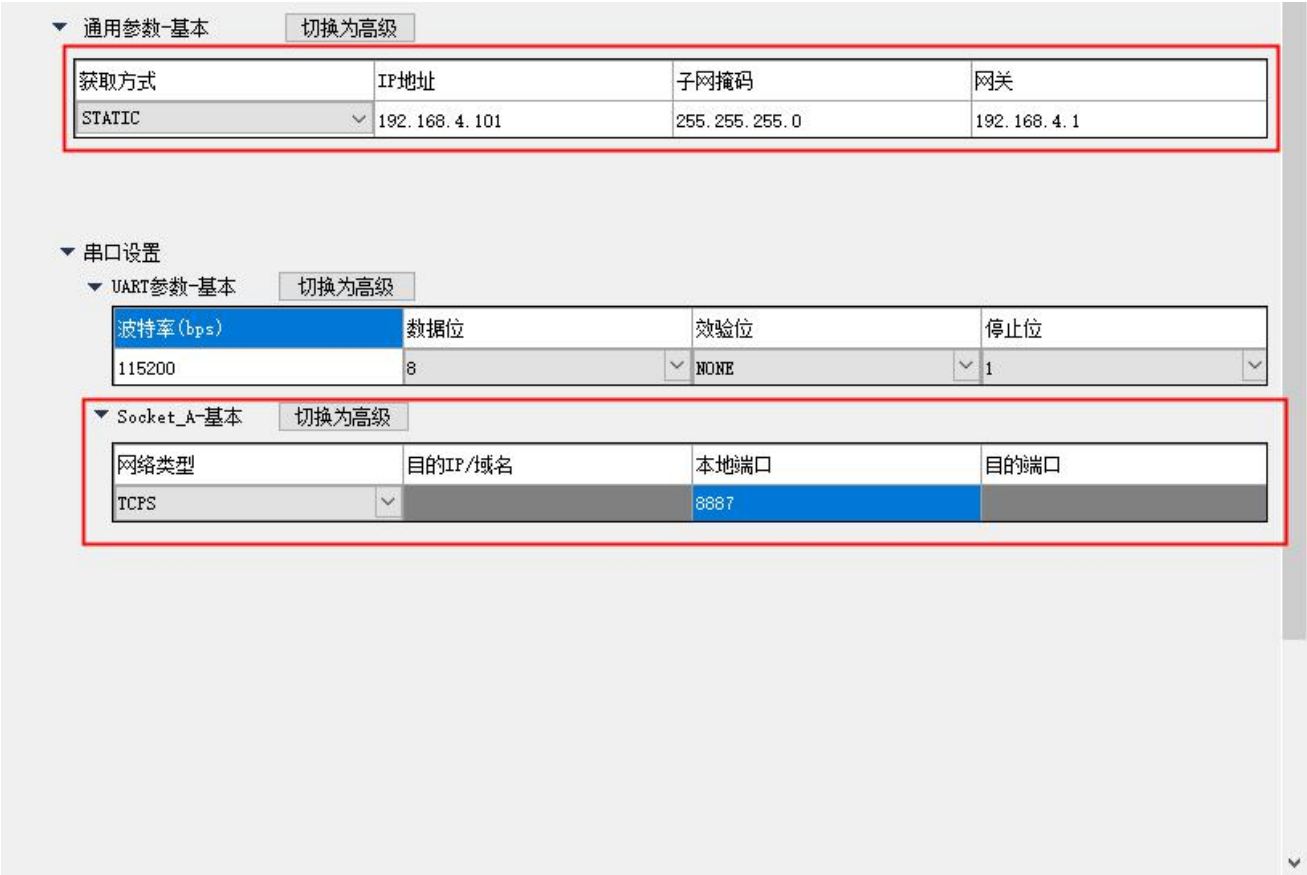


Figure 12 Searching devices

Click Read Parameters on the RF Parameter Settings interface to obtain the module's current RF parameter settings, then you can configure the RF settings.

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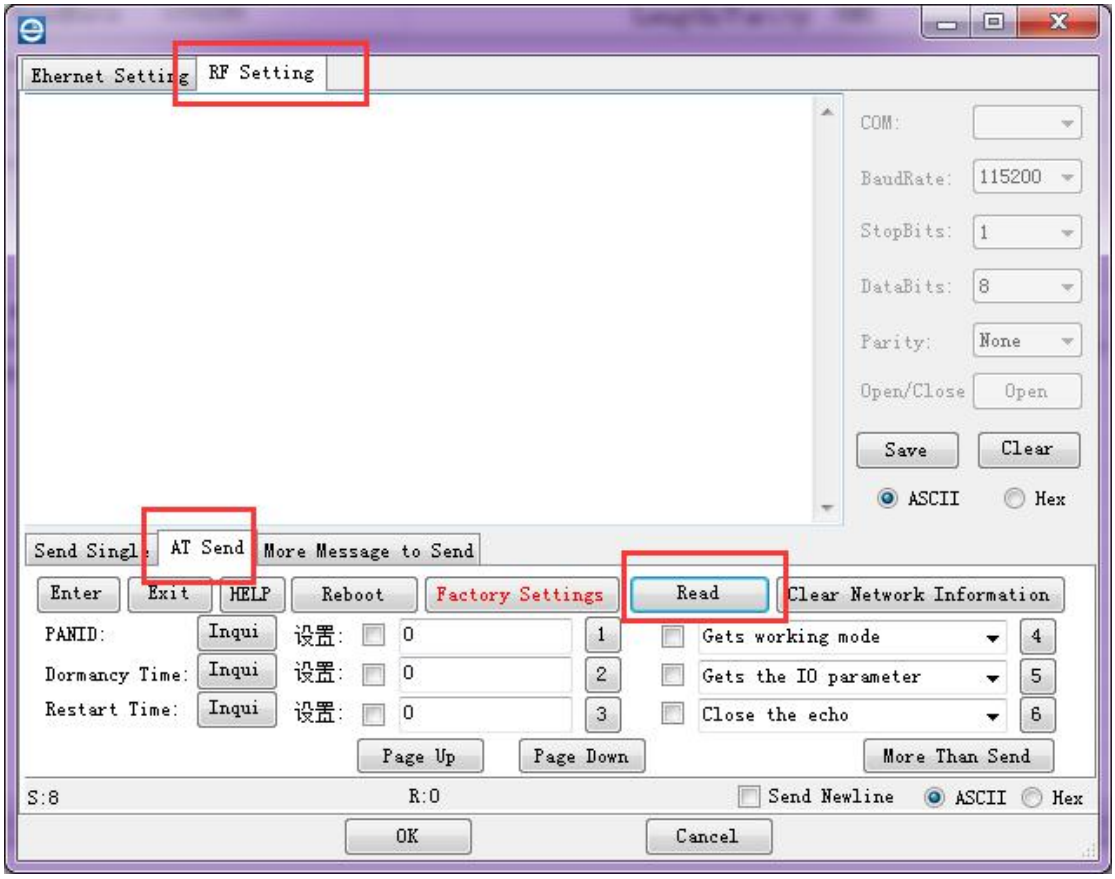


Figure 13 RF Parameter configuration settings

(2) Open two network debugging assistants, set the network debugging assistant protocol type to TCP Client, the network debugging assistant's server IP address is set to the module's IP address, the network debugging assistant's server port is set to the module's local port, click Connect.

(3) Enter a string of data in the sending area of network debugging assistant A, click Send, you will see that network assistant B has received the same data in the sending area of the serial port. Input a string of data in the sending area of network debugging assistant A, network assistant B also received the data. It realizes bidirectional transparent transmission.

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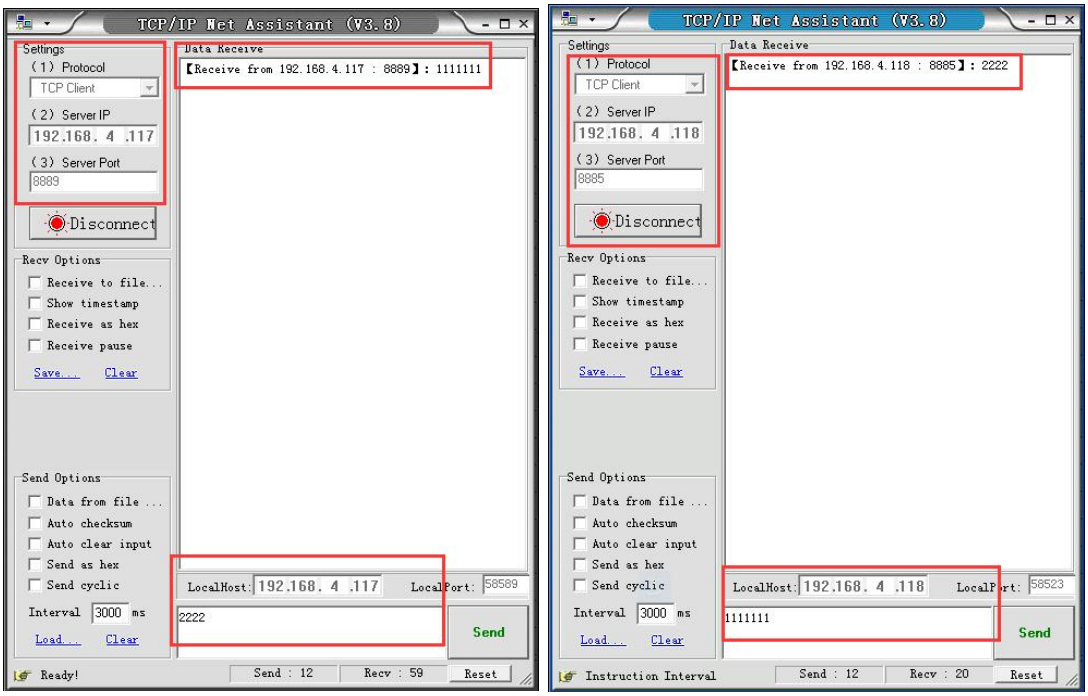
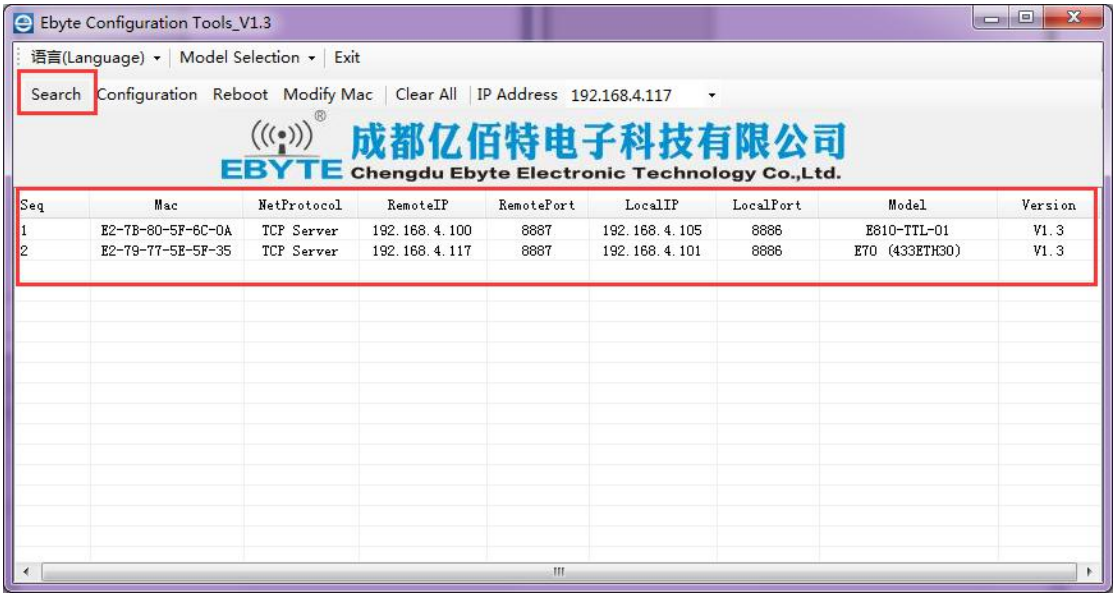


