Chengdu Ebyte Electronic Technology Co.,Ltd

Wireless Modem

User Manual

E821-DTU(0400-ETH)



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Functional Features

- Support 4-way analog input, default current acquisition;
- Support 1-way Ethernet port, can use socket to connect to remote server, support TCP/UDP;
- Adopt Modbus TCP/RTU protocol data processing;
- Support connecting to YBT cloud, command and control;
- Support 2 kinds of working modes, host mode, slave mode, the slave can be cascaded to multiple devices via RS485;
- Support Reload touch button, long press 5s, Modbus device address, RS485 serial port baud rate and parity bit to restore the factory settings;
- Hardware watchdog with high reliability;
- Multiple indicators to show the working status;
- Power supply with static electricity, surge 3-level protection, and at the same time with over-current, over-voltage, anti-reverse connection and other protection;

Note: Customizable features, such as conditional control (determining how to output based on the input state)

1. Quick Start

This chapter is a quick start introduction for E821-RTU(0400-ETH) series products, it is recommended that users read this chapter systematically and follow the instructions before using the product, it will give you a systematic understanding of the product, users can also select the chapters you are interested in according to the need to read. For specific details and instructions, please refer to the subsequent chapters.

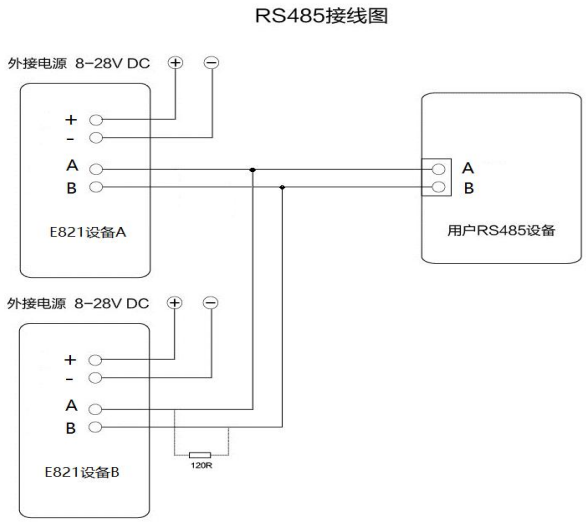
1.1 Port Connection

1.1.1 RS485 connection

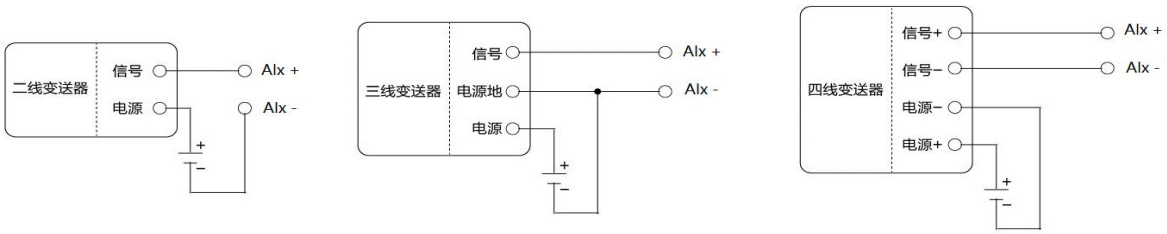
E821-RTU devices with master and slave operating modes can be cascaded through the RS485 port, 120R (matching resistor) according to the actual line matching options to add or not (default does not add);

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1.1.2 Analog Input Connection



模拟量输入连接

1.2 Simple to use

Wiring: PC connects E821-RTU(0400-ETH) via USB to RS485; PC connects E821-RTU(0400-ETH) via network cable.
Power supply: E821-RTU(0400-ETH) working voltage is DC 8~28V, at least 0.2A power supply capacity should be ensured.

1.2.1 RS485 bus control

Select the device model, the corresponding port, set the baud rate checksum, and click “Search” to search for the device.

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Click "Stop" when the actual number of connected devices is found; the number of connected devices in the example is 1.



At this point, you can see the device address of the current device, the "automatic refresh" √ processing, you can read the analog input, the example shows that channel 4 has a 10mA current input.

