

CWT-MB318K

Modbus I O Module

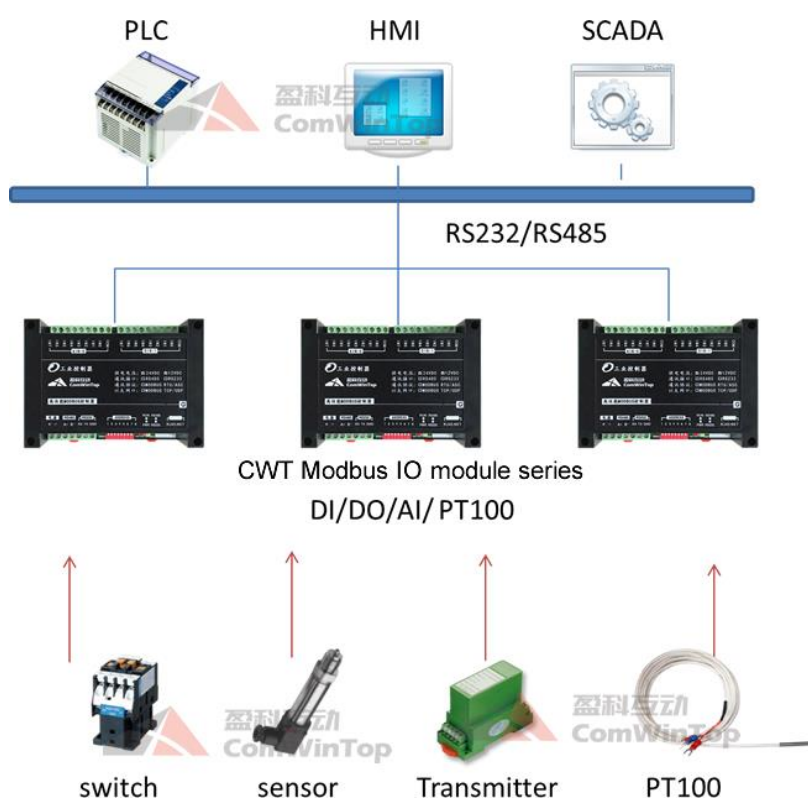
manual

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1 OVERVIEW

Model	Options	IO Port	Communication Port	Protocol
CWT-MB318K	485	8PT + 8DI + 6DO	RS485	Modbus RTU
	485-232	8PT + 8DI + 6DO	RS485+RS232	Modbus RTU
	E	8PT + 8DI + 6DO	Ethernet	Modbus TCP
	E-485-232	8PT + 8DI + 6DO	Ethernet+RS485+RS232	Modbus TCP, Modbus RTU