Figure 14 Data transparent transmission

6.2.2 TCP Client instructions

(1) Connect two E810-DTU(RS232)-V2.0 serial ports and network cables to PC, open the network configuration software and search for the device. The searched device will display the device list. Double-click the device to be configured in the list and enter the setting interface. Set the module to TCP Client mode, set the target IP address to 192.168.3.100, set the target port of module A to 8887, the target port of module B to 8886, set the RF parameters, click the OK button after the setting is complete, and then restart the device to search Check once to see if the parameter modification was successful.



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Figure 15 Searching devices

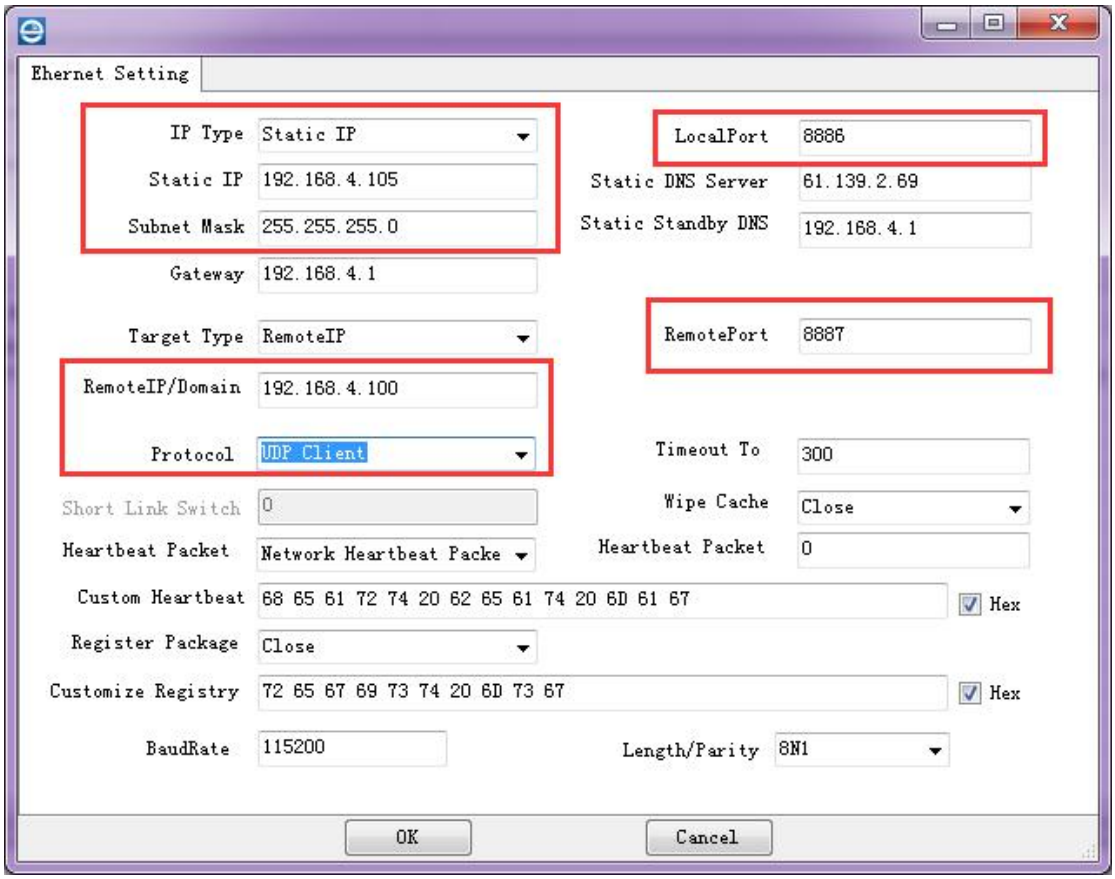


Figure 16 Parameter settings

Click Read Parameters on the RF Parameter Settings interface to obtain the module's current RF parameter settings. Then you can configure the RF settings.

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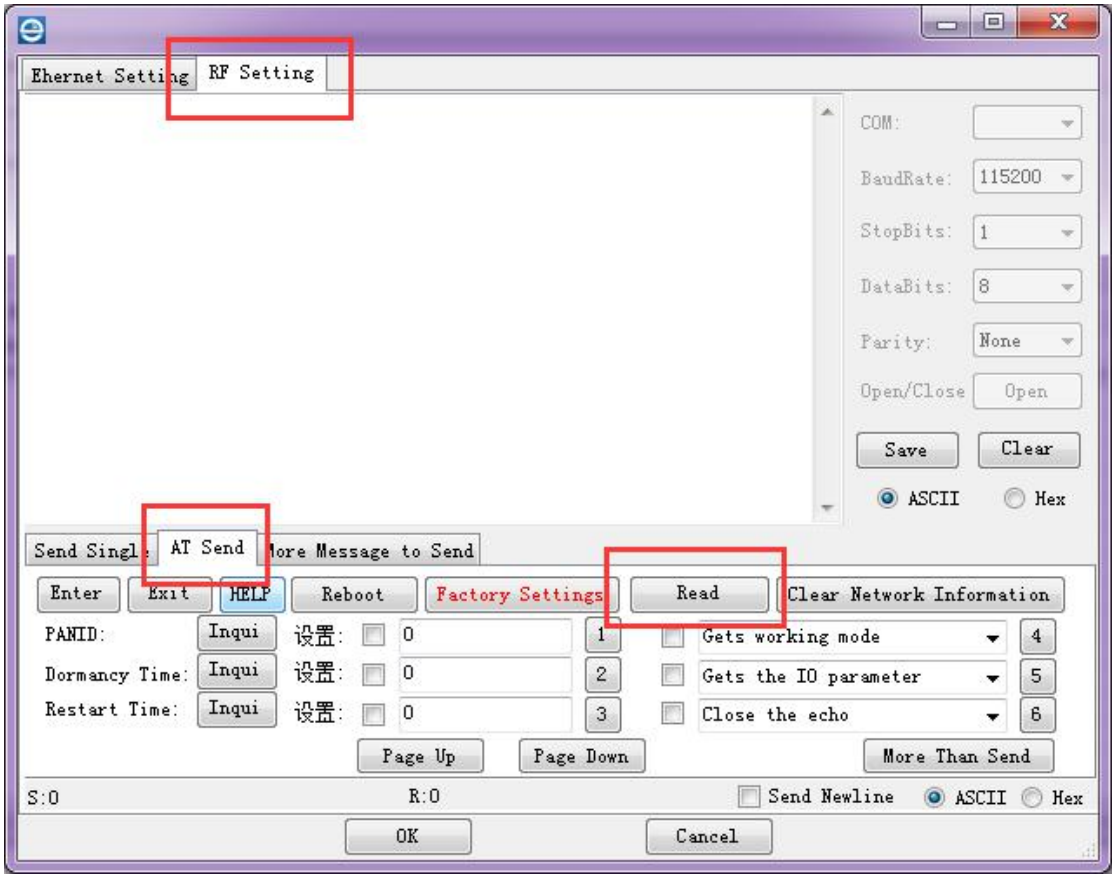


Figure 17 RF Parameter configuration settings

(2) Open two network debugging assistants, set the network debugging assistant protocol type to TCP Client, the network debugging assistant's server IP address is set to the module's IP address, the network debugging assistant's server port is set to the module's local port, click Connect.

(3) Enter a string of data in the sending area of network debugging assistant A, click Send, you will see that network assistant B has received the same data in the sending area of the serial port. Input a string of data in the sending area of network debugging assistant A, network assistant B also received the data. It realizes bidirectional transparent transmission.

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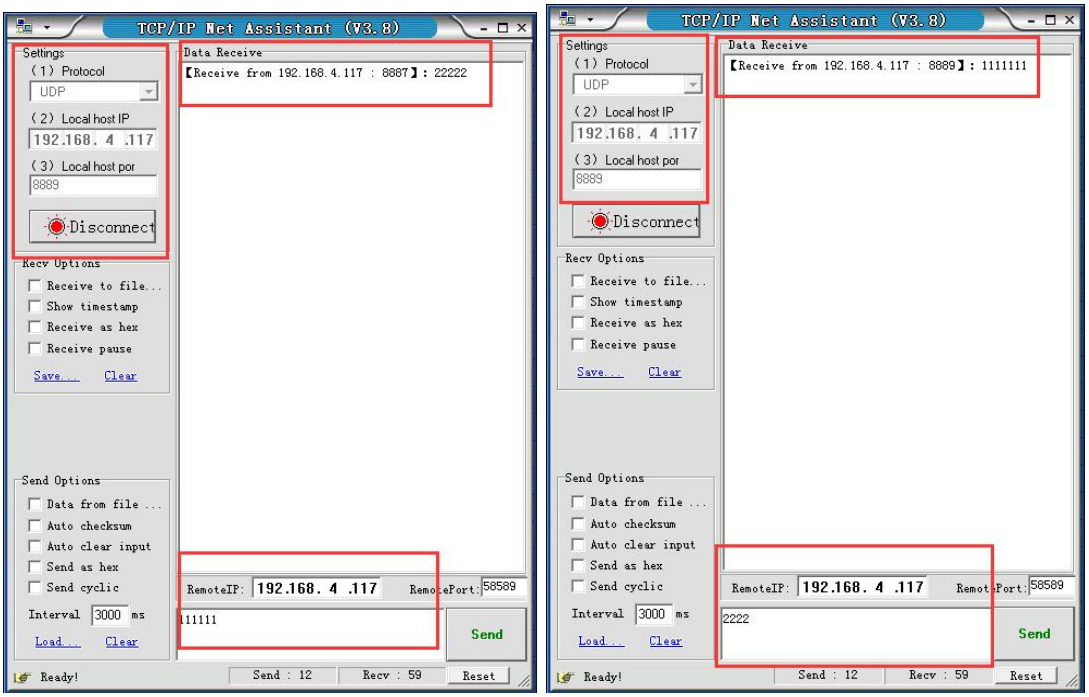


Figure 18 Data transparent transmission

6.2.3 UDP Server instructions

(1) Connect two E810-DTU(RS232)-V2.0 serial ports and network cables to PC, open the network configuration software and search for the device. The searched device will display the device list. Double-click the device to be configured in the list and enter the setting interface. Set the module to UDP Server mode, set the target IP address to 192.168.3.100, set the target port of module A to 8887, the target port of module B to 8886, set the RF parameters, click the OK button after the setting is complete, and then restart the device to search Check once to see if the parameter modification was successful.

