

TCP-518K

Industrial Ethernet I/O module

DI	DO	PT100	RS232	RS485	以太网	RTU 协议	TCP 协议	UDP 协议
8	6 (常开继电器)	8	1	1	1	支持	支持	支持

Be careful !

Please read this manual carefully before proceeding! Disconnect the input power before installing the wiring! Please confirm whether the wiring is correct before power on! Please do not operate in flammable and explosive environment! Please operate within the specified voltage range!

The first chapter is product overview

Our products are widely used in buildings, HVAC, fire, water supply, petrochemical, environmental protection and other industries, for most system integrators and automation companies, the Institute adopted, is a Species with a very high personality ratio, stable and reliable number of mining modules

Support SIEMENS PLC = > >; support force control, Kingview, MCGS configuration software;

The support for RS232, RS485 interface, Modbus touch screen, Wen Benping;

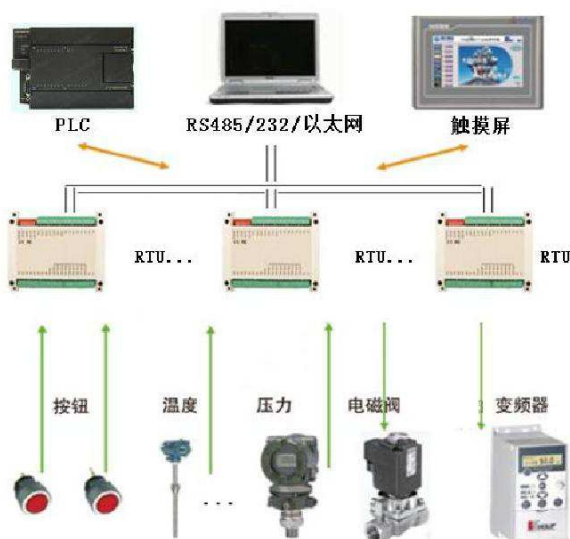
Modbus online communication equipment support all standard >;

= > If a certain amount of customization, function module;

= > R & D personnel directly to customers technical support, assist customers to complete the project;

Chapter 2 system parameter

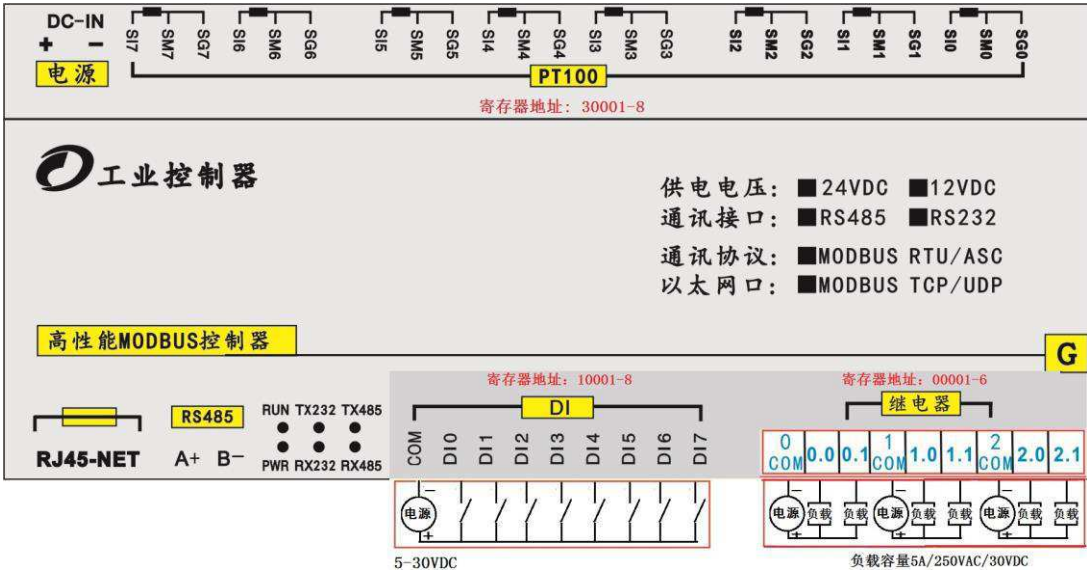
CPU	US imports chips, 32 bit ATMEL ARM high speed processors, 72MHZ
operating system	GCOS, 10ms Scheduling mechanism
Supply voltage	24VDC(optinal 12V)@3W, Power reverse protection, isolation design
communication interface	DCDC isolation design, 2500V lightning protection, ESD, overvoltage and overcurrent protection
Outline size	Volume (length x width x height): 180 x 108 x 44 (mm)
Installation method	Screw or guide rail installation
Environmental indicator	-40~85℃, 5%~95%RH No condensation, IP20 protection
hardware watchdog	1.5 second hardware watchdog protection system
Channel isolation	2500VDC Isolation and anti-interference protection design
	Products from 1997, stable application in industrial field