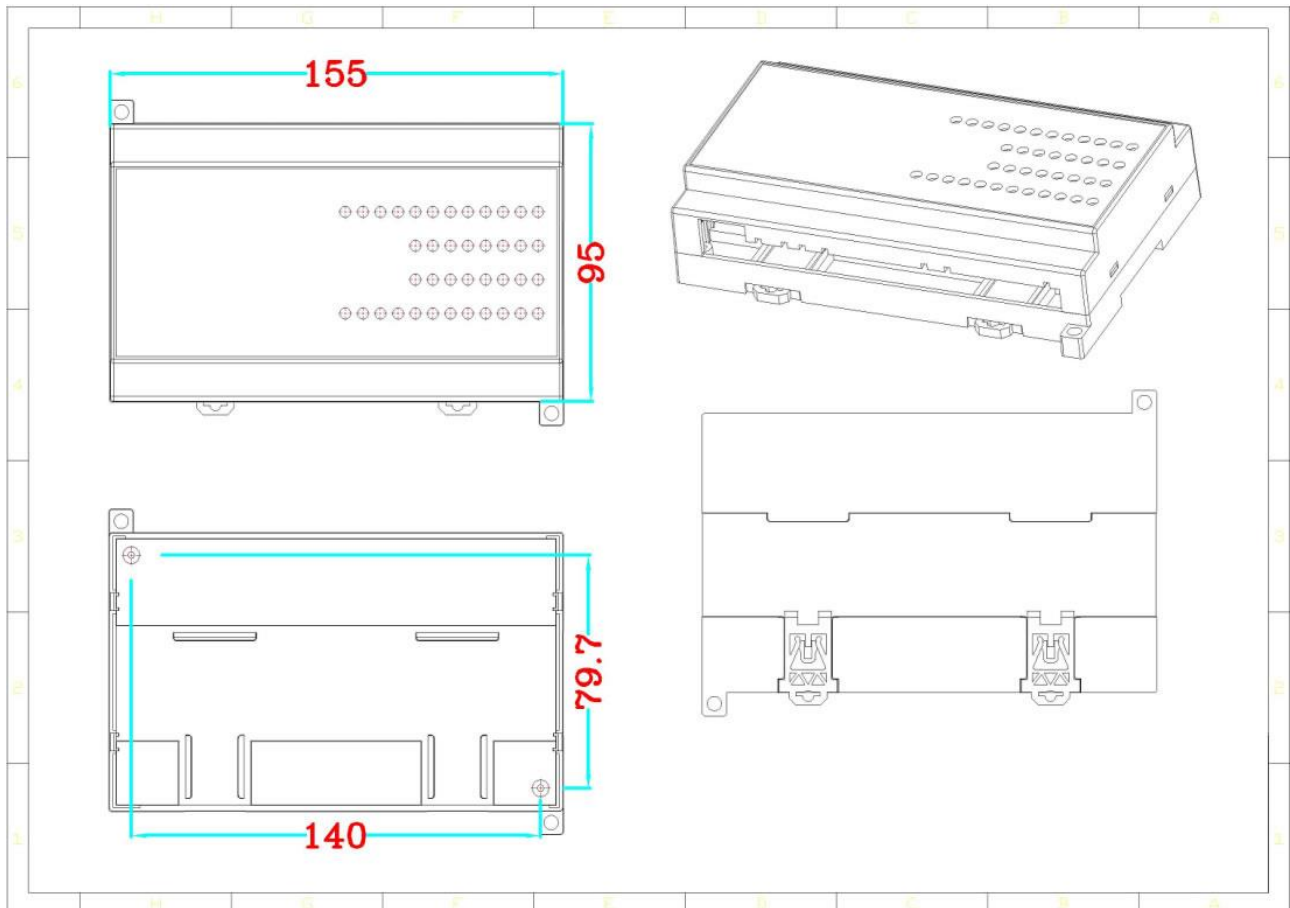


1.1 System Parameter

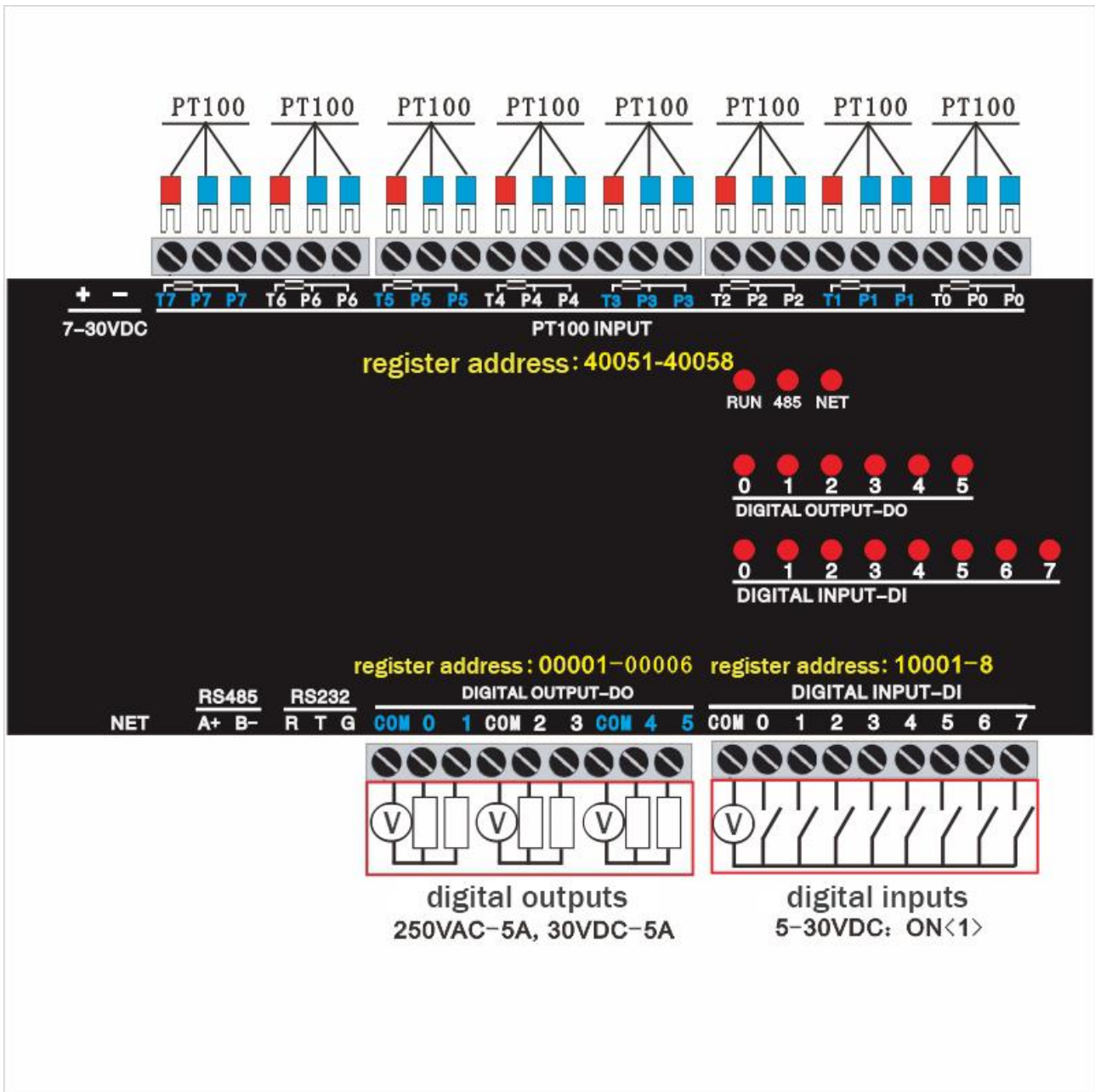
CPU	32-bit ATMEL ARM, 72MHZ
OS	GCOS, 10ms scheduling mechanism
Power	7-35VDC @2W, power supply reverse protection, isolation design
Installation	DIN rail mounting or screw fixing 
Working Environment	-40℃～85℃, 5%～95%RH(non-condensing)
Protection	IP20
Watchdog	1.5m guard