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Figure 19 Searching devices

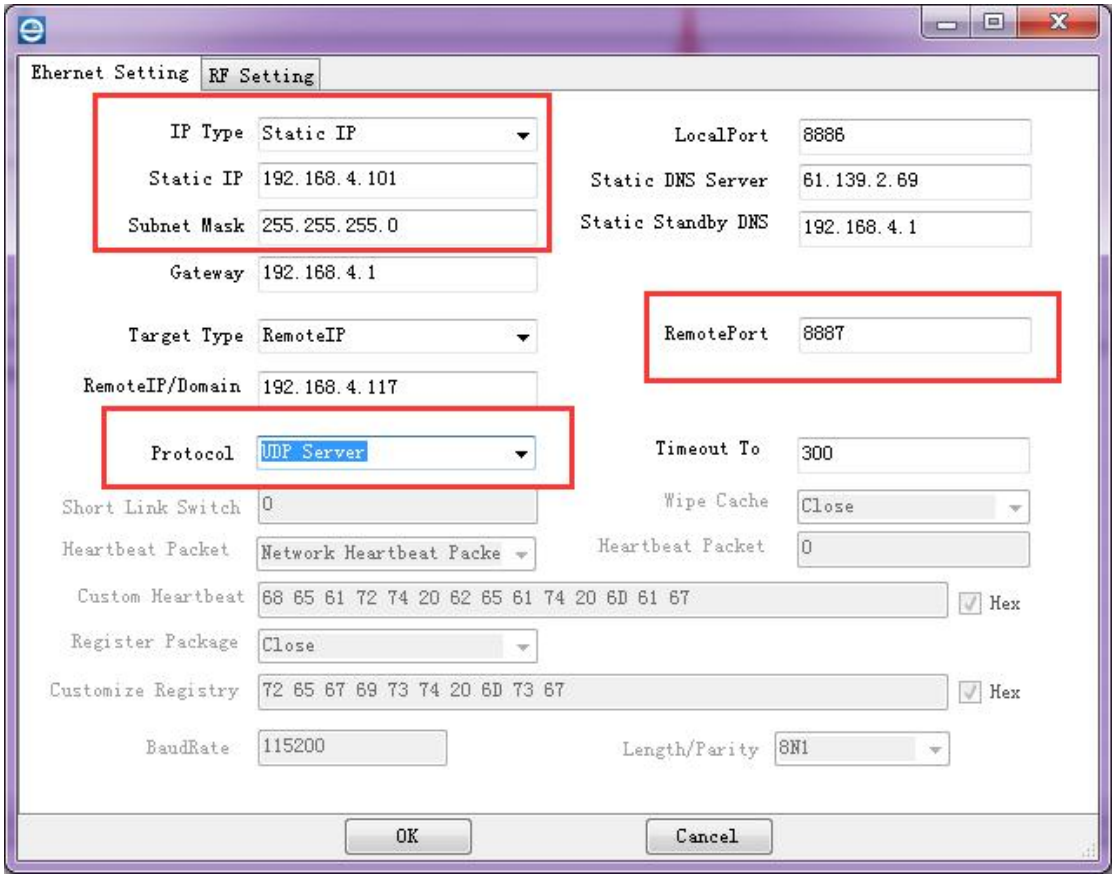


Figure 20 Parameter settings

Click Read Parameters on the RF Parameter Settings interface to obtain the module's current RF parameter settings. Then you can configure the RF settings.

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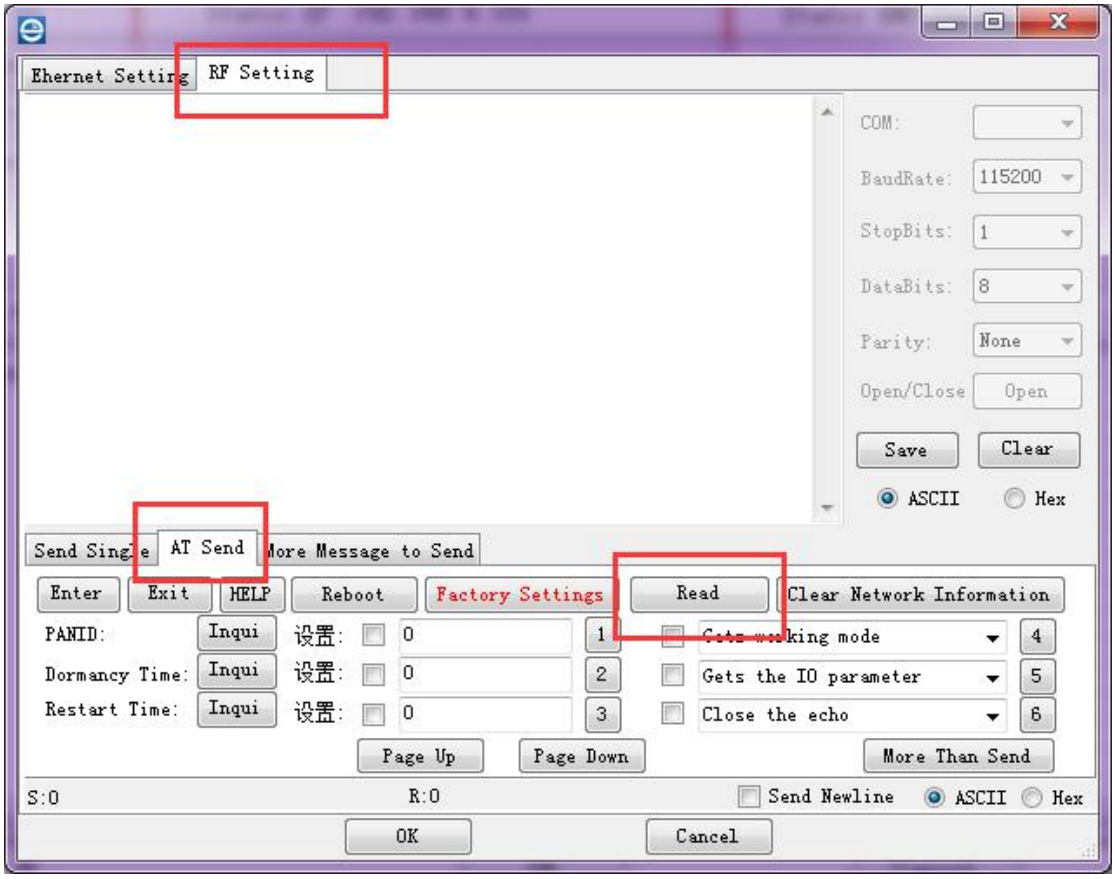


Figure 21 RF Parameter configuration settings

(2) Open two network debugging assistants, set the network debugging assistant protocol type to UDP Server, the network debugging assistant's server IP address is set to the module's IP address, the network debugging assistant's server port is set to the module's local port, click Connect.

(3) Enter a string of data in the sending area of network debugging assistant A, click Send, you will see that network assistant B has received the same data in the sending area of the serial port. Input a string of data in the sending area of network debugging assistant A, network assistant B also received the data. It realizes bidirectional transparent transmission.

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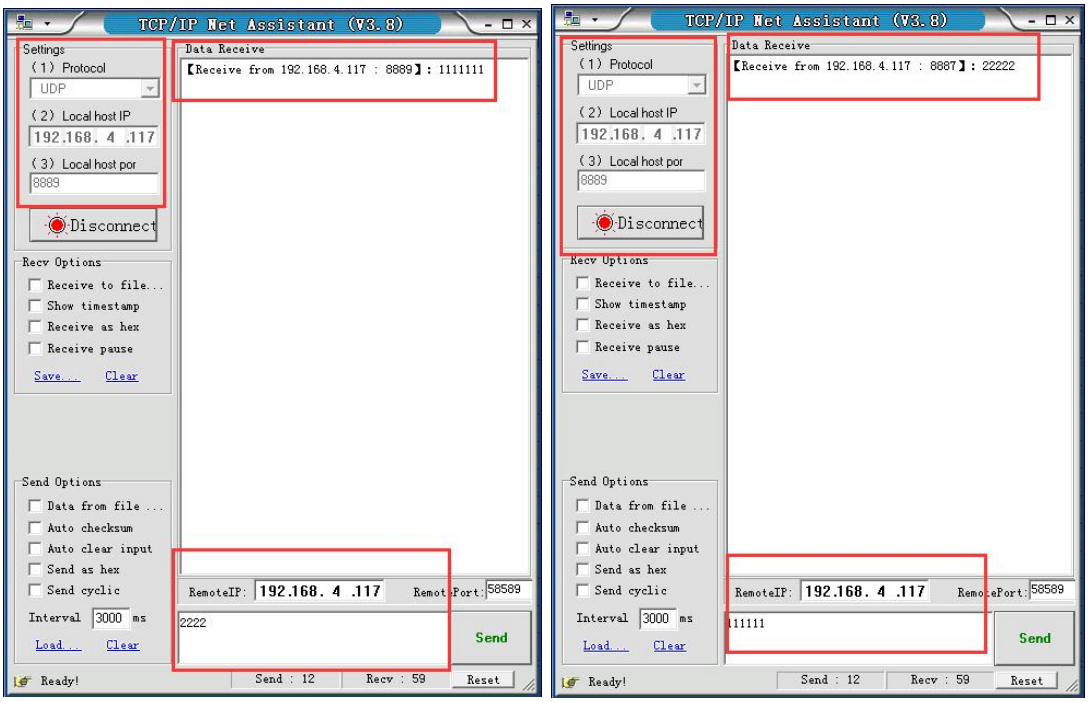


Figure 22 Data transparent transmission

6.2.4 UDP Client instructions

(1) Connect two E810-DTU(RS232)-V2.0 serial ports and network cables to PC, open the network configuration software and search for the device. The searched device will display the device list. Double-click the device to be configured in the list and enter the setting interface. Set the module to UDP Client mode, set the target IP address to 192.168.3.100, set the target port of module A to 8887, the target port of module B to 8886, set the RF parameters, click the OK button after the setting is complete, and then restart the device to search Check once to see if the parameter modification was successful.