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1.2.2 Network-based control

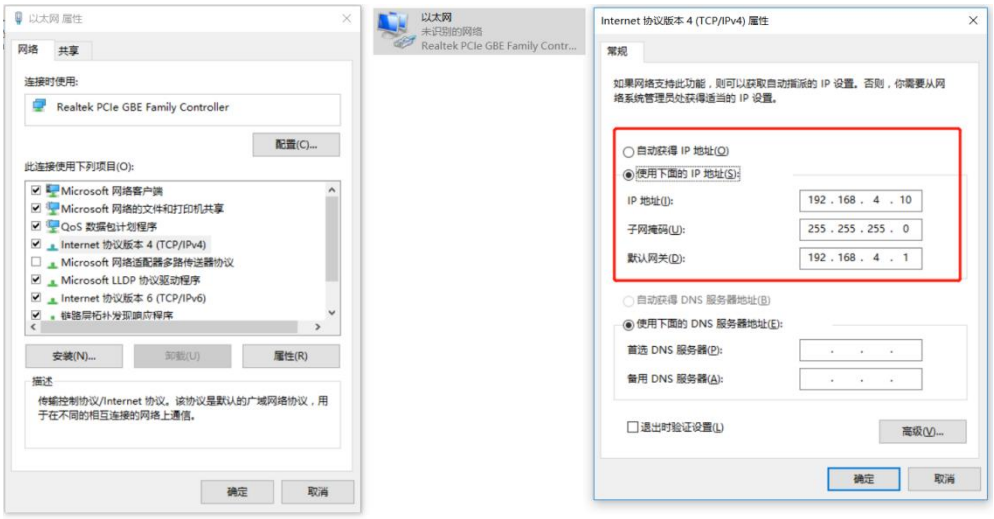
Click on the parameter settings, read the parameters, at this time we can see that the device address is "1", in "slave mode", local IP "192.168.4.101", subnet mask "255.255.255.0" "TCP server", port number 8666; to control the network with the network. Local IP "192.168.4.101", subnet mask "255.255.255.0", "TCP server", port number 8666;

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Right-click the local connection, set the computer's IP: “192.168.4.10”, subnet mask: “255.255.255.0”, gateway: 192.168.4.1



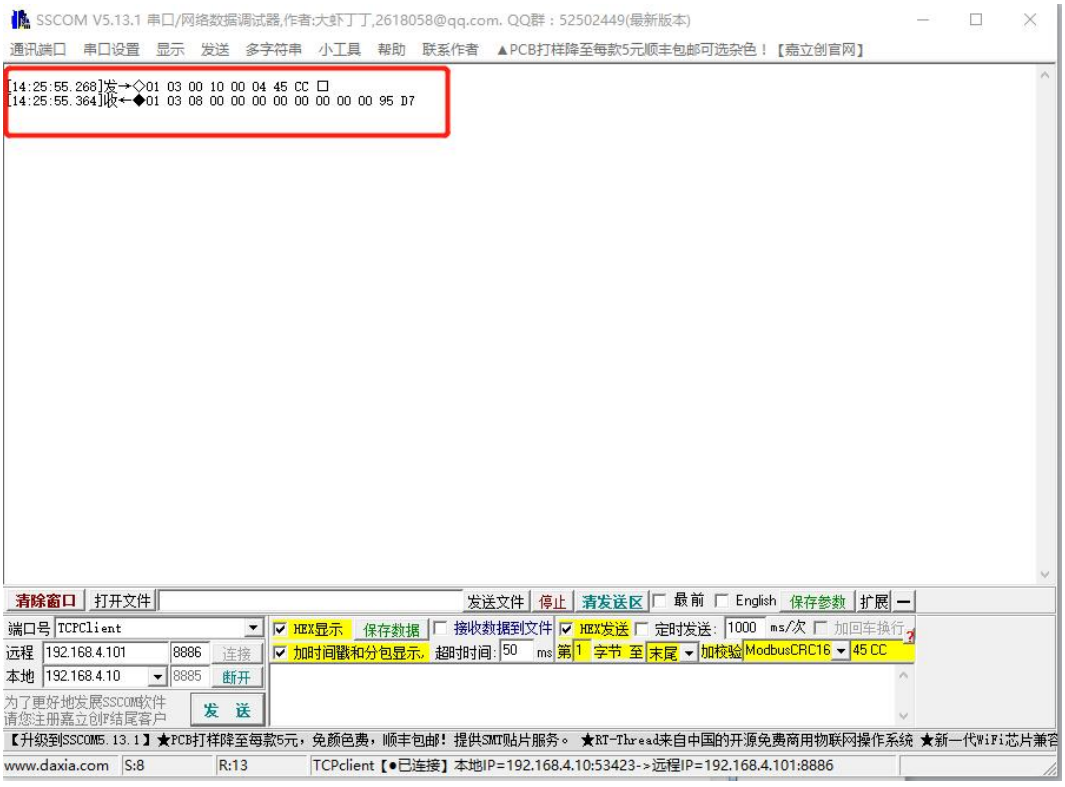
Open the network data debugging assistant, set the port number and other parameters, click Connect, you can find that the device LINK light is on to indicate a successful connection;

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Sending via Modbus command: 01 03 00 10 00 04 45 CC reads the current values collected by the 4 analog channels;



2. Product Introduction

The E821-RTU(0400-ETH) is a network data acquisition product that supports 4 analog (current) inputs. It supports

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Modbus TCP/RTU protocol. The product is highly user-friendly and can be easily and quickly integrated into your own system to realize network-based remote data acquisition.