2 INSTALL

2.1 size



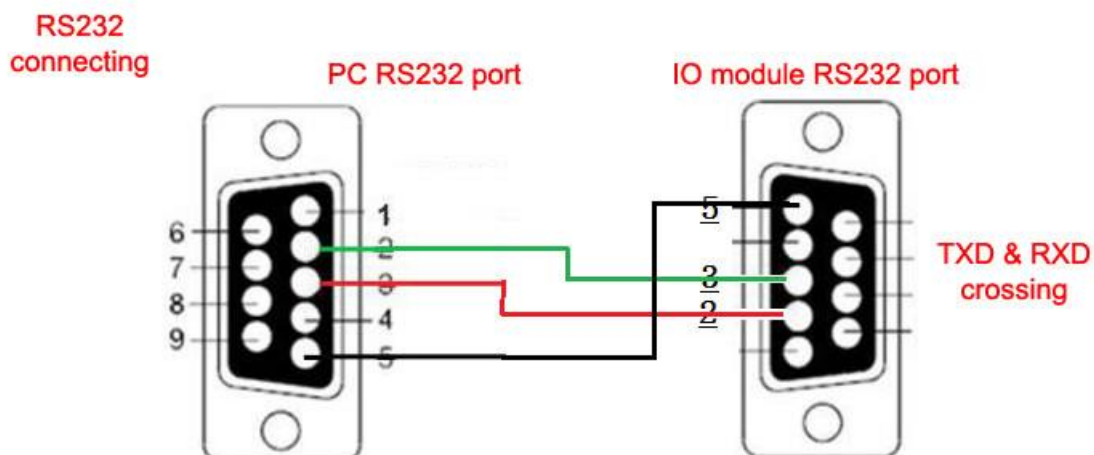
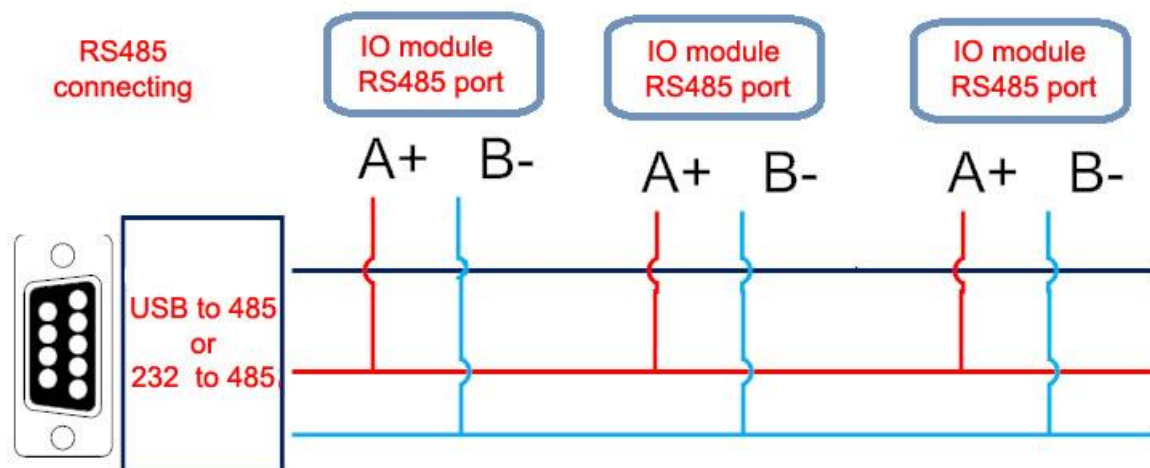
2.2 wiring