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Figure 23 Searching devices

Click Read Parameters on the RF Parameter Settings interface to obtain the module's current RF parameter settings. Then you can configure the RF settings.

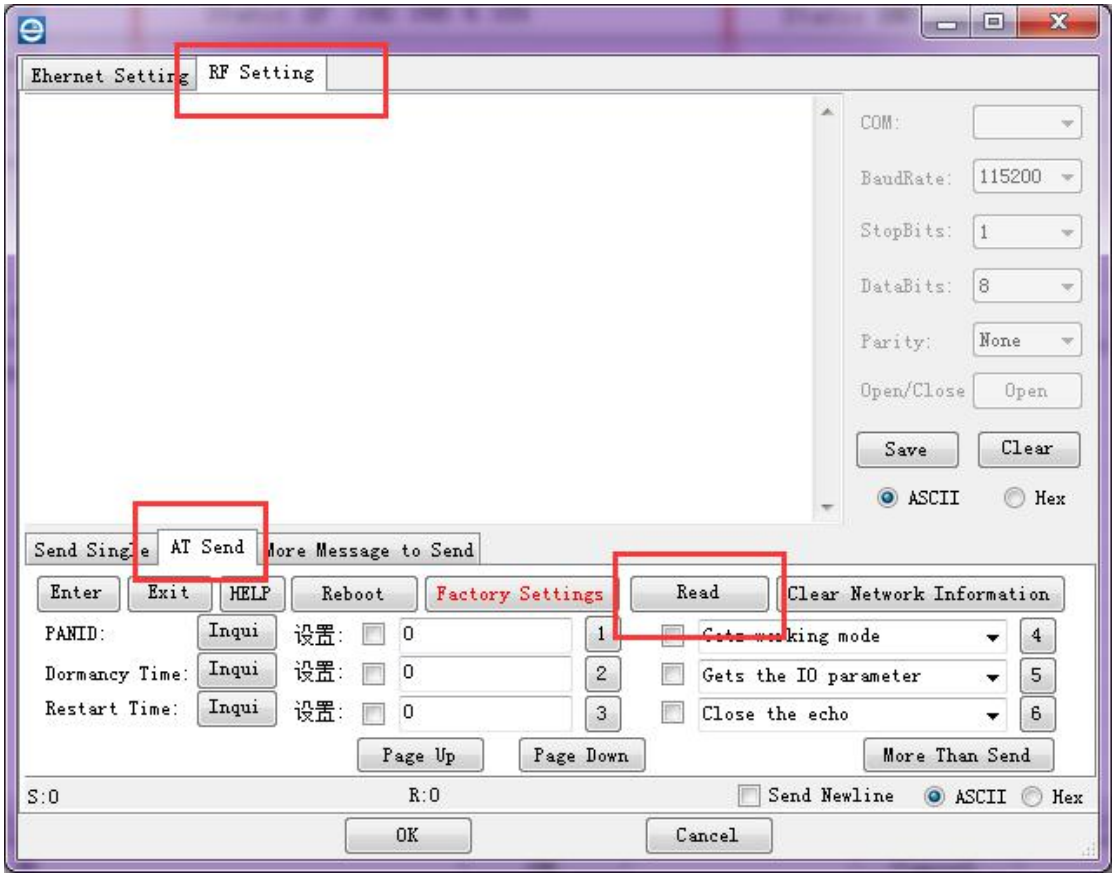


Figure 24 Searching devices

(2) Open two network debugging assistants, set the network debugging assistant protocol type to UDP Client, the network debugging assistant's server IP address is set to the module's IP address, the network debugging assistant's server port is set to the module's local port, click Connect.

(3) Enter a string of data in the sending area of network debugging assistant A, click Send, you will see that network assistant B has received the same data in the sending area of the serial port. Input a string of data in the sending area of network debugging assistant A, network assistant B also received the data. It realizes bidirectional transparent transmission.

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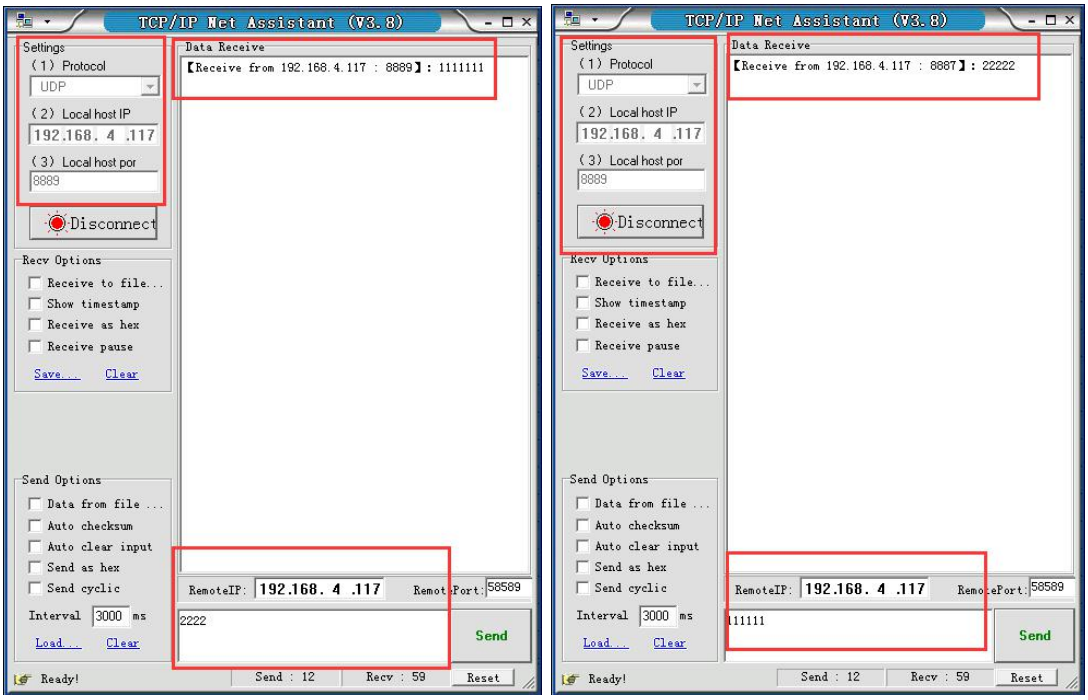


Figure 25 Data transparent transmission

6.3 Special function instructions

6.3.1 Short connection instructions

The TCP short connection function is applied to TCP Client mode. After the short connection function is enabled, if no data is received at the serial port or network port within the set time, the connection will be automatically disconnected. The short connection function is disabled by default, disconnection time can be set after the function is enabled. The setting range is 2~255s, users can enter it directly:

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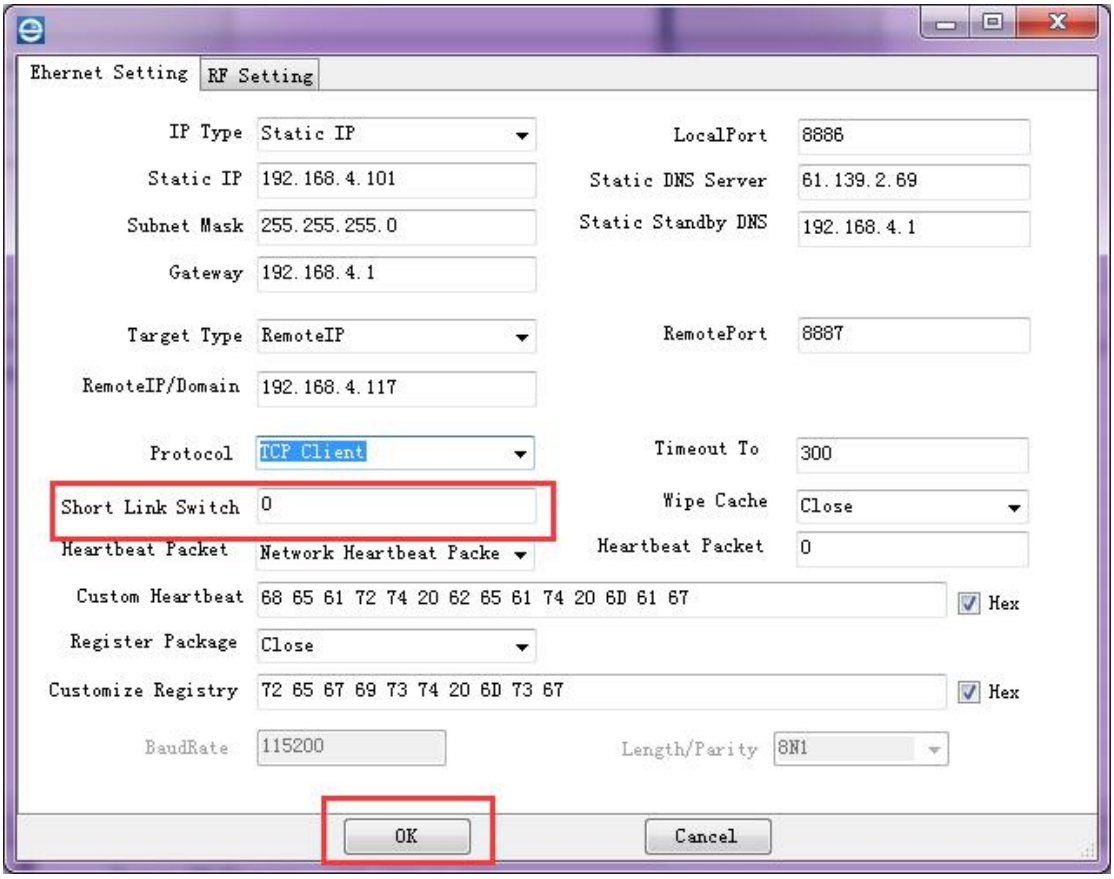


Figure 26 Short connection setting

6.3.2 Registration packet instructions

The E810-DTU(RS232)-V2.0 has four registration packet mechanisms, which are sending MAC when connecting, sending user-defined data when connecting, sending MAC for each packet of data, and sending user-defined data for each packet of data, user-defined data defaults to hexadecimal data (ascii optional).

The registration packet is closed by default, when you need to use it, you can open the network configuration software configuration. The user-defined data can be directly input.