Chapter 3

wiring

drawings



第 4 章 配置软件



Module communication interface	RS232、RS485、UDP Ethernet Select through the orange icon above
Computer communication settings	Module current parameters
UART Configuration description	See this chapter: RS232/RS485 parameters
Module information	Module identity information; can use the "Restore factory configuration software .exe" number module information;
Native Ethernet	See this chapter: Ethernet parameters

Chapter 5 Ethernet Parameters

communication interface	RJ45 interface
Communication protocol	MODBUS TCP、MODBUS UDP protocol
Communication speed	Communicate with the host computer 1000 times per second
Communication bandwidth	10M/100Mbps, True high speed Ethernet
IP address	192.168.1.75
Port number	502
TCP link	You can also establish links with 8 computer clients and communicate with each other simultaneously
Support cable	Both cross and straight lines are available, and modules can be adaptive
Computer	The computer IP must be in the same network segment as module IP: 192.168.1.xx

Module configuration software	
Assist debugging	 1. use ping 192.168.1.75 test 2. Concrete steps: lower left corner of Microsoft system > Start Menu > run - -> input cmd, and press enter key --> ping 192.168.1.75

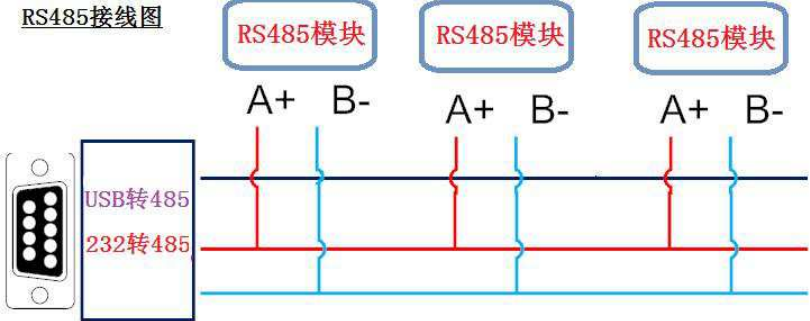
Chapter 6 RS485/RS232

Channel number	1 road RS485	1road RS232
Baudrate	1200~115200, default 9600	
Parity check	Odd check, even check, no checksum	
Start bit	1 bit	
Data bits	8 bit	
Stop bit	1、2 bit	
Communication protocol	MODBUS RTU	
Default parameter	9600.N.8.1, Station number is: 1	
UART0/1 Configuration description	Address: two ● configuration methods It can be configured by software or by dialing code switch; See the following section: module address	

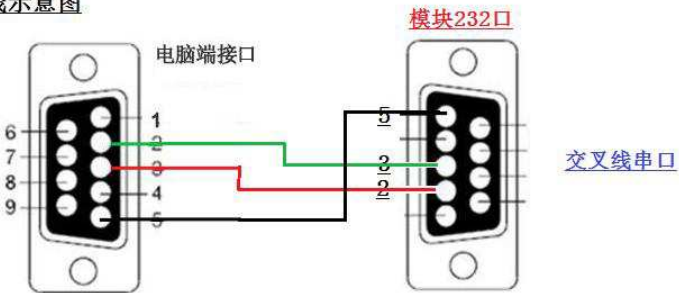
- Module type: select the I/O module type;

Protocol type:
1. Standard MODBUS RTU
Protocol;
2. Other options:
reserved unused;

RS485接线图



RS232接线示意图



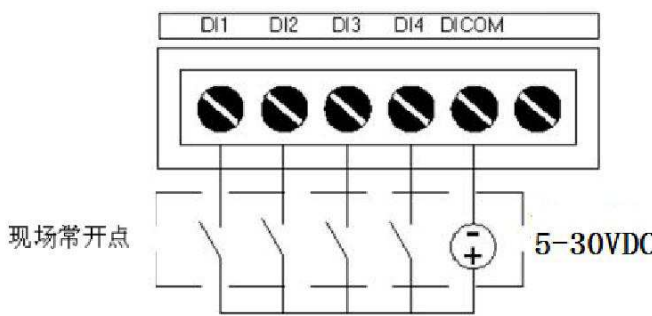
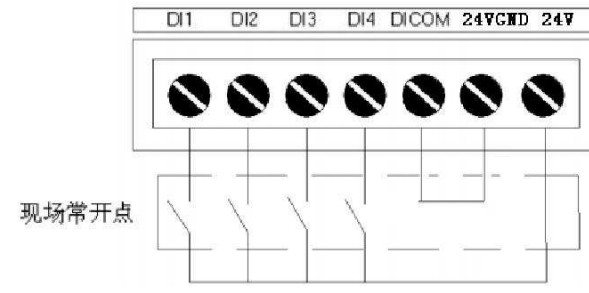
Chapter 7 LED indicator light