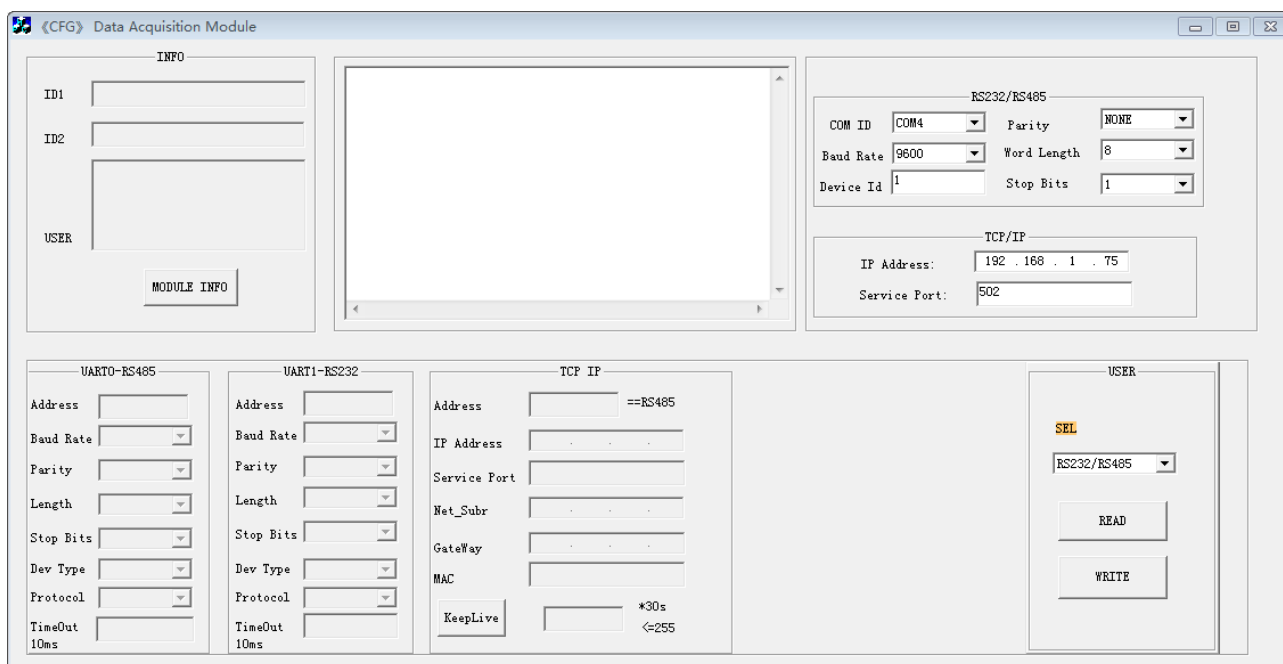
3 CONFIGURATION

3.1 RS232/RS485

Port type	1RS485 & 1RS232
Protection	DCDC isolation design, 2500V lightning protection, ESD, overvoltage, overcurrent protection
Baud rate	1200~115200, default 9600
Parity	Even, Odd, None
start bit	1 bit
data bits	8 bit
Stopbits	1,2bits
Protocol	MODBUS RTU
default	9600.N.8.1, slave id is 1



3.2 Configuration software



Set salve ID, default is 1

3.1 Ethernet

Port type	RJ45
Communicate protocol	MODBUS TCP、MODBUS UDP
Communicate rate	1000 times/s
bandwidth	10M/100Mbps
IP address	192.168.1.75
Port	502