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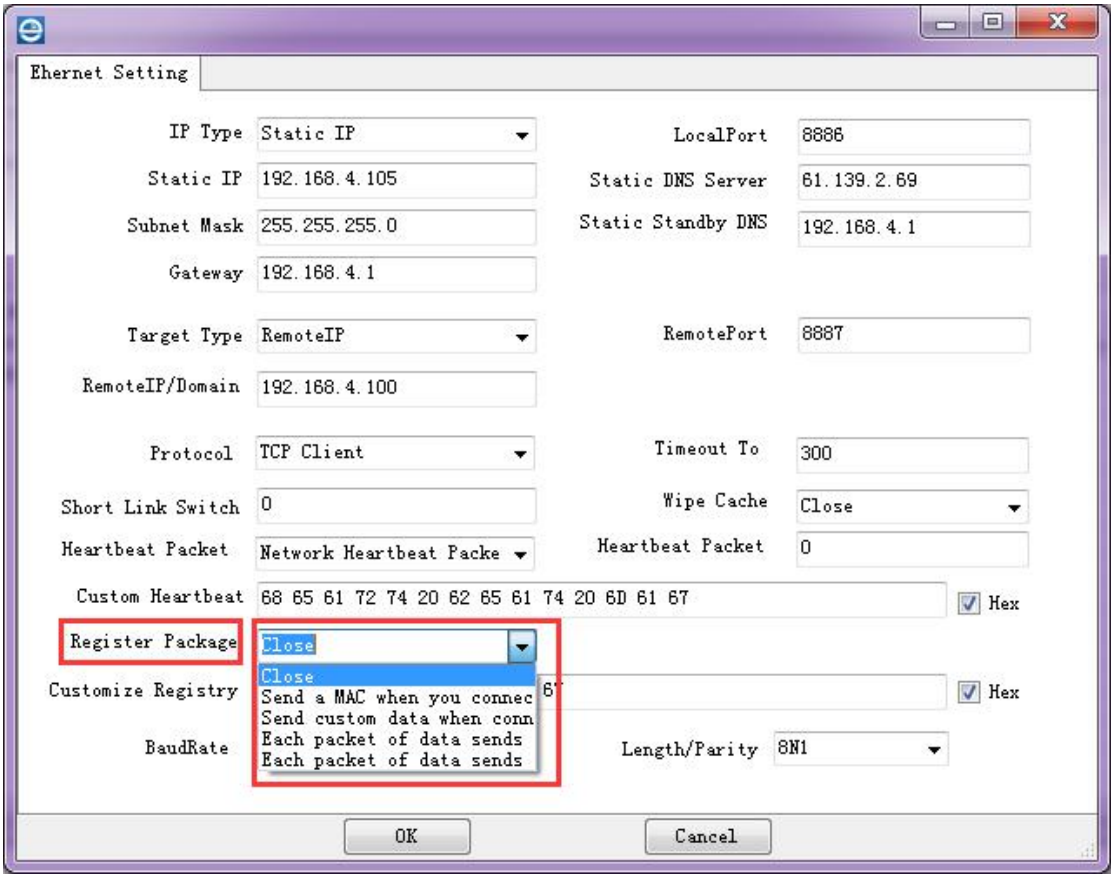


Figure 27 Registration packet setting

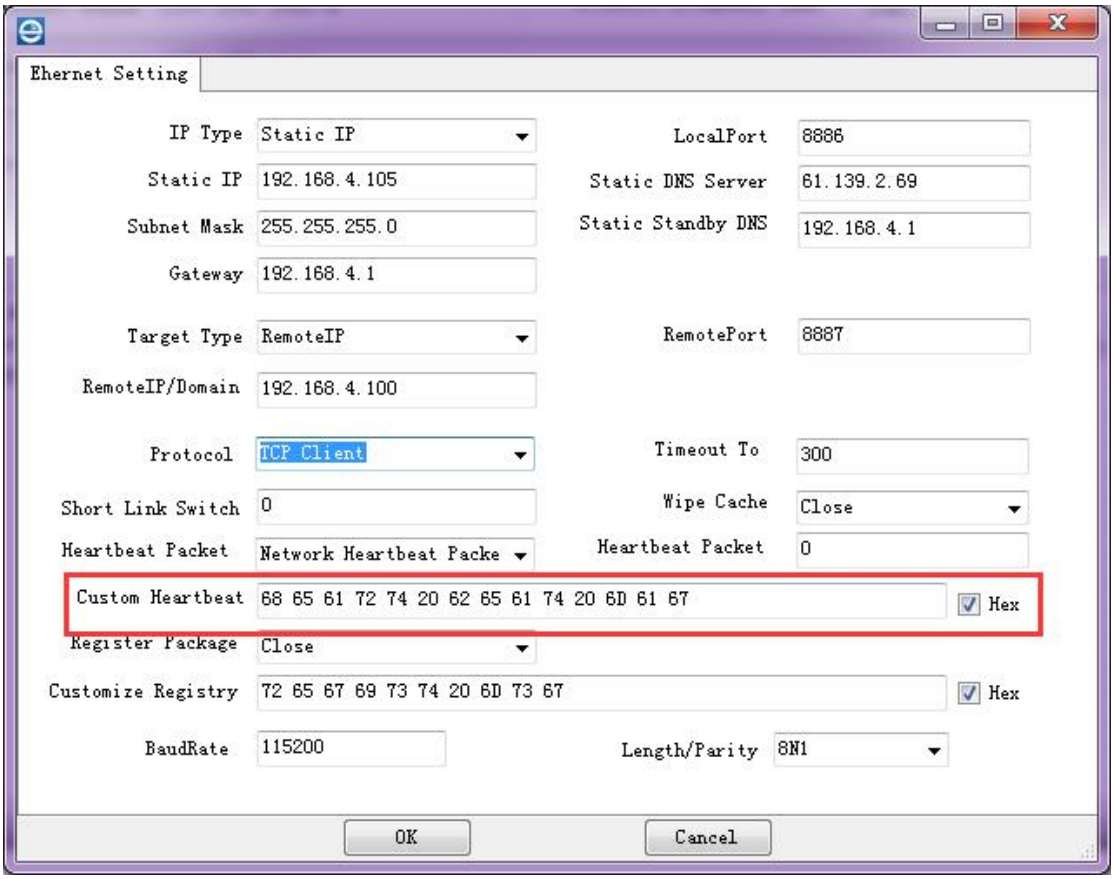


Figure 28 User-defined data setting

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6.3.3 Heartbeat packet instructions

Heartbeat packets are used to ensure the reliability of the connection. E810-DTU(RS232)-V2.0 supports two heartbeat packets, which are network heartbeat packets and serial heartbeat packets. After setting the heartbeat packet type, you also need to set the heartbeat period and custom heartbeat packet data.

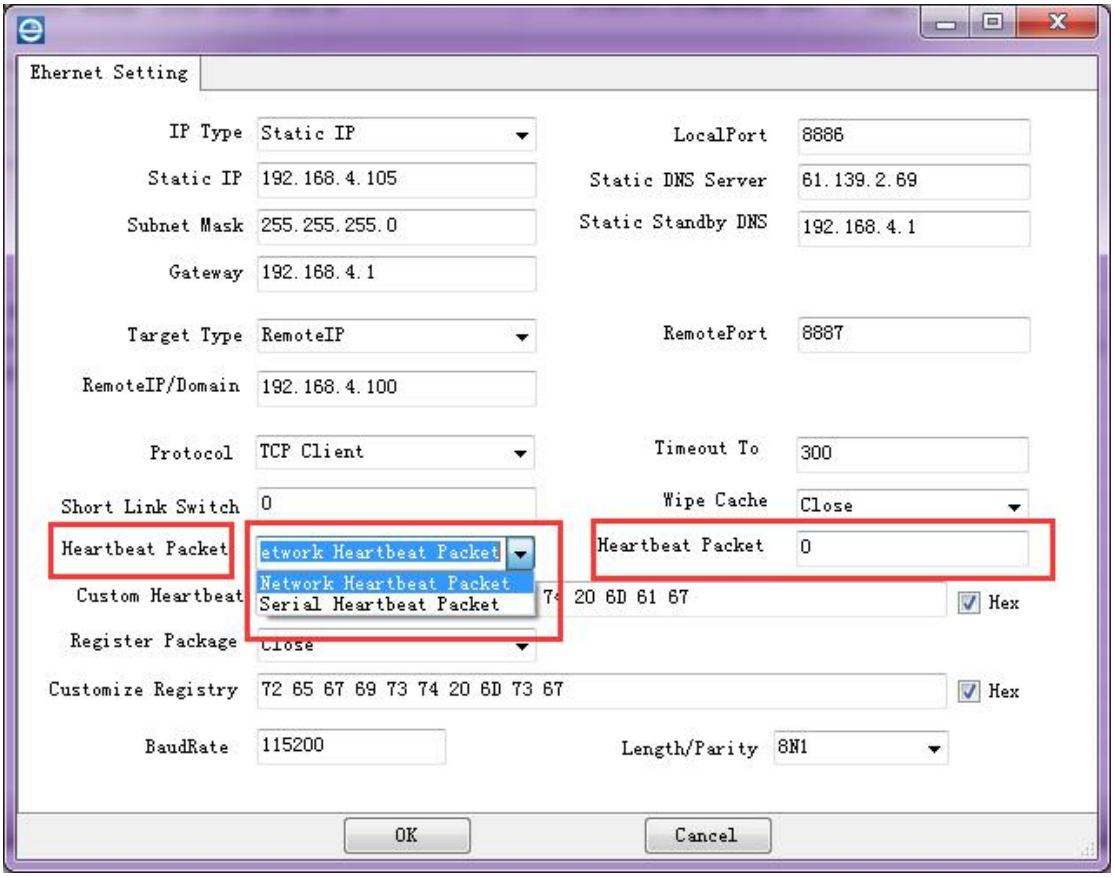


Figure 29 Heartbeat packet setting

6.3.4 Overtime restart instructions

The overtime restart is when the network port has not received data for a long time. After the module exceeds the set time, it restarts automatically to avoid communication abnormalities The restart time can be set to 60~65535S, default 300s.

