# JY-MODUBS-IO16T 模块

# 使用手册

--V1.0

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# 一、产品概述

## 1.1、产品简介

JY-MODUBS-IO16T 是一款集数字量采集控制 ,带 485 串口 MODUBUS RTU 通讯等功能的模块，是一款经济稳定、安装简易，适用性强的产品。

## 1.2、特点功能

- 16 路光电隔离数字量输入，16 路晶体管数字量输出（对应数量状态指示灯）
- 1 路 RS485 通讯接口（端子）
- 采用标准 MODBUS RTU 通信，可与 PLC、组态、上位机等进行组网
- 带本模块波特率、站地址拨码开关，方便设置模块参数
- 专用上位机可设置模块参数永久保存
- 电源电路采用防反接设计
- 广泛用于工业现场设备的信号采集和控制

## 1.3、应用场景

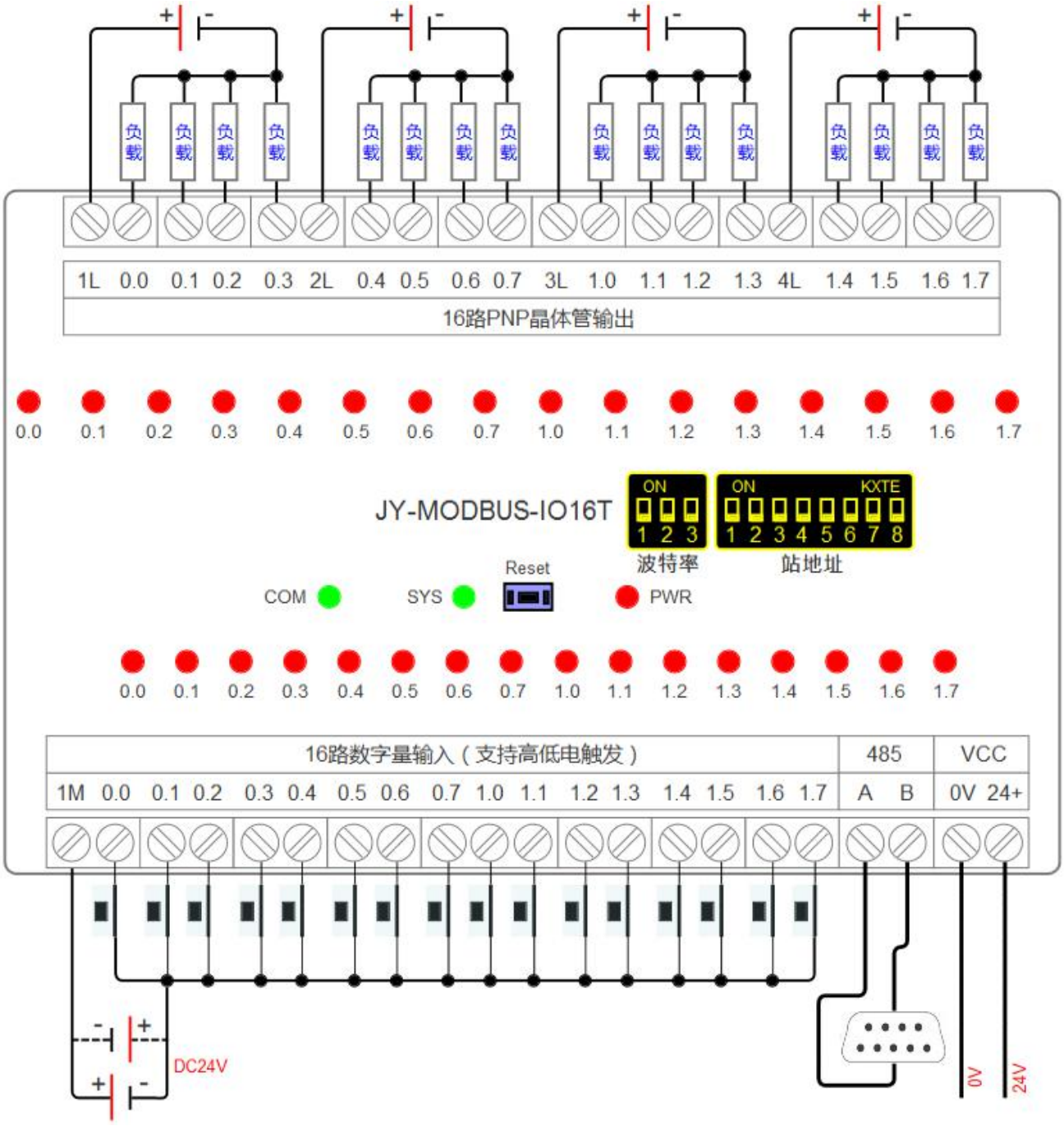
JY-MODUBS-IO16T 模块可应用范围很广，如：PLC 控制、工业自动化、楼宇自控、 POS 系统、电力监控、门禁医疗、考勤系统、自助银行系统、电信机房监控、信息家电、LED 信息显示设备、测量仪表及环境动力监控系统、售饭系统等含 RS485 串口的设备或系统。