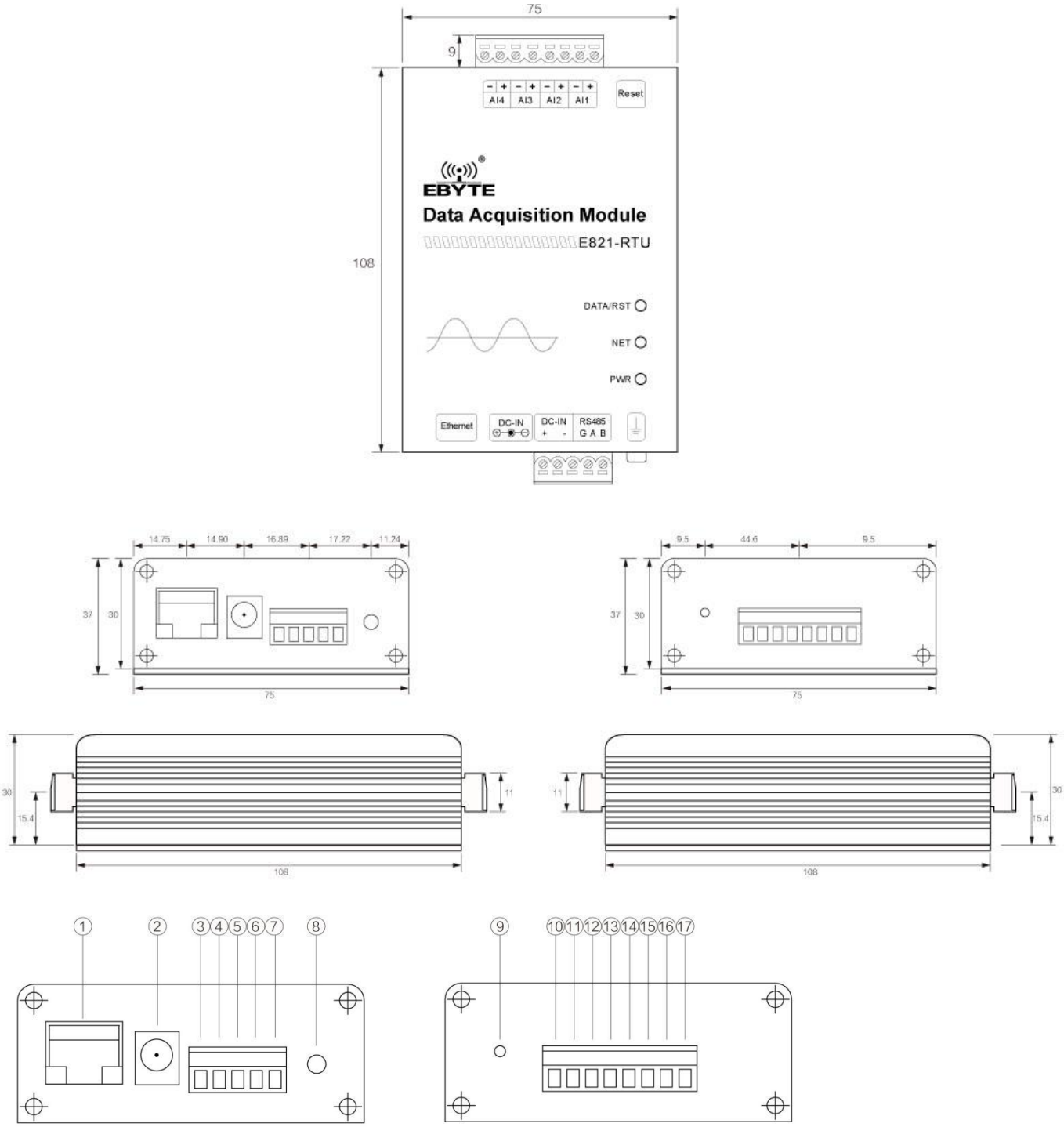
2.1 Basic parameters

	Item	Specifications
Network parameters	Network port specification	RJ45, 10/100Mbps
	Network protocol	IP, TCP/UDP, ARP, ICMP, IPV4
	IP acquisition method	Static IP, DHCP
	Domain name resolution	Support
Hardware parameters	Product size (H*W*D)	108*75*37mm
	Product weight	230.8±5g
	Operating temperature	-20℃~+70℃
	Storage temperature	-40℃~+85℃
	Operating humidity	5%~95%
	Storage humidity	1%~95%
	Operating voltage	8V~28V, 8V/143mA, 12V/98mA, 24V/52mA, 28V/45mA
	Current acquisition range	0mA~20mA/4mA-20mA Configurable
	Accuracy	0.2%
	Data interface	RS485: 1200~115200bps/RJ45: 100M
Software parameters	Network type	Ethernet
	Configuration commands	Modbus TCP/ RTU
	Network protocol	Modbus TCP/RTU
	Operating mode	Host mode, slave mode
	Data transmission method	TCP/UDP

