



# VM-IW32 系列电流信号采集单元

## VM-IW32 Series Current Signal Collect Unit

### 1. 概述 Introduction

VM-IW32 系列电流信号采集单元配套 32 个外置电流互感器，可以同时采集 32 路电流信号。32 个外置互感器可以使用不同变比类型。通过设置 CT 值可以直接显示一次侧电流。

VM-IW32 series current signal collect unit with 32 external CT, can collect 32 current signal. 32 external CT can use different kinds of ratio. It can display the primary currents by setting the CT value.

### 2. 性能指标 Performance index

测量范围 Measuring range: AC/DC~20mA (二次侧 the secondary currents)

过载能力 Overload capacity: 2 倍过载 2 times

精度等级 Accuracy: 0.5 级 level

辅助电源 Power supply: AC85~265V or DC85~330V

或 or DC20~60V

工频耐压 Insulation voltage: 电源/输入/输出间 between power supply/input/output: AC1.0kV/min-1mA

绝缘电阻 Insulation resistance: ≥100MΩ

通讯接口 Communication port: RS-485

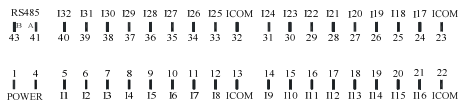
地址 Address: 1~32

波特率 Baud rate: 2400/4800/9600/19200

校验位 Parity bit: 奇/偶/无 N/E/O

通讯规约 Communication protocol: ModBus RTU

### 3. 端子定义如下 Terminal's Definition:

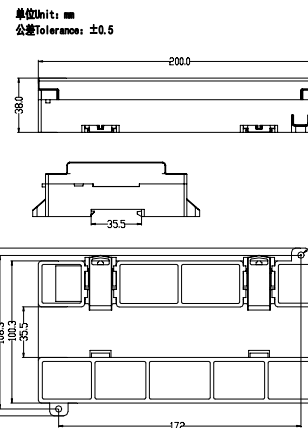


1、4	POWER	辅助电源输入端 Power supply input terminal
13、22、23、32	ICOM	电流输入公共端 Current input public terminal
5	I1	第 1 路电流接线端 The 1st current terminal
6	I2	第 2 路电流接线端 The 2nd current terminal
7	I3	第 3 路电流接线端 The 3rd current terminal
.....	.....	.....
38	I30	第 30 路电流接线端 The 30th current terminal
39	I31	第 31 路电流接线端 The 31st current terminal
40	I32	第 32 路电流接线端 The 32nd current terminal
41	A	RS485 接口的 A 端 Terminal A for RS485 interface
43	B	RS485 接口的 B 端 Terminal B for RS485 interface

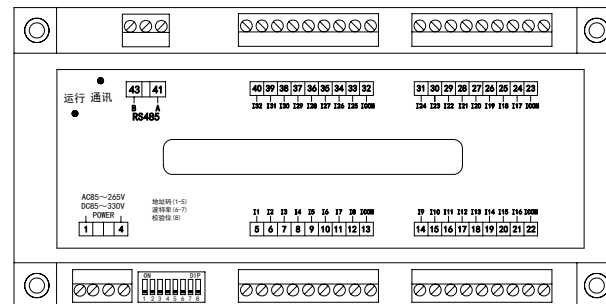
### 4. 安装和接线说明 Instruction for Installation and Connection

安装方便，直接卡装在标准导轨上即可 Convenient installation, can be directly mounted on standard sliding-way

外形尺寸(长×宽×高)Dimension (L×W×H): 200±0.5mm×118.3±0.5mm×38±0.5mm



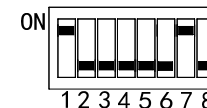
外形尺寸图 Dimension



运行	Run
通讯	Communication
地址码(1-5)	Address Code (1-5)
波特率(6-7)	Baud rate (6-7)
校验位(8)	Check digit (8)