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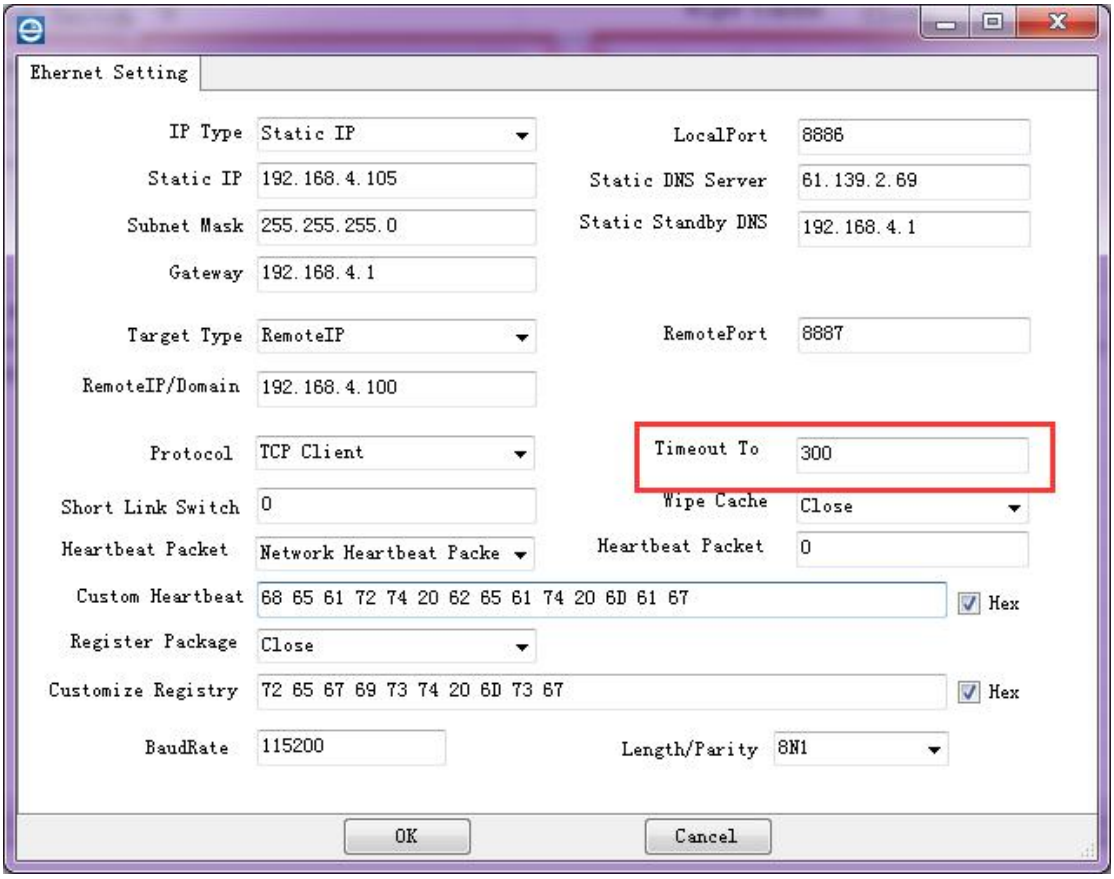


Figure 30 Overtime restart setting

6.3.5 Clearing cache instructions

When TCP is not established, the data received by the serial port is in the buffer, and users can set to clear buffer according to the requirements, default closed.

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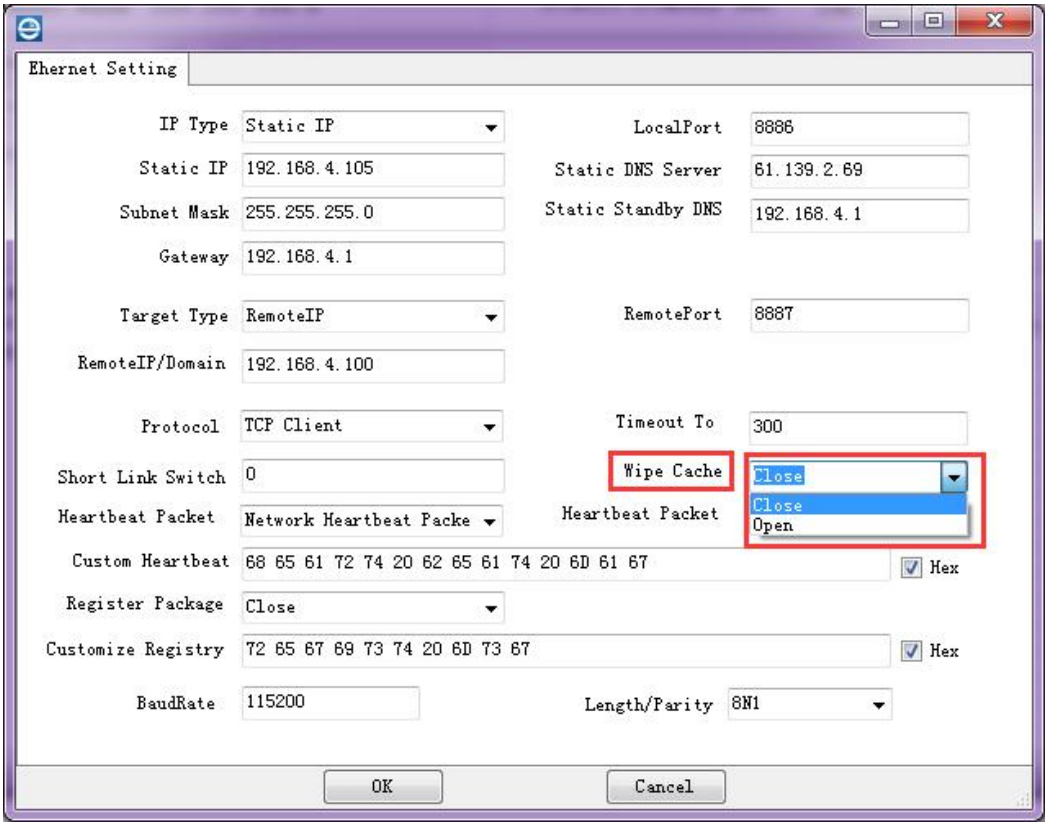


Figure 31 Clearing cache setting

7 AT Command

7.1 AT command summary

AT command means, a user instruction set command is transmitted by UART module in command mode, explained later in detail using the AT command format. When switching on to the configuration mode after power-on, the module can be set via the UART.

Switching from transparent transmission mode to command mode:

The UART device sends “+++” to the module continuously, after the module receives “+++”, the module starts timeout after 3 seconds. If any AT command is received within the timeout period, the module will successfully switch to the configuration mode. Before the mode was successfully switched, any UART data was transmitted through the network.

Switching from command Mode to Transparent Transmission Mode

The serial device sends the command “AT+ EXAT” to the module. After receiving the instruction, the module returns “+OK” and switches to the transparent transmission mode at the same time.

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Instructions： <CR>： ASCII code 0x0d;

<LF>： ASCII code 0x0a;

7.2 AT command error code

Error code	Instruction
-1	Invalid command format
-2	Invalid command
-3	Invalid operating code
-4	Invalid parameters
-5	Operation not allowed

7.3 AT command set

No.	Command	Instruction
1	AT	Test command
2	EXAT	Exit AT command
3	E	Set/Query command echo mode
4	MID	Set/Query module name
5	VER	Query version number
6	MAC	Query module MAC address
7	USERMAC	Set custom MAC address
8	UART1	Set/Query UART Parameters
9	UARTPKT1	Set/Query the serial port packet
10	WANN	Set/Query WAN Parameters
11	DNS	Set/Query DNS
12	SOCKA1	Set the query local port number SOCKA1
13	SOCKB1	Set the query local port number SOCKB1
14	LINKSTAA1	Query TCP connection status of SOCKETA1
15	LINKSTAB1	Query TCP connection status of SOCKETB1
16	REGMODA1	Set/Query Registration Package Mode of SOCKETA1
17	REGMODB1	Set/Query Registration Package Mode of SOCKETB1
18	REGDATA1	Set/Query Registration Package data of SOCKETA1
19	REGDATB1	Set/Query Registration Package data of SOCKETB1
20	HRTMODA1	Set/Query heartbeat mode of socketA1
21	HRTMODB1	Set/Query heartbeat mode of socketB1
22	HRTDATA1	Set/Query heartbeat data of socketA1
23	HRTDATB1	Set/Query heartbeat data of socketB1
24	HRTTIMA1	Set/Query heartbeat time of socketA1
25	HRTTIMB1	Set/Query heartbeat time of socketB1
26	SHORTMA1	Set/query short connection time of SocketA1

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27	SHORTMB1	Set/query short connection time of SocketB1
28	UARTCLRA1	Set / Query the serial port corresponding SOCKET A1 to clear the cache function
29	UARTCLRB1	Set / Query the serial port corresponding SOCKET B1 to clear the cache function
30	CONMAXA1	Set / Query the maximum allowed connections when TCP Server
31	KEPALVA1	Set / Query the keepalive parameter information of the serial port corresponding to SOCKET A1
32	KEPALVB1	Set / Query the keepalive parameter information of the serial port corresponding to SOCKET B1
33	KEPNEWA1	Set/Query if TCP Server permits new connection
34	LPORTA1	Set/Query SOCKET A1 local port number
35	LPORTB1	Set/Query SOCKET B1 local port number
36	MODBUS	Set/Query MODBUS switch
37	EBTIOT	Set/Query cloud transparent transmission
39	WEBU	Set/Query Web login info
40	WEBPORT	Set/Query Web port number
41	LANDISC	Set/Query land discovery
42	TMORST	Set/Query timeout restart time
43	REBT	Module reset
44	RESTORE	Restore factory settings

7.4 AT command detailed instructions

7.4.1. AT: Test command
Function: Test instruction
Format: Settings
Send: AT <CR>
Returns: <CR> <LF> + OK <CR> <LF>
Example: AT <CR>

7.4.2. AT + EXAT: Exit AT instruction
Function: Exit AT instruction
Format: Settings
Send: AT + EXAT <CR>
Returns: <CR> <LF> + OK <CR> <LF>
Example: AT + EXAT <CR>

7.4.3 AT + E: Query / Set Command Echo Mode
Function: query / set the command echo mode.
Format: query
Send: AT + E <CR>
Returns: <CR> <LF> + OK = <sw> <CR> <LF>
Set up

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Send: AT + E = <sw> <CR>
Returns: <CR> <LF> + OK <CR> <LF>
Parameters:
sw AT command echo switch
ON Turns on the echo and echoes the command entered under the AT command
OFF Turn off echo. In AT command mode, input command is not echoed
Example: AT + E = ON <CR>

7.4. 4. AT + MID: query / set module name
Function: query / set module name.
Format: query
Send: AT + MID <CR>
Returns: <CR> <LF> + OK = <name> <CR> <LF>
Set up
Send: AT + MID = <name> <CR>
Returns: <CR> <LF> + OK <CR> <LF>
parameter:
name module name
Example: AT + MID = E810-DTU-V2.0 <CR>

7.4.5. AT + VER: Query Module Version Information
Function: query module version information
Format: query
Send: AT + VER <CR>
Returns: <CR> <LF> + OK = <ver> <CR> <LF>
Parameters:
ver module version number
Example: AT + VER <CR>