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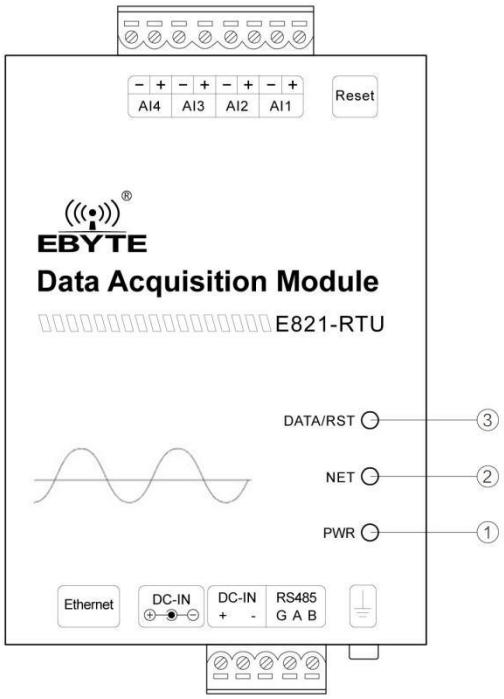
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2.2 Dimensions, Interface Description



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No	Ports and other definitions	Functions	Description
1	RJ45 ports	Ethernet interface	Standard RJ45 interface, connect with device or PC
2	DC-IN holders	DC socket 5.5*2.1mm	Power input, DC 8V~28V, 12V/24V is recommended
3	DC-IN +	Positive crimp power input	Power input, DC 8V~28V, 12V/24V is recommended
4	DC-IN -	Negative crimp power input	Power supply reference ground
5	RS485 G	RS485 reference ground	Signal reference ground, may not be connected
6	RS485 A	RS485 interface A	RS485 interface A is connected with the device A interface
7	RS485 B	RS485 interface B	RS485 interface B is connected with the device B interface
8	Ground screws	Connection to ground	Connected with the earth earth
9	Reset	Reset button	Press and hold for 5S effectively
10	AI1+	Analog input channel 1 positive	Analog signal input channel, used in combination with negative pole to capture analog
11	AI1-	Analog input channel 1 negative	Analog signal input channel, used in combination with positive pole to capture analog
12	AI2+	Analog input channel 2 positive	Analog signal input channel, used in combination with negative pole to capture analog
13	AI2-	Analog input channel 2 negative	Analog signal input channel, used in combination with positive pole to capture analog
14	AI3+	Analog input channel 3	Analog signal input channel, used in combination

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		positive	with negative pole to capture analog
15	AI3-	Analog input channel 4 negative Input channel 3 negative	Analog signal input channel, used in combination with positive pole to capture analog
16	AI4+	Analog signal input channel 4 positive	Analog signal Analog signal input channel, analog acquisition in combination with the negative pole
17	AI4-	Analog signal input channel 4 negative	Analog signal input channel, analog acquisition in combination with the positive pole
LED indicator			
1	PWR	Power indication	Power on red, long light
2	NET	Ethernet connection indication	blue and green LED, Ethernet port connection TCP/UDP connection is successful after the blue LED long light, power on green LED light a table is initializing
3	DATA/RST	Data send/receive indication/reset indication	blue and green LED, there is data sending and receiving the blue LED flashes, key reset is successful green LED blinks 3 times

Note: It is recommended to connect the housing to the earth

2.3 Description of Reset Tap Button

Long press 5S is valid, after successful reset, RST lamp blinks 3 times, Modbus device address, RS485 serial port baud rate and parity bit restore to factory settings, other configuration parameters remain unchanged.

3 Modbus

3.1 Register address table

Register address table (function table: 0x03H, 0x04H, 0x06H, 0x10H)						
Register address	**Number of registers**	**Register Properties**	**Register Type**	**Register Value Range**	**default value**	**Support Function Codes**
30017 (0x0010)	1	AI4 input value in uA	Read-only	0-20000	-	0x03 0x04
30018 (0x0011)	1	AI3 input value in uA	Read-only		-	
30019 (0x0012)	1	AI2 input value in uA	Read-only		-	
30020 (0x0013)	1	AI1 input value in uA Defaults	Read-only		-	
reservation						
40078 (0x004D)	1	Device address	Read/Write	1 - 247	01	0x03 0x06
40079 (0x004E)	1	Baud rate	Read/Write	0 - 7	03	