POWER light	Display power status
RUN light	Show the system running, flash once
COM0 TX0 RX0 light	Shows the communication status of the RS485 communication port
COM1 TX1 RX1 light	Shows the communication status of the RS232 communication port

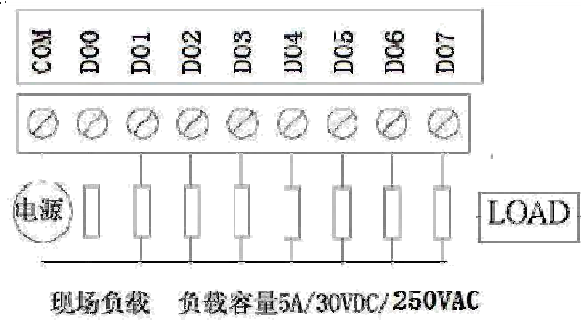
chapter 8 Module address

Explain	Through software configuration, the RS232 RS485 interface address can be configured independently
	See chapter in this article: 《RS485/RS232》

Chapter 9, DI digital input

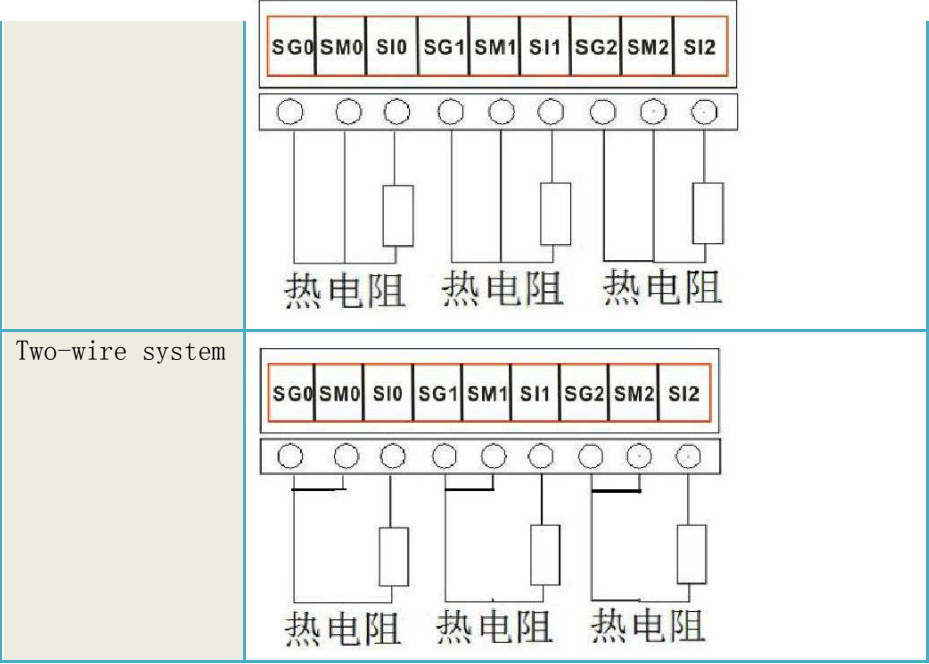
Modbus address	10001~10008: < number of corresponding channels >
Input mode	Optocoupler isolation
ON level	5-30VDC, 6mA@24VDC
OFF level	0-3VDC
Isolation voltage	2500V, Lightning protection circuit + optocoupler isolation + overrun protection
Sampling rate	Quick collection of all channel data in 0.01 seconds
Wet node connection method	 The diagram shows a terminal block with six terminals labeled DI1, DI2, DI3, DI4, and DICOM. Below the terminals are six circular optocoupler symbols. Each DI1-DI4 terminal is connected to a switch labeled '现场常开点' (on-site normally open point). The DICOM terminal is connected to a common terminal of a 5-30VDC power source, represented by a battery symbol with '+' and '-' signs.
Dry node connection method	 The diagram shows a terminal block with eight terminals labeled DI1, DI2, DI3, DI4, DICOM, 24V, GND, and 24V. Below the terminals are eight circular optocoupler symbols. Each DI1-DI4 terminal is connected to a switch labeled '现场常开点'. The DICOM terminal is connected to the GND terminal. The 24V and 24V terminals are connected to a 24V power source.