7.4.6. AT + MAC: Query module MAC address
Function: Query module MAC address
Format: query
Send: AT + MAC <CR>
Returns: <CR> <LF> + OK = <mac> <CR> <LF>
Parameters:
mac module mac address
Example: AT + MAC <CR>

7.4.7. AT + USERMAC: Set a custom MAC address
Function: Set custom MAC address
Format: Settings
Send: AT + USERMAC = <mac> <CR>
Returns: <CR> <LF> + OK <CR> <LF>
Parameters:

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mac module mac address
Example: AT + USERMAC = 3C970E441007 <CR>

7.4.8. AT + UART1: Query / Set Serial Port Parameters
Function: query / set serial port parameters.
Format: query
Send: AT + UART1 <CR>
Returns: <CR> <LF> + OK = <baud, data, stop, parity, flowctrl> <CR> <LF>
Set up
Send: AT + UART1 = <baud, data, stop, parity, flowctrl> <CR>
Returns: <CR> <LF> + OK <CR> <LF>
Parameters:
baud baud rate, supports any baud rate of 300-3,000,000
data data bits 7, 8, 9
stop Stop bits 1, 2
parity parity ODD (odd parity), EVEN (even parity), NONE (no parity)
flowctrl flow control bit NFC (no hardware flow control), FC (with hardware flow control)
Example: AT + UART1 = 115200,8,1, NONE, NFC <CR>

7.4.9. AT + UARTPKT1: Query / Set Serial Port Subcontracting Information
Function: Query / set serial port subcontracting information.
Format: query
Send: AT + UARTPKT1 <CR>
Returns: <CR> <LF> + OK = <time, size> <CR> <LF>
Set up
Send: AT + UARTPKT1 = <time, size> <CR>
Returns: <CR> <LF> + OK <CR> <LF>
parameter:
time Packing time, 0, 10 ~ 255 ms
size Packing length, 0, 4-1460 bytes
Example: AT + UARTPKT1 = 10,1460 <CR>

7.4.10. AT + WANN: query / set the IP parameter information of the module's WAN port
Function: Query / set the module's WAN port IP parameter information.
Format: Query
Send: AT + WANN <CR>
Returns: <CR> <LF> + OK = <mode, address, mask, gateway> <CR> <LF>
Set up
Send: AT + WANN = <mode, address, mask, gateway> <CR>
Returns: <CR> <LF> + OK <CR> <LF>
Parameters:
mode IP mode: STATIC (static), DHCP (dynamic)
address IP address
mask subnet mask

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gateway gateway address

Example: AT + WANN = STATIC, 192.168.0.7,255.255.255.0,192.168.0.1 <CR>

7.4.11 AT + DNS: Query / Set Module DNS Information

Function: Query / set DNS server address.

Format: Query

Send: AT + DNS <CR>

Returns: <CR> <LF> + OK = <address 1, address2> <CR> <LF>

Set up

Send: AT + DNS = <address1, address2> <CR>

Returns: <CR> <LF> + OK <CR> <LF>

Parameters:

address1 Preferred DNS server address (the default value is 61.139.2.69).

address2 The alternate DNS server address (the default value is 192.168.4.1).

Example: AT + DNS = 61.139.222.77,112.118.4.222 <CR>

7.4.12 AT + SOCKA1: Query / set the serial port corresponding SOCKET A1 network protocol parameters

Function: Query / set the serial port corresponding SOCKET A1 network protocol parameters.

Format: Query

Send: AT + SOCKA1 <CR>

Returns: <CR> <LF> + OK = <protocol, ip, port> <CR> <LF>

Set up

Send: AT + SOCKA1 = <protocol, ip, port> <CR>

Returns: <CR> <LF> + OK <CR> <LF>

parameter:

potocol protocol type, TCPS / TCPC / UDPS / UDPC

TCPS corresponds to TCP server

TCPC corresponds to TCP client

UDPS corresponds to UDP server

UDPC corresponds to UDP client

ip When the module is set to "CLIENT", the IP address or domain name of the target server

port Port number: Local port number in Server mode, remote port number in Client mode, decimal number, less than 65535.

Example: AT + SOCKA1 = TCPC, 192.168.0.201,8234 <CR>

7.4.13 AT + SOCKB1: Query / set the serial port corresponding SOCKET B1 network protocol parameters

Function: Query / set the serial protocol corresponding SOCKET B1 network protocol parameters.

Format: Query

Send: AT + SOCKB1 <CR>

Returns: <CR> <LF> + OK = <protocol, ip, port> <CR> <LF>

Set up

Send: AT + SOCKB1 = <protocol, ip, port> <CR>

Returns: <CR> <LF> + OK <CR> <LF>

parameter:

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potocol protocol type, TCPC / UDPS / UDPC

TCPC corresponds to TCP client

UDPS corresponds to UDP server

UDPC corresponds to UDP client

ip When the module is set to "CLIENT", the IP address or domain name of the target server

port Port number: Local port number in Server mode, remote port number in Client mode, decimal number, less than 65535.

Example: AT + SOCKB1 = UDPC, 192.168.4.222,6666 <CR>

7.4.14 开始

6666 < CR > 192.168.4.222,

8.4.14 AT+LINKSTAA1: inquire the connection status of serial port corresponding to SOCKET A1

Function: query serial port corresponding to SOCKET A1 connection status.

Format: query

Send: AT+ LINKSTAA1<cr><

Return: <cr><lf>+OK=< sta ><cr><lf>

Parameters:

Whether Sta establishes TCP link, Connect/Disconnect;

Connect TCP is connected.

Disconnect TCP did not connect.

Example: AT+ LINKSTAA1<cr>

7.4.15 AT+LINKSTAB1: query serial port corresponding to SOCKET B1 connection status

Function: query serial port corresponding SOCKET B1 connection status.

Format: query

Send: AT+ LINKSTAB1<cr>

Return: <cr><lf>+OK=< sta ><cr><lf>

Parameters:

Whether Sta establishes TCP link, Connect/Disconnect;

Connect TCP is connected.

Disconnect TCP did not connect.

Example: AT+ LINKSTAB1<cr>

7.4.16 AT+REGMODA1: query/set the serial port corresponding to the registered package mode of SOCKET A1

Function: query/set serial port corresponding to SOCKET A1 registered package mode.

Format: query

Send: AT + REGMODA1 < CR >

Return: <cr><lf>+OK=< mode ><cr><lf>

Set up the

Send: AT+ REGMODA1 =< mode ><cr>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

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mode

EMBMAC adds 6 bytes of MAC as the registered packet data before each packet is sent to the server.

EMBCSTM adds custom registration package data to each packet sent to the server.

OLMAC only sends a 6-byte MAC registration package the first time it links to the server.

OLCSTM only sends a user-defined registration package the first time it is linked to the server.

OFF disable registration package mechanism.

Example: AT+ REGMODA1= EMBMAC<cr>

7.4.17 AT+REGMODB1: query/set the serial port corresponding to the registered package mode of SOCKET B1

Function: query/set serial port corresponding to SOCKET B1 registered package mode.

Format: query

Send: AT + REGMODB1 < CR >

Return: <cr><lf>+OK=< mode ><cr><lf>

Set up the

Send: AT+ REGMODB1 =< mode ><cr>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

mode

EMBMAC adds 6 bytes of MAC as the registered packet data before each packet is sent to the server.

EMBCSTM adds custom registration package data to each packet sent to the server.

OLMAC only sends a 6-byte MAC registration package the first time it links to the server.

OLCSTM only sends a user-defined registration package the first time it is linked to the server.

OFF disable registration package mechanism.

Example: AT+ REGMODB1= OLCSTM<cr>

7.4.18 AT+REGDATA1: query/set the serial port corresponding to the registered package contents of SOCKET A1

Function: query/set serial port corresponding to SOCKET A1 registered package content.

Format: query

Send: AT+ REGDATA1<cr>

Return: <cr><lf>+OK=< data,code ><cr><lf>

Set up the

Send: AT+ REGDATA1 =< data,code ><cr>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

The registered package contents of ASCII code or hexadecimal data within 40 bytes of data.

Code ASCII or HEX

Example: AT+ REGDATA1=EBYTE,ASCII<cr>

7.4.19 AT+REGDATB1: query/set the serial port corresponding to the registered package contents of SOCKET B1

Function: query/set serial port corresponding to SOCKET B1 registered package content.

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Format: query
Send: AT+ REGDATB1<cr>
Return: <cr><lf>+OK=< data,code ><cr><lf>
Set up the
Send: AT+ REGDATB1 =< data,code ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
The registered package contents of ASCII code or hexadecimal data within 40 bytes of data.
Code ASCII or HEX
Example: AT+ REGDATB1=EBYTE, ASCII<cr>

7.4.20 AT+HRTDATA1: query/set serial port corresponding to SOCKET A1 heartbeat package content
Function: query/set serial port corresponding to SOCKET A1 heartbeat package content.
Format: query
Send: AT+ HRTDATA1 <cr>
Return: <cr><lf>+OK=< data,code ><cr><lf>
Set up the
Send: AT+ HRTDATA1 =< data,code ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
The heartbeat packet contents of ASCII code or hexadecimal data within 40 bytes of data.
Code ASCII or HEX
Example: AT+ HRTDATA1= EBYTE,ASCII<cr>

7.4.21 AT+HRTDATB1: query/set serial port corresponding to SOCKET B1 heartbeat package content
Function: query/set serial port corresponding to SOCKET B1 heartbeat package content.
Format: query
Send: AT+ HRTDATB1 <cr>
Return: <cr><lf>+OK=< data,code ><cr><lf>
Set up the
Send: AT+ HRTDATB1 =< data,code ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
The heartbeat packet contents of ASCII code or hexadecimal data within 40 bytes of data.
Code ASCII or HEX
Example: AT+ HRTDATB1= EBYTE,ASCII<cr>

7.4.22 AT+HRTMODA1: query/set the heartbeat packet mode of the serial port corresponding to SOCKET A1
Function: query/set serial port corresponding to SOCKET A1 heartbeat packet mode.
Format: query
Send: AT+ HRTMODA1 <cr>
Return: <cr><lf>+OK=< mode ><cr><lf>
Set up the

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Send: AT+ HRTMODA1 =< mode ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
mode
NET network heartbeat package.
COM serial heartbeat package.
Example: AT+ HRTMODA1=NET<cr>

7.4.23 AT+HRTMODB1: query/set the heartbeat package mode of the serial port corresponding to SOCKET B1

Function: query/set serial port corresponding to SOCKET B1 heartbeat packet mode.
Format: query
Send: AT+ HRTMODB1 <cr>
Return: <cr><lf>+OK=< mode ><cr><lf>
Set up the
Send: AT+ HRTMODB1 =< mode ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
mode
NET network heartbeat package.
COM serial heartbeat package.
Example: AT+ HRTMODB1=NET<cr>