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40080 (0x004F)	1	Checksums	Read/Write	0 - 2	00	
40081(0x0050)	1	Host mode or slave mode	Read/Write	0 - 1	01	
reservation						
40084(0x0053)	1	Analog range setting	Read/Write	0 - 1	01	
reservation						
40098 (0x0061)	3	Device MAC address	Read	-	-	0x03 0x06 0x10
40104 (0x0067)	1	Ethernet reboot	read/write	-	-	
40108 (0x006B)	7	WAN port IP information	read/write	-	Static 192.168.4.101 255.255.255.0 192.168.4.1	
40122 (0x0079)	4	Setting DNS information	read/write	-	61.139.2.69 192.168.4.1	
40130 (0x0081)	4	Setting network protocol parameters	read/write	-	TCPS,192.168.4.10, 8886	
40146 (0x0091)	1	Setting registration packet mode	read/write	0-4	“0” closes the registration package	
40150 (0x0095)	21	Setting registration packet content	read/write	-	regist msg	
40234 (0x00E9)	21	Setting heartbeat packet content	read/write	-	heartbeat msg	
40318 (0x013D)	1	Setting heartbeat packet mode	read/write	0-1	“0” network heartbeat packets	
40322 (0x0141)	1	Setting heartbeat packet time	read/write	0、2-65535	0	
40330 (0x0149)	1	Setting clear cache	read/write	0-1	Does not clear cached data on SOCKET A1 link	
40336 (0x014F)	3	Setting keep-alive parameter	read/write	-	Probe time 10s Probe interval 5s Probe count 30 times	
40350 (0x015D)	1	Setting local port number	read/write	0-65535	8886	
40354 (0x0161)	1	Setting cloud pass-through function	read/write	0-1	close	
40356 (0x0163)	1	Setting timeout reboot time	read/write	60-65535	3600	
40358 (0x0165)	4	SN code	read	-	-	

3.2 Modbus Address Table

Modbus Address Table	
1（default）	1
2	2

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3	3
…	…
245	245
246	246
247	247

3.3 RS485 serial port baud rate code value table

baud rate code value table	
0	1200
1	2400
2	4800
3（default）	9600
4	19200
5	38400
6	57600
7	115200

3.4 RS485 Serial Port Check Digit Code Value Table

check digit code value table	
0（default）	No parity
1	Even parity
2	Odd parity

3.5 Configuration of parameters via the host computer

Select the “parameter setting” column, you can read the parameters, write the parameters, the specific realization of the function, see the following product function introduction.

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4 Product Features

4.1 Working mode

The operating modes are divided into master mode and slave mode, which are configured through Modbus register 40081 (0x0050). When the register value is 0, it is the master mode; when the register value is 1, it is the slave mode, and the default slave mode.

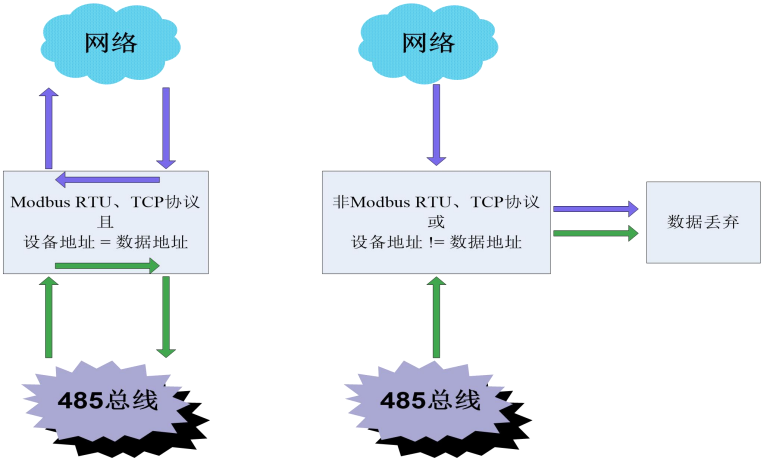
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4.1.1.slave mode

In the slave mode (register value 0x01), the data sent to the device by the network side or the 485 bus side (sender side) satisfies Modbus RTU, Modbus TCP protocol and the address in the data is the device address, the device will answer the sender side with the same protocol; if the data sent to the device by the network side or the 485 bus side does not satisfy Modbus RTU, If the data sent to the device from the network side or the 485 bus side does not meet the Modbus RTU, Modbus TCP protocols, or meets the Modbus RTU, Modbus TCP protocols but the address in the data is different from the address of the device, the data at the sending end will be discarded.

In the slave mode, the device can directly connect to the device in the master mode through the 485 bus, realizing that even if the slave is not connected to the network, the network side can also access the data of the slave through the master.



