

# **CWT-MB318A**

## **Modbus I O Module**

### **manual**

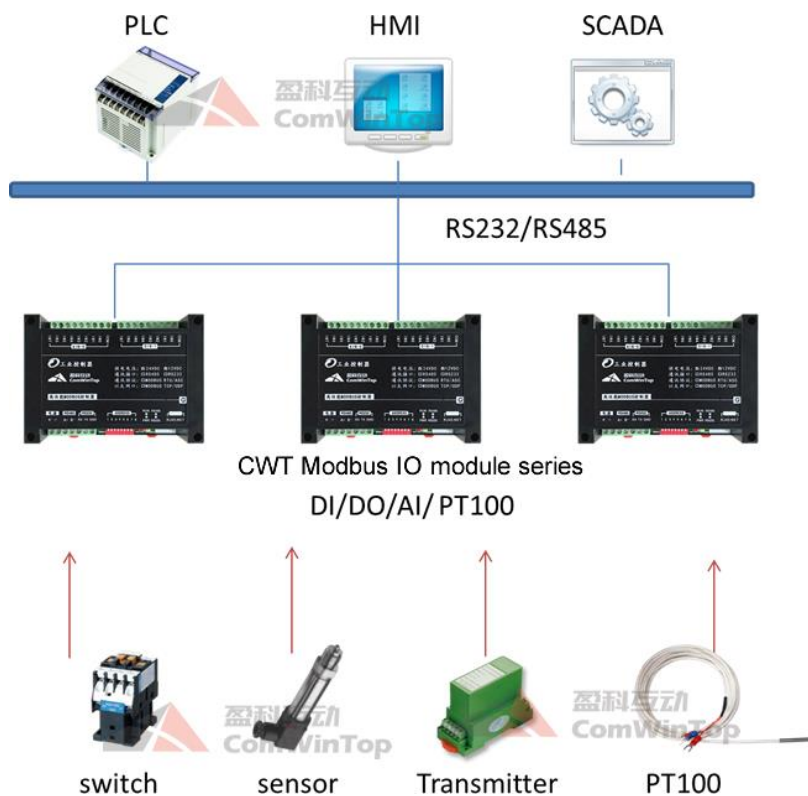
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## 1 OVERVIEW

Model	Options	IO Port	Communication Port	Protocol
CWT-MB318A	485-232	4PT	RS485+RS232	Modbus RTU

