

CWT-MB307C

Modbus I O Module

manual

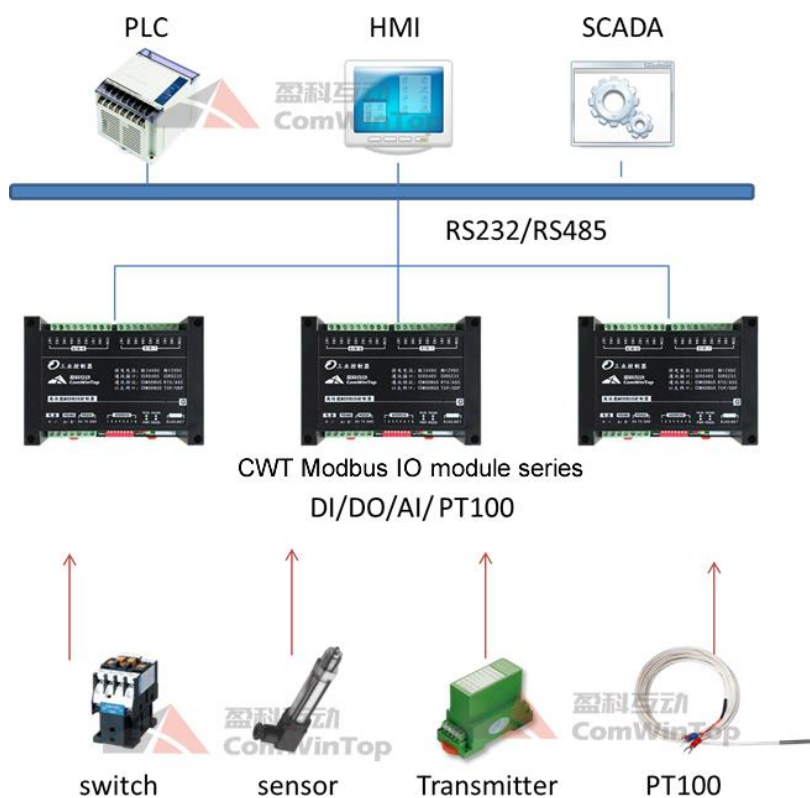
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1 OVERVIEW

Model	Options	IO Port	Communication Port	Protocol
CWT-MB307C	I-V-485-232	4AO (4-20mA/0-10V)	RS485+RS232	Modbus RTU
	I-V-E-485-232	4AO (4-20mA/0-10V)	Ethernet+RS485+RS232	Modbus TCP, Modbus RTU