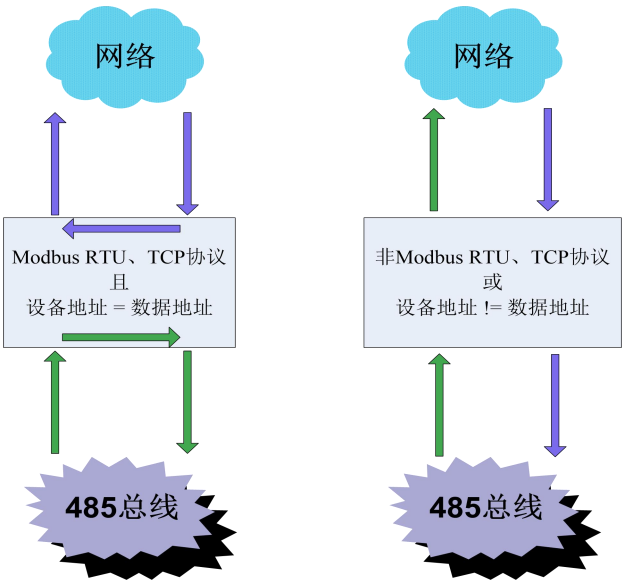
4.1.2. Host Mode

In host mode (register value 0x00), the data sent to the device from the network side or the 485 bus side (sender) satisfies Modbus RTU, Modbus TCP protocol and the address in the data is the device address, the device will answer the sender with the same protocol; if the data sent to the device from the network side or the 485 bus side does not satisfy Modbus RTU, If the data sent from the network side or 485 bus side to the device does not meet the Modbus RTU, Modbus TCP protocol, or meets the Modbus RTU, Modbus TCP protocol but the address in the data is not the address of the device, the data coming from the 485 bus will be transmitted to the network, and the data coming from the network will be transmitted to the 485 bus.

This function of the host mode can realize the device cascade function and the data transmission between the 485 bus and the network.

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4.2 RTU Basic Functions

4.2.1.Read analog AI input

Function code: 03, read holding register; 04, read input register
Address range: 30017(0x0010)~30020(0x0013)
Explanation: Analog input value unit is uA
Example:
Function code 0x03, read AI1 input, assuming that AI1 input is 9946uA, the corresponding value should be 0x26 DA

Modbus RTU protocol to read analog input:

send	01	03	00 13	00 01	75 CF
	Device ModBus address	function code	Analog start address	Number of addresses read	CRC check digit

receive	01	03	02	26 DA	23 BF
	Device ModBus address	function code	Returns the number of bytes	Analog Input Value	CRC check digit

Modbus TCP protocol to read analog inputs：

send	00 01	00 00	00 06	01	03	00 13	00 01
	transport identifier	protocol identifier	lengths	unit identification	function code	Analog start address	Number of read addresses

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receive	00 01	00 00	00 05	01	03	02	26 DA
	transport identifier	protocol identifier	lengths	unit identification	function code	Returns the number of bytes	Analog Input Value

4.2.2.Analog AI acquisition range setting

When register 0x40084 (0x0053) value is 0, the analog input range is 0 -- 20mA;
When register 0x40084 (0x0053) value is 1, the analog input range is 4 -- 20mA;
Note: If the current at the input terminal is <4mA when the range is 4-20mA, the value of the register is 0.

4.3 Network Related Functions

4.3.1.Device MAC address reading

Modbus RTU protocol write register:

send	01	03	00 61	00 03	54 15
	Device ModBus address	function code	starting address	Number of registers to read	CRC check digit

receive	01	03	06	1A 00 1C C0 BB FF	16 53
	Device ModBus address	function code	byte count	retrieve value	CRC check digit

Modbus TCP protocol write register:

send	00 01	00 00	00 06	01	03	00 61	00 03
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

receive	00 01	00 00	00 09	01	03	06	1A 00 1C C0 BB FF
	transport identifier	protocol identifier	length	unit identification	function code	byte count	retrieve value

Description: 1A 00 1C C0 BB FF is the MAC address of the device, the device has a unique, different MAC address from other devices.

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4.3.2.Device SN code reading

Modbus RTU protocol read register:

send	01	03	01 65	00 04	55 EA
	Device ModBus address	function code	starting address	Number of registers to read	CRC check digit

receive	01	03	08	19 05 21 14 00 13 55 50	F9 AA
	Device ModBus address	function code	byte count	Read value	CRC check digit

Modbus TCP protocol read register:

send	00 01	00 00	00 06	01	03	01 65	00 04
	transport identifier	protocol identifier	length	unit identification	function code	address	Number of readings

receive	00 01	00 00	00 0B	01	03	08	19 05 21 14 00 13 55 50
	transport identifier	protocol identifier	Length	unit identification	function code	byte count	retrieve value

Description: 19 05 21 14 00 13 55 50 The SN code of the device. the SN code of the device is not the same.

4.3.3.Commands for network-related function parameters to take effect (Ethernet restart commands)

Modbus RTU protocol write register:

send	01	06	00 67	00 01	F9 D5
	Device ModBus address	function code	address	write value	CRC check digit

receive	01	06	00 67	00 01	F9 D5
	Device ModBus address	function code	address	write value	CRC check digit

Modbus TCP protocol write register:

send	00 01	00 00	00 06	01	06	00 67	00 01
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

receive	00 01	00 00	00 06	01	06	00 67	00 01

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	transport identifier	protocol identifier	length	unit identification	function code	address	write value

Special Note: The Ethernet component can be restarted by writing the value ox00 01 to address ox00 67. You must execute this restart command after you have configured the Ethernet-related parameters, otherwise the configured parameters will not take effect.