外形图 Drawing

### 5. 拨码开关设置 DIP Switch Setting



上图所示设置状态为：地址 01；波特率 9600；无校验  
The setting condition is as the picture above: Address 01; Baud rate 9600; None parity



## 6. 拨码定义 DIP Definition

1	2	3	4	5	6	7	8
地址设置 Address setting				波特率设置 Baud rate setting		通讯校验位设置 Communication parity setting	

## 7. 地址定义 Address Definition

拨码 DIP 5	拨码 DIP 4	拨码 DIP 3	拨码 DIP 2	拨码 DIP 1	地址 Address
0	0	0	0	1	1
0	0	0	1	0	2
-----					
-----					
-----					
1	1	1	1	1	31
0	0	0	0	0	32

### ◆波特率设置 Baud Rate Setting

波特率 Baud rate	拨码 DIP 7	拨码 DIP 6
2400bps	0	0
4800bps	0	1
9600bps	1	0
19200bps	1	1

### ◆通讯校验码设置 Communication Parity Setting

模式 Mode	拨码 DIP8
无校验 None check	0
奇偶校验 Parity check (上位机发奇校验, 下位机也发奇校验 The upper pc send odd parity, the same as the lower pc; 上位机发偶校验, 下位机也发偶校验 The upper pc send even parity, the same as the lower pc)	1

## 8. Modbus 寄存器定义 Register Definition

### ◆读写寄存器内容 Read-Write Register Content

地址(十进制) Address(decimal)	内容 Contents	读/写 Read/Write	命令字 Command character	字节长度 Byte length
00	仪表识别码 Meter ID(205)	R	03	2
01	版本号 Version NO (0001)	R	03	2
02	地址编码 Address code	R	03	2
03	波特率 Baud rate	R	03	2
04	校验模式 Parity mode	R	03	2
10	第 1 路测量值 The 1st measured value	R	03	2
	.....			
40	第 31 路测量值 The 31st measured value	R	03	2

41	第 32 路测量值 The 32nd measured value	R	03	2
130	CT1	R/W	03/10	2
131	CT2	R/W	03/10	2
	.....			
160	CT31	R/W	03/10	2
161	CT32	R/W	03/10	2

### 注 Note:

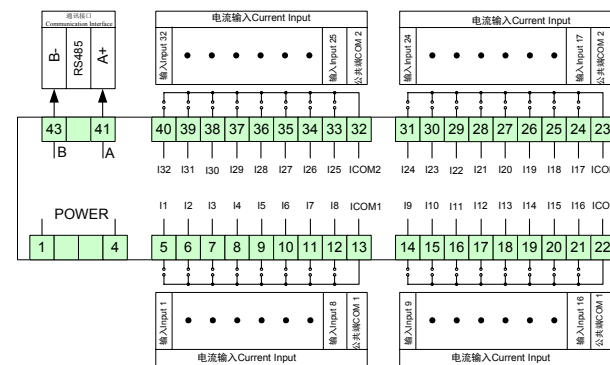
外置互感器的二次侧电流应在 AC/DC0~20mA 范围内, CT 必须设置为整数, 范围是 1~65535。

The secondary currents of the external CT should range in AC/DC0~20mA, the CT should be integer, ranged in 1~65535.

CT变比设置实例: 若用电流互感器为50A/10mA, 则变比设置为: 5000。

Example of CT setting: If using a current transformer of 50A/10mA, the CT should be set to 5000.

## 9. 接线端子图 Connection Diagram



注: 互感器 I1~I18 蓝线须对应接主机 I1~I18 端子, 白线接主机 ICOM1 端子。

Transformers I1~I18 blue line should be connected to the host I1~I18 terminals, white line host ICOM1 terminals;

互感器 I19~I32 蓝线须对应接主机 I19~I32 端子, 白线接主机 ICOM2 端子。

Transformer I19~I32 blue line should be connected to the host I19~I32 terminal, white line host ICOM2 terminal.

注: 以上图片仅供参考, 以实际出货为准。

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