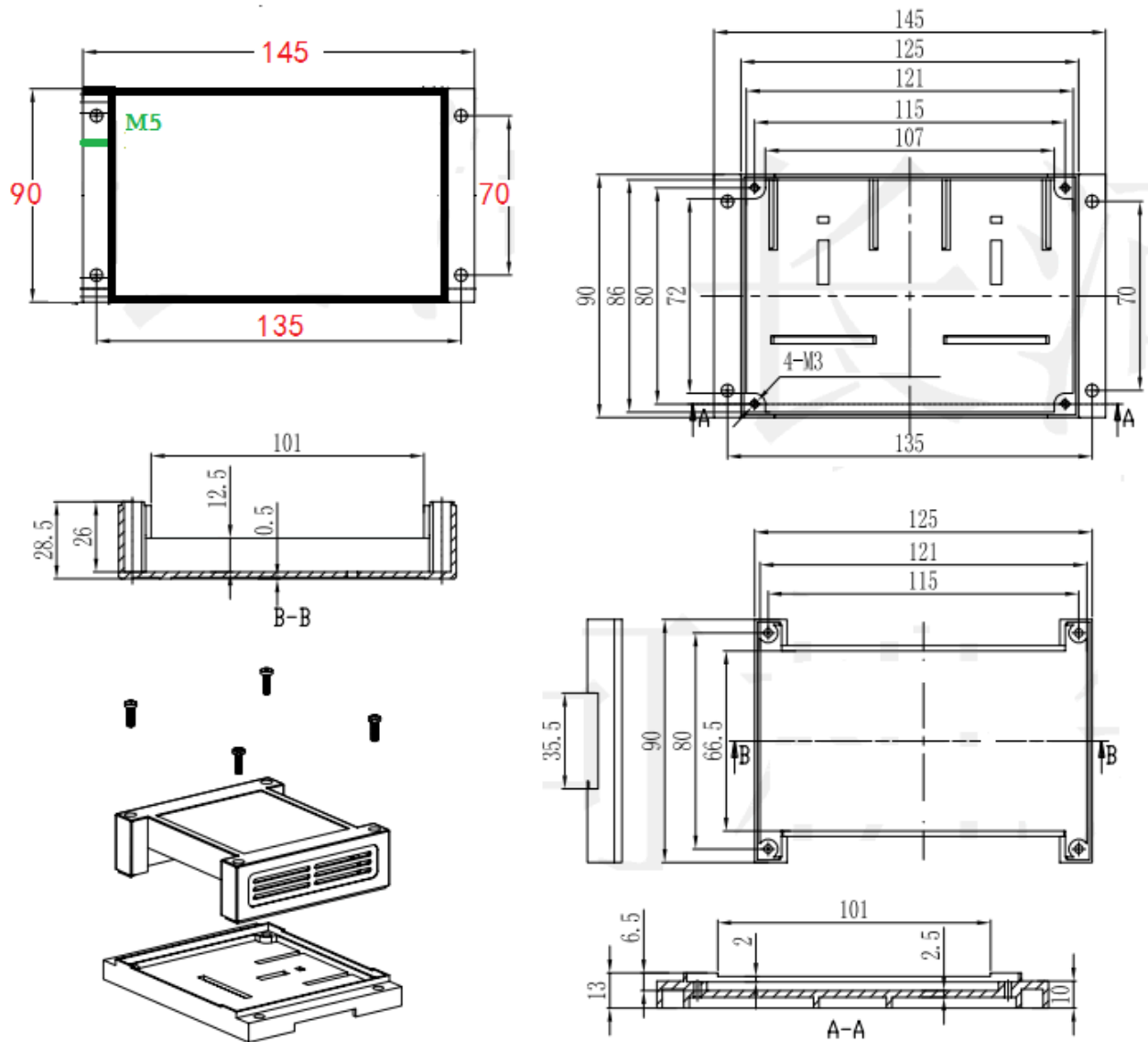


1.1 System Parameter

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