4.3.4.WAN port ip information configuration

Modbus RTU protocol writes the WAN port IP register:

	01	10	00 6B	00 07	0E	00 00 C0 A8 04 65 FF FF FF 00 C0 A8 04 01	BE 17
send	Device ModBus address	function code	address	Register Length	byte count	write value	CRC check digit

	01	10	00 6B	00 07	F0 17
receive	Device ModBus address	function code	address	Register length	CRC check digit

Modbus TCP protocol write register:

	00 01	00 00	00 15	01	10	00 6B	00 07	0E	00 00 C0 A8 04 65 FF FF FF 00 C0 A8 04 01
send	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length	byte count	write value

	00 01	00 00	00 15	01	10	00 6B	00 07
receive	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length

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Description: 00 00 means static mode, if 00 01 means dynamic mode. c0 A8 04 65 (192.168.4.101) means IP address. ff ff ff 00 (255.255.255.0) subnet mask. c0 A8 04 01 (192.168.4.1) gateway address. When set to dynamic mode, IP address, subnet mask, and gateway address are required for the format, and the IP address of the device needs to be obtained through the query command.

4.3.5.Setting up DNS information

Modbus RTU protocol write DNS register:

send	01	10	00 79	00 04	08	3D 8B 02 45 C0 A8 04 02	E0 50
	Device ModBus address	function code	address	Register Length	byte count	write value	RC check digit

receive	01	10	00 79	00 04	10 13
	Device ModBus address	function code	address	Register Length	RC check digit

Modbus TCP protocol write register:

send	00 01	00 00	00 0F	01	10	00 79	00 04	08	3D 8B 02 45 C0 A8 04 02
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length	byte count	write value

receive	00 01	00 00	00 0F	01	10	00 79	00 04
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length

Note: 3D 8B 02 45 denotes the preferred DNS server address. C0 A8 04 02 denotes the alternate DNS server address.

4.3.6.Setting Network Protocol Parameters

Modbus RTU protocol write DNS register:

Send	01	10	00 81	00 04	08	00 00 C0 A8 04 0A 22 B6	81 3B
	Device ModBus address	function code	address	Register Length	byte count	write value	RC check digit

receive	01	10	00 81	00 04	91 E2
	Device ModBus address	function code	address	Register Length	RC check digit

Modbus TCP protocol write register:

Send	00 01	00 00	00	01	10	00 81	00 04	08	00 00 C0 A8 04 0A 22 B6

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			0F						
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length	byte count	write value

receive	00 01	00 00	00 0F	01	10	00 81	00 04
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length

Description: 00 00 means TCP server, the value can be: 00 01 means TCP client, 00 02 means UDP server, 00 03 means UDP client. C0 A8 04 0A means the IP address or domain name of the target server when it is set to client, 22 B6 port number, local port number in server mode, remote port number in client mode. C0 A8 04 0A denotes the IP address or domain name of the target server when it is set to “client”, and 22 B6 port number, which is the local port number in server mode and the remote port number in client mode.

4.3.7.Setting the registration package mode

Modbus RTU protocol write register:

Send	01	06	00 91	00 00	D8 27
	Device ModBus address	function code	address	write value	RC check digit

receive	01	06	00 91	00 00	D8 27
	Device ModBus address	function code	address	write value	RC check digit

Modbus TCP protocol write register:

Send	00 01	00 00	00 06	01	06	00 91	00 00
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

receive	00 01	00 00	00 06	01	06	00 91	00 00
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

Description: 00 00 means disable the registration packet mechanism, the value can be as follows: 00 01 means Send a user-defined registration packet only when linking to the server for the first time, 00 02 means Send a registration packet with a 6-byte MAC only when linking to the server for the first time, 00 03 means add customized registration packet data in front of each packet SEND to the server, and 00 04 means add 6-byte MAC as registration packet data in front of each packet SEND to the server. 00 03 means that customized registration packet data is added before each packet sent to the server, and 00 04 means that a 6-byte MAC is added before each packet sent to the server as the registration packet data.

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4.3.8.Setting the contents of the registration package

Modbus RTU protocol write register:

Send	01	10	00 95	00 15	2A	00 28 41 42 43 68 23 67 AA 00 2A 00 30 00 00 00 00 00 00 00 00 00 00 00 11 00 22 00 33 00 44 00 12 33 23 11 10 1D 1C BB AA	1C 91
	Device ModBus address	function code	address	Register Length	byte count	write value	CRC check digit

receive	01	10	00 95	00 15	11 EA
	Device ModBus address	function code	address	Register Length	RC check digit

Modbus TCP protocol write register:

Send	00 01	00 00	00 31	01	10	00 95	00 15	2A	00 28 41 42 43 68 23 67 AA 00 2A 00 30 00 00 00 00 00 00 00 00 00 00 00 00 11 00 22 00 33 00 44 00 12 33 23 11 10 1D 1C BB AA
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length	byte count	write value

receive	00 01	00 00	00 31	01	10	00 95	00 15
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length

BB AA indicates the content of the registration packet. For example: Send registration packet content is: ebyte, write value is 01 05 65 62 79 74 65 00 00 00 00 00 00 00 00 00 00 00 00

	Device ModBus address	function code	address	write value	RC check digit

Modbus TCP protocol write register:

Send	00 01	00 00	00 06	01	06	01 3D	00 00
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

receive	00 01	00 00	00 06	01	06	01 3D	00 00
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

Description: 00 00 indicates a network heartbeat packet and the value can be: 00 01 indicates a serial heartbeat packet.