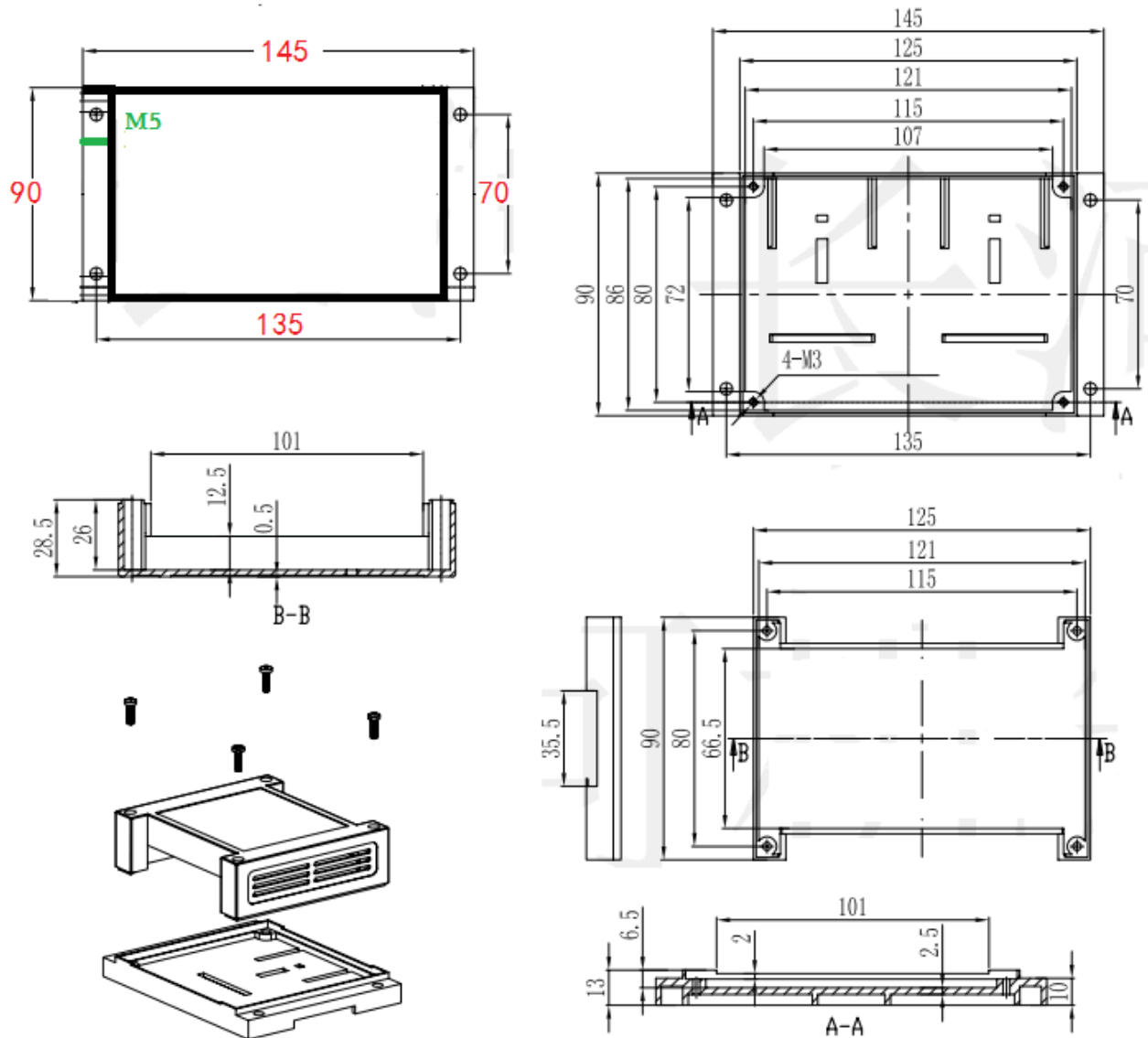


### 1.1 System Parameter

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