4 DESCRIPTION OF IO CHANNEL

4.1 Digital input

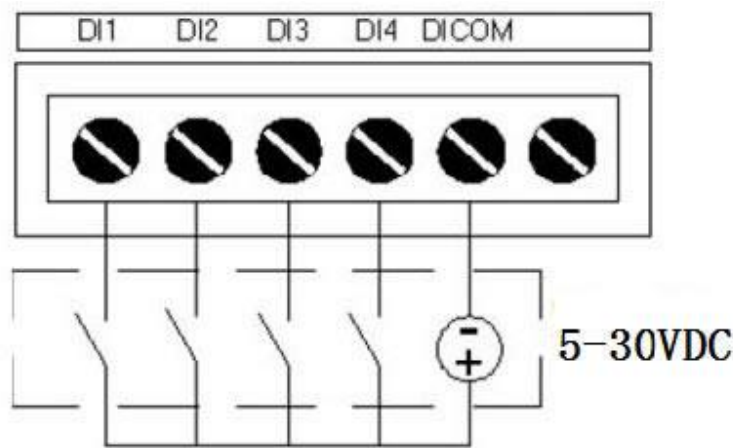
ON signal level	5-30VDC, 6mA@24VDC
OFF signal level	0-3VDC
Protection	opt coupler isolation, 2500V lightning protection, overvoltage, overcurrent protection
Sample rate	0.01m

Modbus Register map

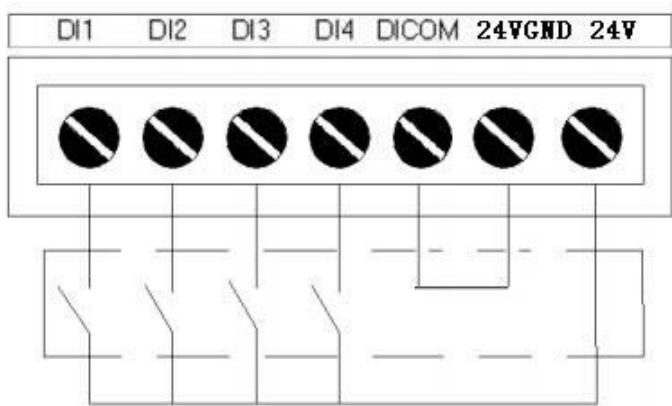
channel	Register address
DI0-DI7	10001-10008

DI wiring diagram

Wet contact wiring



Dry contact wiring



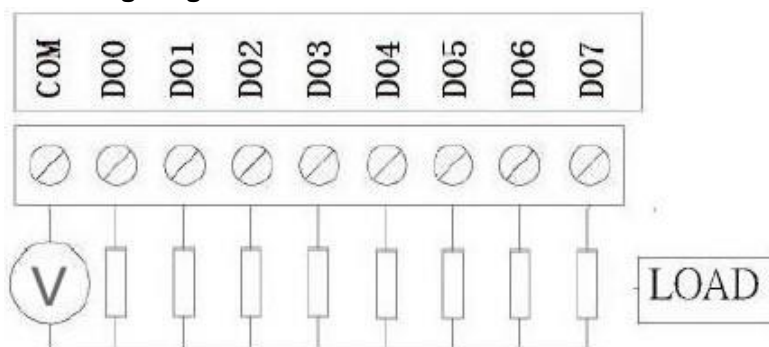
4.2 Digital output

Output type	normal open relay output
Isolation	opt coupler isolation& relay isolation
Resistive load	5A/250VAC, 5A/30VDC
Response time	≤0.01s

Modbus Register map

channel	Register address
Do0-Do5	00001-00006

DO wiring diagram



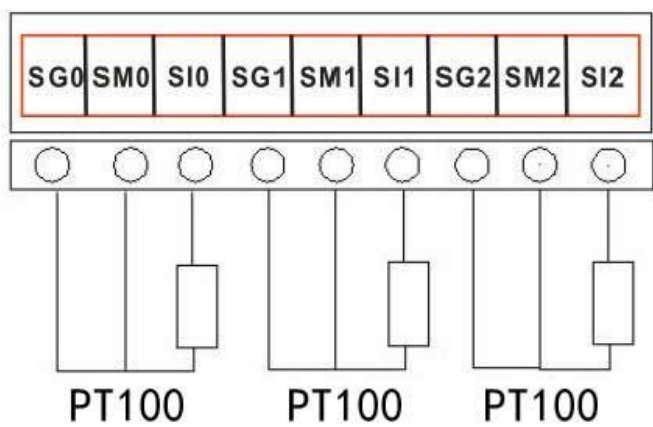
4.3 PT100 Input

Input type	PT100
Precision	0.1°C
Measurement range	-200°C~220°C

Modbus Register map

channel	Register address	Function code	Format	Scaling
PT0-PT7	40051-40058	03	signed UINT16	0.1

Three wires



Two wires