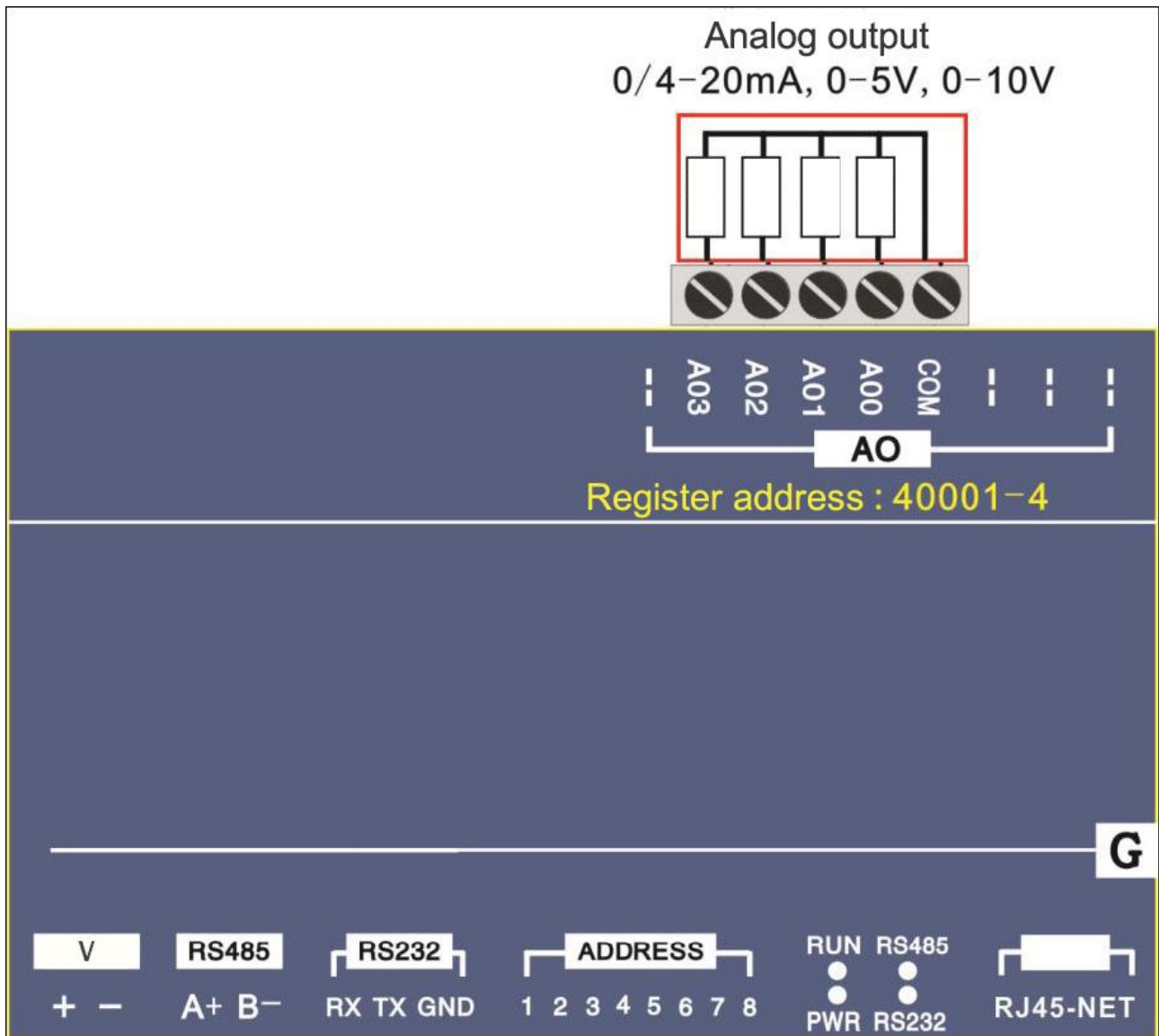
2 INSTALL

2.1 size



145 x 90 x 40 (mm)