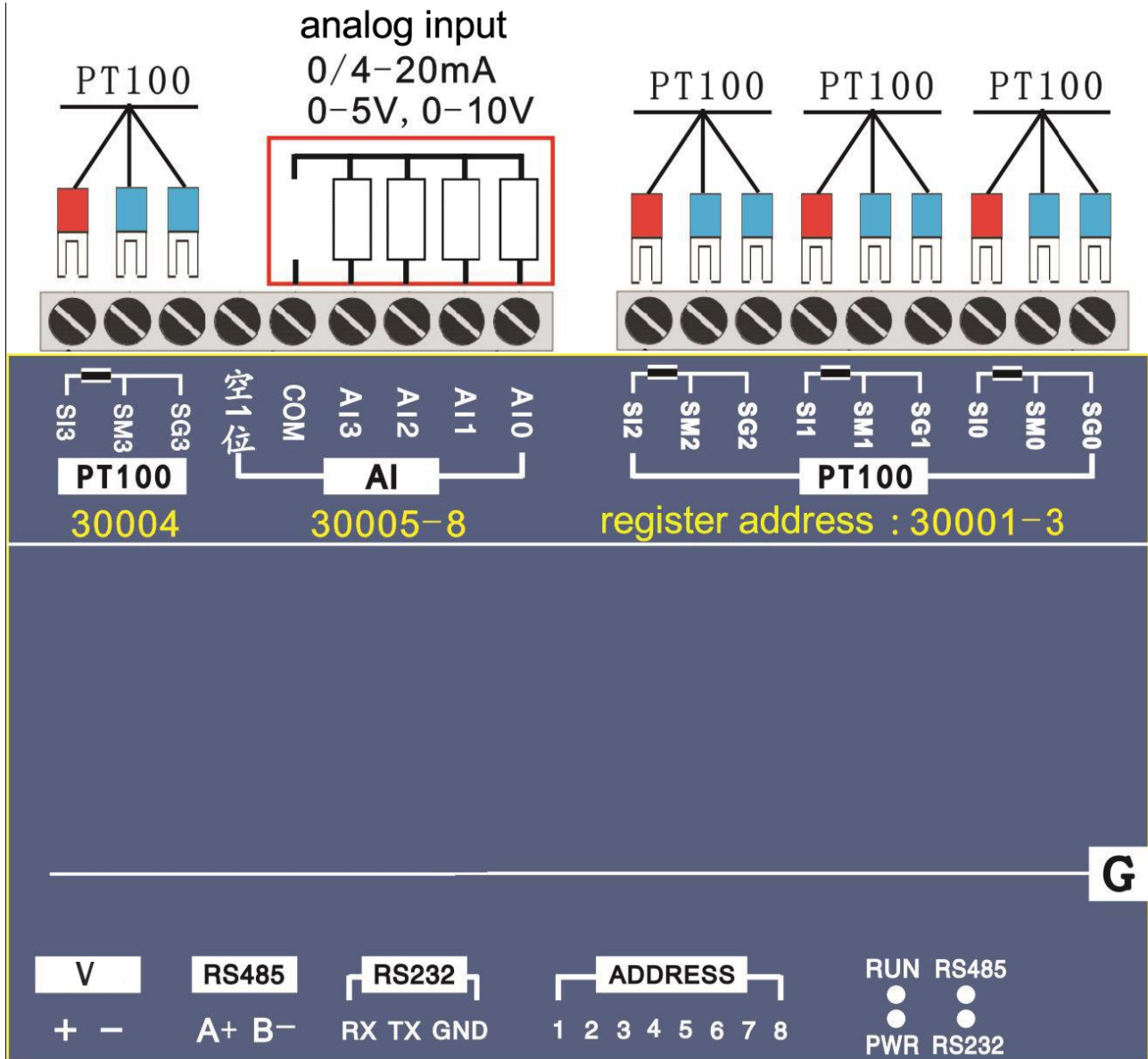
## 2 INSTALL

### 2.1 size



145 x 90 x 40 (mm)