7.4.24 AT+HRTTIMA1: query/set the heartbeat packet time of the serial port corresponding to SOCKET A1
Function: query/set the heartbeat packet time of the serial port corresponding to SOCKET A1.
Format: query
Send: AT+ HRTTIMA1 <cr>
Return: <cr><lf>+OK=< time ><cr><lf>
Set up the
Send: AT+ HRTTIMA1 =< time ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
0 off, range from 2 to 65535 seconds.
Example: AT+ HRTTIMA1=30<cr>

7.4.25 AT+HRTTIMB1: query/set the heartbeat packet time of the serial port corresponding to SOCKET B1
Function: query/set the heartbeat packet time of the serial port corresponding to SOCKET B1.
Format: query
Send: AT+ HRTTIMB1 <cr>
Return: <cr><lf>+OK=< time ><cr><lf>
Set up the
Send: AT+ HRTTIMB1 =< time ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:

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0 off, range from 2 to 65535 seconds.
Example: AT+ HRTTIMB1=30<cr>

7.4.26 AT+SHORTMA1: query/set the short connection time of the serial port corresponding to SOCKET A1

Function: query/set short connection time of serial port corresponding to SOCKET A1.
Format: query
Sent: AT+ SHORTMA1 <cr>
Return: <cr><lf>+OK=< time ><cr><lf>
Set up the
Sent: AT+ SHORTMA1 =< time ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
Time short connection time, 0 off, range 2 ~ 65535 seconds.
Example: AT+ SHORTMA1=100<cr>

7.4.27 AT+SHORTMB1: query/set the short connection time of the serial port corresponding to SOCKET B1

Function: query/set short connection time of serial port corresponding to SOCKET B1.
Format: query
Sent: AT+ SHORTMB1 <cr>
Return: <cr><lf>+OK=< time ><cr><lf>
Set up the
Sent: AT+ SHORTMB1 =< time ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
Time short connection time, 0 off, range 2 ~ 65535 seconds.
Example: AT+ SHORTMB1=100<cr>

7.4.28 AT+UARTCLRA1: query/set serial port corresponding to SOCKET A1 to clear the cache function
Function: query/set serial port corresponding to SOCKET A1 to clear the cache function.
Format: query
Send: AT+ UARTCLRA1 <cr>
Return: <cr><lf>+OK=< sw ><cr><lf>
Set up the
Send: AT+ UARTCLRA1 =< sw ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
Sw switch
ON clears the cached data of the SOCKET A1 link, but does not clear the serial cache data.
OFF does not clear the cached data of the SOCKET A1 link.
Example: AT+ UARTCLRA1=ON<cr>

7.4.29 AT+UARTCLRB1: query/set serial port corresponding to SOCKET B1 to clear the cache function

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Function: query/set serial port corresponding to SOCKET B1 cache clearing function.
Format: query
Send: AT+ UARTCLRB1 <cr>
Return: <cr><lf>+OK=< sw ><cr><lf>
Set up the
Send: AT+ UARTCLRB1 =< sw ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
Sw switch
ON clears the cache data of the SOCKET B1 link, but does not clear the serial cache data.
OFF does not clear the cached data of the SOCKET B1 link.
Example: AT+ UARTCLRB1=ON<cr>

7.4.30 AT+CONMAXA1: query/set the maximum number of connections allowed for TCP Server
Function: query/set the maximum allowable connections of TCP Server.
Format: query
Send: AT+ CONMAXA1 <cr>
Return: <cr><lf>+OK=< num ><cr><lf>
Set up the
Send: AT+ CONMAXA1 =< num ><cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
Num TCP Server maximum number of connections allowed, range from 1 to 6.
Example: the AT + CONMAXA1 = 5 < CR >

7.4.31 AT+KEPALVA1: query/set the keep-alive parameter of SOCKET A1 corresponding to the serial port
Function: query/set the keep-alive parameter of SOCKET A1.
Format: query
Send: AT + KEEPALIVEA1 < CR >
Returns: < CR > < LF > + OK = < time, intv, the probes > < CR > < LF >
Set up the
Send: AT + KEEPALIVEA1 = < time, intv, the probes > < CR >
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
Time TCP link after how many seconds no datagram transmission starts probe message
0: turn off KeepAlive
2~7200: KeepAlive function is enabled with intv,probes, and time parameters in effect
Unit S in seconds
The time interval between the previous probe message of intv and the next probe message of intv
2~7200, unit S (seconds)
The maximum number of probe failures to which the TCP connection is disconnected when the probes fails
2~255, unit: times
Example: the AT + KEEPALIVEA1 = 10,5,20 < CR >

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7.4.32 AT+KEPALVB1: query/set the keep-alive parameter of SOCKET B1 corresponding to the serial port

Function: query/set the keep-alive parameter of SOCKET B1 corresponding to the serial port.

Format: query

Send: AT + KEEPALIVEB1 < CR >

Returns: < CR > < LF > + OK = < time, intv, the probes > < CR > < LF >

Set up the

Send: AT + KEEPALIVEB1 = < time, intv, the probes > < CR >

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

Time TCP link after how many seconds no datagram transmission starts probe message

0: turn off KeepAlive

2~7200: KeepAlive function is enabled with intv,probes, and time parameters in effect

Unit S in seconds

The time interval between the previous probe message of intv and the next probe message of intv

2~7200, unit S (seconds)

The maximum number of probe failures to which the TCP connection is disconnected when the probes fails

2~255, unit: times

Example: the AT + KEEPALIVEB1 = 10,5,20 < CR >

7.4.33 AT+KEPNEWA1: query/set TCP Server to allow new connections

Function: query/set TCP Server to allow new connections.

Format: query

Send: AT+ KEPNEWA1<cr>

Return: <cr><lf>+OK=< sw ><cr><lf>

Set up the

Send: AT+ KEPNEWA1=< sw ><cr>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

Sw switch

When the number of clients connected to TCP Server reaches the maximum number of connections allowed by TCP Server, new connections are allowed, but new connections crowd out the earliest connections to TCP Server.

When the number of clients connected to TCP Server reaches the maximum allowable connections of TCP Server, no new connections are allowed.

Example: AT+ KEPNEWA1=ON<cr>

7.4.34 AT+LPORTA1: query/set the local port number of SOCKET A1

Function: query/set SOCKET A1 local port number.

Format: query

Send: AT+ LPORTA1<cr>

Return: <cr><lf>+OK=< port ><cr><lf>

Set up the

Send: AT+ LPORTA1 =< port ><cr>

Returns: < CR > < LF > + OK < CR > < LF >

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Parameters:

Port 0 means to use a random port. 1-65535 represents the set SOCKET A1 local port.

Example: AT+ LPORTA1=8887<cr>

7.4.35 AT+LPORTB1: query/set the local port number of SOCKET B1

Function: query/set SOCKET B1 local port number.

Format: query

Send: AT+ LPORTB1<cr>

Return: <cr><lf>+OK=< port ><cr><lf>

Set up the

Send: AT+ LPORTB1 =< port ><cr>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

Port 0 means to use a random port. 1-65535 represents the set SOCKET B1 local port.

Example: AT+ LPORTB1=8887<cr>

7.4.36 AT+MODBUS: inquire/set the MODBUS switch

Function: query/set MODBUS switch.

Format: query

Send: AT+ MODBUS <cr>

Return: <cr><lf>+OK=< sw ><cr><lf>

Set up the

Send: AT+ MODBUS =< sw ><cr>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

Sw switch

ON enables the mutual conversion between Modbus RTU and Modbus TCP

OFF closes the mutual conversion between Modbus RTU and Modbus TCP

Example: AT+ MODBUS=ON<cr>

7.4.37 AT+LANDISC: query/set Intranet discovery information

Function: query/set Intranet discovery information.

Format: query

Send: AT+ LANDISC <cr>

Return: <cr><lf>+OK=< port, password ><cr><lf>

Set up the

Send: AT+ LANDISC =< port, password ><cr>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

Port set Intranet discovery port, range: 1-65535

Password sets the password found on the Intranet, up to 40 bytes, allowing both Chinese and English passwords

Example: the AT + LANDISC = 1901, < CR > www.cdebyte.comwww.cdebyte.com

7.4.38 AT+WEBU: search/set Intranet discovery information

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Function: query/set Intranet discovery information.

Format: query

Send: AT + WEBU < CR >

Return: <cr><lf>+OK=<name, password=""><cr><lf></lf></cr></name,></lf></cr>

Set up the

Send: AT+WEBU=<name, password=""><cr></cr></name,>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

Name web login authentication user name, up to 20, does not support Spaces and special characters

Password, up to 20 passwords, does not support Spaces and special characters

Example: the AT + WEBU = admin, admin < CR >

7.4.39 AT+WEBPORT: query/set Intranet discovery information

Function: query/set Intranet discovery information.

Format: query

Send: AT + WEBPORT < CR >

Returns: < CR > < LF > + OK = < port > < CR > < LF >

Set up the

Send: AT+WEBPORT =<cr></cr></port>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

Port web page port

Example: the AT + WEBPORT = port < CR >

7.4.40 AT+EBIOT: query/set the cloud transmission function

Function: query/set the cloud transmission function.

Format: query

Send: AT+ EBIOT <cr></cr>

Return: <cr><lf>+OK=< sw ><cr><lf></lf></cr></lf></cr>

Set up the

Send: AT+ EBIOT =< sw ><cr></cr>

Returns: < CR > < LF > + OK < CR > < LF >

Parameters:

Sw switch

ON enables cloud transmission

OFF turns OFF cloud transmission.

Example: AT+ EBIOT =ON<cr></cr>

7.4.41 AT+TMOST: query/set module timeout restart time

Function: query/set module timeout restart time.

Format: query

Send: AT+ TMOST <cr></cr>

Return: <cr><lf>+OK=< time ><cr><lf></lf></cr></lf></cr>

Set up the

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Send: AT+ TMOST =< time ><cr></cr>
Returns: < CR > < LF > + OK < CR > < LF >
Parameters:
Time short connection time range: 0, 60-65535 seconds.
Example: AT+ TMOST =3600<cr></cr>

7.4.42 AT+RESTORE: RESTORE factory Settings
Function: restore factory Settings
Format: set
Send: AT + RESTORE < CR >
Returns: < CR > < LF > + OK < CR > < LF >
Parameters: no
Example: AT+ RESTORE <cr></cr>
< note > : after this command is executed correctly, restart the module using the AT+REBT instruction.

7.4.43 AT+REBT: restart the module
Function: restart the module
Format: set
Send: AT + REBT < CR >
Returns: < CR > < LF > + OK < CR > < LF >
Parameters: no
Example: AT+ REBT <cr></cr>
< note > : after this command is executed correctly, the module restarts.

8 About us

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