4.3.10.Setting Heartbeat Packet Contents

Send	01	10	00 E9	00 15	2A	00 28 41 42 43 68 23 67 AA 00 2A 00 30 00 00 00 00 00 00 00 00 00 00 00 11 00 22 00 33 00 44 00 12 33 23 11 10 1D 1C 1B 1A	9D 8C
	Device ModBus address	function code	address	Register Length	byte count	write value	CRC check digit

Modbus RTU protocol write register:

receive	01	10	00 E9	00 15	D0 32
	Device ModBus address	function code	address	Register Length	RC check digit

Modbus TCP protocol write register:

Send	00 01	00 00	00 31	01	10	00 E9	00 15	2A	00 28 41 42 43 68 23 67 AA 00 2A 00 30 00 00 00 00 00 00 00 00 00 00 00 00 11 00 22 00 33 00 44 00 12 33 23 11 10 1D 1C 1B 1A
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length	byte count	write value

receive	00 01	00 00	00 31	01	10	00 E9	00 15
	transport identifier	protocol identifier	length	unit identificati	function code	address	Register Length

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For example, the Send heartbeat packet content is: ebyte, write value is 01 05 65 62 79 74 65 00 00 00

	transport identifier	protocol identifier	length	unit identification	function code	address	write value

receive	00 01	00 00	00 06	01	06	01 49	00 00
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

Explanation: 00 00 means do not clear the cached data of SOCKET A1 link, 00 01 means clear the cached data of SOCKET A1 link, but will not clear the cached data of serial port.

4.3.13 Setting the keep-alive parameter (keep-alive parameter)

Modbus RTU protocol write register:

Send	01	10	01 4F	00 03	06	02 D1 02 D1 00 31	BD 3D
	Device ModBus address	function code	address	Register Length	byte count	write value	RC check digit

receive	01	10	01 4F	00 03	B0 23
	Device ModBus address	function code	address	Register Length	RC check digit

Modbus TCP Protocol Write Register:

Send	00 01	00 00	00 0D	01	10	01 4F	00 03	06	02 D1 02 D1 00 31
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length	byte count	write value

receive	00 01	00 00	00 0D	01	10	01 4F	00 03
	transport identifier	protocol identifier	length	unit identification	function code	address	Register Length

Description: 02 D1 indicates the number of seconds after which the TCP link has no data message transmission to start the probe message, 00 00 indicates the KeepAlive function is turned off, the value is 2-7200 seconds.02 D1 the time interval between the previous probe message and the next one, the value is 2-7200 seconds.00 31 indicates the maximum number of probing failures, when sniffing fails to the number of times, the TCP connection will be disconnected, the value is 2-255 times

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4.3.14 Setting the local port number

Modbus RTU protocol write register:

Send	01	06	01 5D	11 A1	D4 0C
	Device ModBus address	function code	address	write value	RC check digit

receive	01	06	01 5D	11 A1	D4 0C
	Device ModBus address	function code	address	write value	RC check digit

Modbus TCP protocol write register:

Send	00 01	00 00	00 06	01	06	01 5D	11 A1
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

receive	00 01	00 00	00 06	01	06	01 5D	11 A1
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

Description: 11 A1 means A1 local port, when it is 00 00 means random port, the value is 1-65535.

4.3.15 Setting up Cloud Transparency

Modbus RTU protocol write register:

Send	01	06	01 61	00 01	18 28
	Device ModBus address	function code	address	write value	RC check digit

receive	01	06	01 61	00 01	18 28
	Device ModBus address	function code	address	write value	RC check digit

Modbus TCP protocol write register:

Send	00 01	00 00	00 06	01	06	01 61	00 01
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

receive	00 01	00 00	00 06	01	06	01 61	00 01
	transport identifier	protocol identifier	length	unit identificat	function code	address	write value

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Description: 00 00 means cloud passthrough is off, and a value of 00 01 means on. modbus TCP protocol write register

4.3.16 Setting the timeout to restart

Modbus RTU protocol write register:

Send	01	06	01 63	FF A0	39 A0
	Device ModBus address	function code	address	write value	RC check digit

receive	01	06	01 63	FF A0	39 A0
	Device ModBus address	function code	address	write value	RC check digit

Modbus TCP protocol write register:

Send	00 01	00 00	00 06	01	06	01 63	FF A0
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

receive	00 01	00 00	00 06	01	06	01 63	FF A0
	transport identifier	protocol identifier	length	unit identification	function code	address	write value

Modbus TCP Protocol Write Register: Description: FF A0 Indicates the restart time, the value is 60-65535. this function is used when Ethernet does not receive any data for a long period of time and reset the Ethernet.

IMPORTANT NOTICE

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