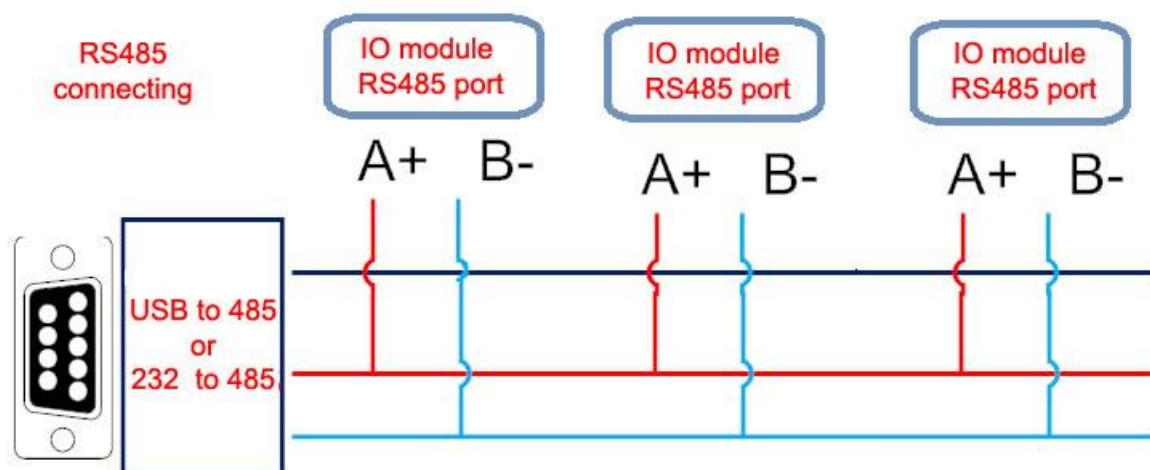
## 2.2 wiring



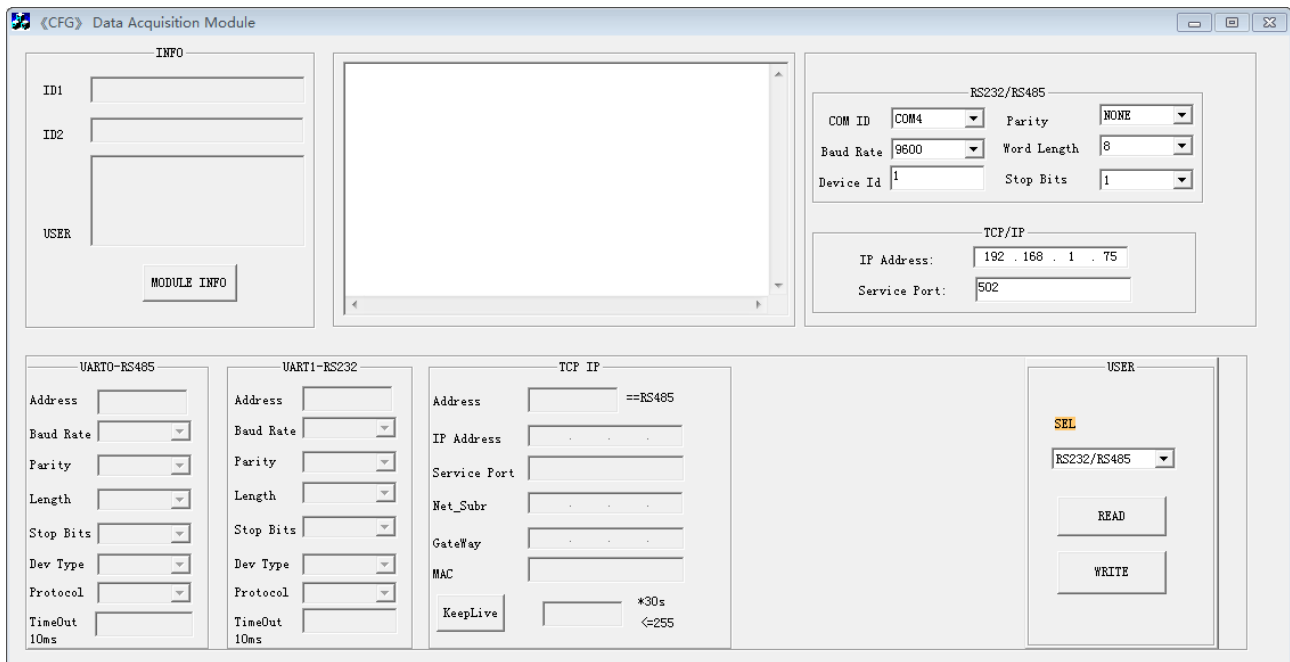
### 3 CONFIGURATION

#### 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



The screenshot shows the 'Data Acquisition Module' configuration window. It is divided into several sections:

- INFO:** Fields for ID1, ID2, and USER. A 'MODULE INFO' button is at the bottom.
- RS232/RS485:** Fields for COM ID (COM4), Parity (NONE), Baud Rate (9600), Word Length (8), Device Id (1), and Stop Bits (1).
- TCP/IP:** Fields for IP Address (192.168.1.75) and Service Port (502).
- UART0-RS485:** Fields for Address, Baud Rate, Parity, Length, Stop Bits, Dev Type, Protocol, and TimeOut (10ms).
- UART1-RS232:** Fields for Address, Baud Rate, Parity, Length, Stop Bits, Dev Type, Protocol, and TimeOut (10ms).
- TCP IP:** Fields for Address (set to ==RS485), IP Address, Service Port, Net\_Subr, GateWay, MAC, and KeepLive (set to \*30s <=255).
- USER:** A 'SEL' button, a dropdown menu set to RS232/RS485, and 'READ' and 'WRITE' buttons.

Set salve ID, default is 1

4 DESCRIPTION OF IO CHANNEL

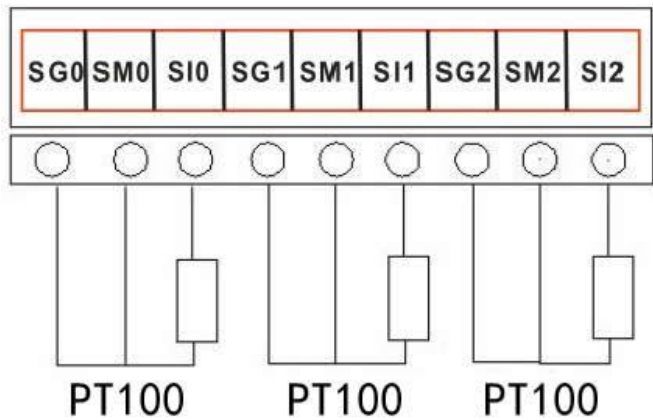
4.1 PT100 Input

Input type	PT100
Precision	0.1℃
Measurement range	-200℃～220℃

Modbus Register map

channel	Register address	Function code	Format	Scaling
PT0-PT3	30001-30004	04	signed UINT16	0.1

Three wire



Two wire