Chapter 10 **D0** Relay output

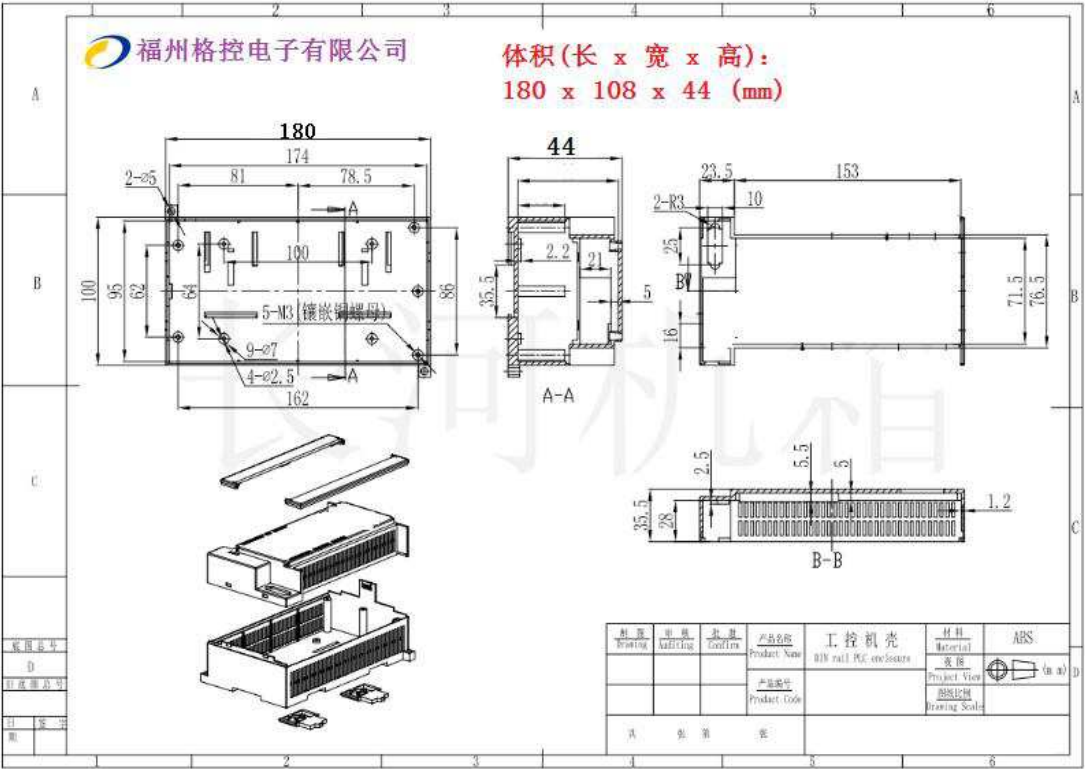
Output mode	Normally open relay
Modbus address	00001-00012:<Number of corresponding channels >
Isolation design	Optocoupler isolation + relay isolation
Resistive load	5A/250VAC, 5A/30VDC
response time	≤0.01s
Mechanical life	Rated 20 million < > Acer relay
Connection mode	

Chapter 10 Thermal resistance PT100 input

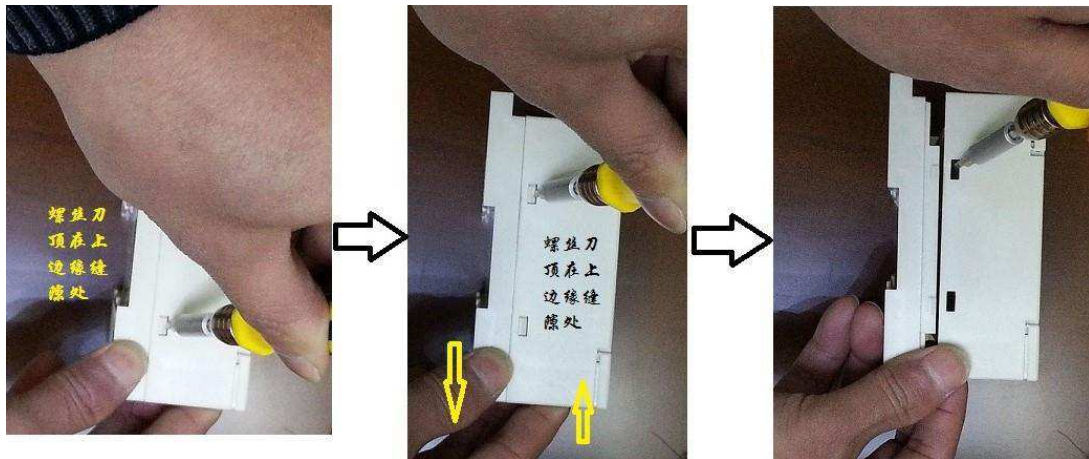
Input type	PT100
Input mode	Two or three wire system
Modbus ADDRESS	30001~30008: < Number of corresponding channels >
accuracy	0.1 Centigrade
Measuring range	-200 to 320 degrees Celsius
Industrial chip	American import chip
Corresponding Modbus Register data	-2000 to 3200 < signed 16 bit integer > Divided by 10 is the actual temperature
Three wire system	



Chapter 11 Housing
size



Chapter 12 Cover instruction



chapter 13 Matters needing attention

1. The default mode of communication is: 9600.N.8.1 station number is: 1;
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