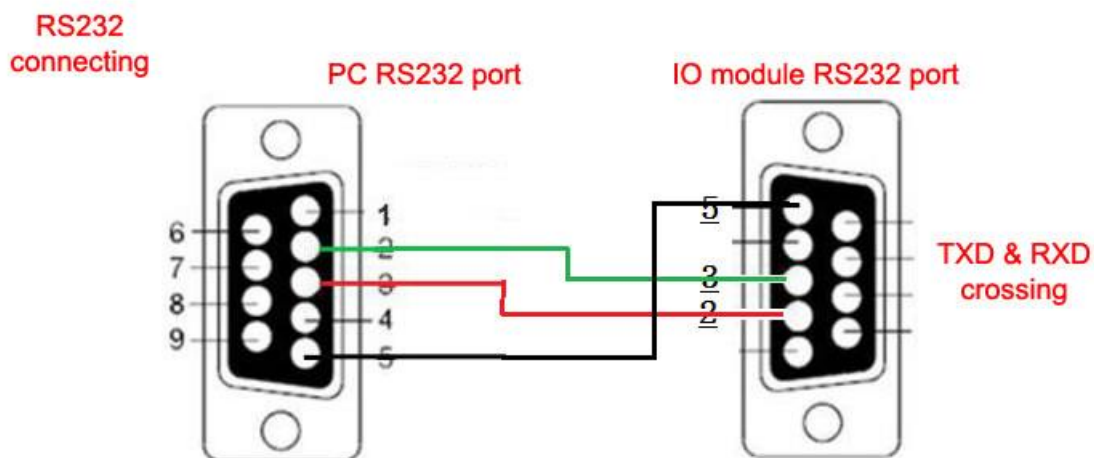
2.2 wiring



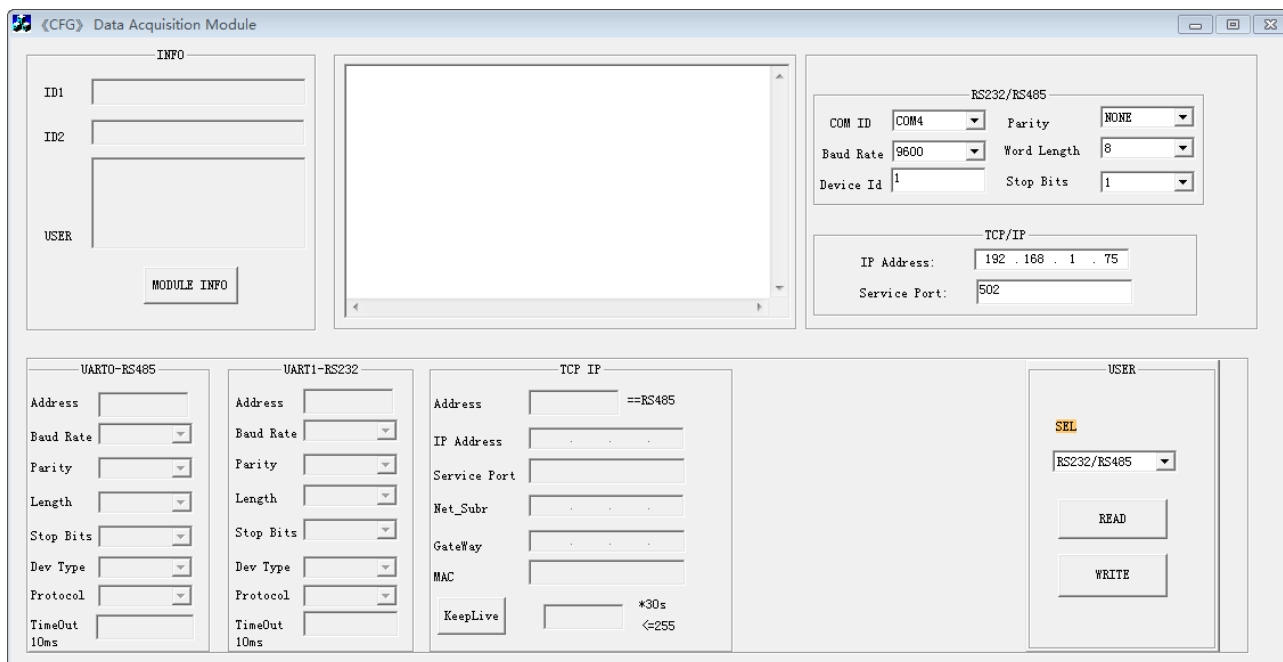
3 CONFIGURATION

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

3.3 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 Analog output

Modbus address	40001~40004 Function code: -- Write multiple: 16 -- Write single: 06 -- read multiple: 03
Output type	Current: 4~20mA/0~20mA <default> Option(need open housing to jumper): Voltage: 0~5V/1~5V/0~10V
Output Precision	0.2%, 12 bit
Isolation	2500V, High speed Opt coupler isolation
Load resistor	current output: load $R \leq 750 \Omega$ voltage output: load $R \geq 2K \Omega$
Range	4~20mA corresponding 10000~50000 <unsigned 16-bit integer> 0~20mA corresponding 00000~50000 0~5V corresponding 00000~25000 0~10V corresponding 00000~50000
Calculation	4~20mA : register value * (50000 / 20) 0~20mA : register value * (50000 / 20) 0~5V : register value * (50000 / 10) 0~10V : register value * (50000 / 10) E.g. Output 6mA register value = 6mA * (50000 / 20) = 15000

AO wiring diagram