# 二、产品规格

## 2.1、产品参数

| 主要参数 | |
|---|---|
| 输入接口（DI） | |
| 输入点数 | 16 路 |
| 输入信号类型 | 开关触点信号或电平信号 |
| 输入信号有效范围 | DC 20~28V |
| 绝缘回路 | 光耦隔离 |
| 输出接口（DO） | |
| 输出点数 | 16 路 |
| 输出类型 | PNP 晶体管输出，常开触点 |
| 输出能力 | 0.5A/点；2A/4 点 |
| 绝缘回路 | 光耦隔离 |
| 串口参数（RS485 通讯参数） | |
| 接口类型 | RS485（为接线端子） |
| 波特率 | 1200~115200（默认 9600，由波特率拨码开关决定，见 5.1 章节） |
| 通信格式 | 默认 8 位数据，1 位停止，无校验（固定） |
| 传输距离 | 波特率 9600 时，485 串口通讯 1200 米，以实际为准 |
| 电源参数 | |
| 工作电压 | DC 24V;带防反接保护 |
| 功耗 | 2W~4W |
| 工作环境 | |
| 工作温度 | -20℃~+70℃ |
| 存储温度 | -40℃~+85℃ |
| 其他 | |
| 安装方式 | 导轨 |
| 尺寸 | 125MM(长)*80MM(宽)*50MM(高)，以实物为准 |

## 2.2、各部分说明


负载
1L 0.0 0.1 0.2 0.3 2L 0.4 0.5 0.6 0.7 3L 1.0 1.1 1.2 1.3 4L 1.4 1.5 1.6 1.7
16路PNP晶体管输出
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7
JY-MODBUS-IO16T
ON
1 2 3
波特率
ON KXTE
1 2 3 4 5 6 7 8
站地址
Reset
COM
SYS
PWR
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7
16路数字量输入（支持高低电触发）
485
VCC
1M 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7
A B
0V 24+
DC24V
0V
24V

## 2.2.1、端子说明

| 端子标号 | 功能说明 |
|---|---|
| 24+ | DC 24V 电源正极 |
| 0V | DC 24V 电源负极 |
| A | 485 A |
| B | 485 B |
| 1M | 第 1~16 路数字量输入通道公共端 |
| 0.0 | 第 1 路数字量输入 |
| 0.1 | 第 2 路数字量输入 |
| 0.2 | 第 3 路数字量输入 |
| 0.3 | 第 4 路数字量输入 |
| 0.4 | 第 5 路数字量输入 |
| 0.5 | 第 6 路数字量输入 |
| 0.6 | 第 7 路数字量输入 |
| 0.7 | 第 8 路数字量输入 |
| 1.0 | 第 9 路数字量输入 |
| 1.1 | 第 10 路数字量输入 |
| 1.2 | 第 11 路数字量输入 |
| 1.3 | 第 12 路数字量输入 |
| 1.4 | 第 13 路数字量输入 |
| 1.5 | 第 14 路数字量输入 |
| 1.6 | 第 15 路数字量输入 |
| 1.7 | 第 16 路数字量输入 |

| 端子标号 | 功能说明 |
|---|---|
| 1L | 第 1~4 路数字量输出通道公共端 |
| 0.0 | 第 1 路数字量输出 |
| 0.1 | 第 2 路数字量输出 |
| 0.2 | 第 3 路数字量输出 |
| 0.3 | 第 4 路数字量输出 |
| 2L | 第 5~8 路数字量输出通道公共端 |
| 0.4 | 第 5 路数字量输出 |
| 0.5 | 第 6 路数字量输出 |
| 0.6 | 第 7 路数字量输出 |
| 0.7 | 第 8 路数字量输出 |
| 3L | 第 9~12 路数字量输出通道公共端 |
| 1.0 | 第 9 路数字量输出 |
| 1.1 | 第 10 路数字量输出 |
| 1.2 | 第 11 路数字量输出 |
| 1.3 | 第 12 路数字量输出 |
| 4L | 第 13~16 路数字量输出通道公共端 |
| 1.4 | 第 13 路数字量输出 |
| 1.5 | 第 14 路数字量输出 |
| 1.6 | 第 15 路数字量输出 |
| 1.7 | 第 16 路数字量输出 |
| 波特率 | 串口波特率的拨码开关 |
| 站地址 | 本模块站号拨码开关 |
| Reset | 复位按钮：<br>复位模块总线错误参数 |

## 2.2.2、指示灯说明

| 名称 | 说明 |
|---|---|
| PWR | 电源指示灯，上电后即常亮 |
| SYS | 系统指示灯：模块正常时一秒慢闪，Reset 复位时快闪 |
| COM | COM 口通讯指示灯，COM 口通讯时闪烁 |

## 2.2.3、数字量输入信号说明

输入信号支持正电/高电或负电/低电接入。

- 当输入端子接正电/高电信号有效时，对应的输入公共端 1M 接电源负极;
- 当输入端子接负电/低电信号有效时，对应的输入公共端 1M 接电源正极。

# 三、本机 MODBUS 寄存器地址

## 3.1、离散量输入

| 离散量输入地址（功能码：0x02 ） | | | | | |
|---|---|---|---|---|---|
| 名称 | PLC 对应地址 | MODBUS 对应地址 | 读/写 | 数值范围 | 说明 |
| 数字量输入通道 1 | 10001 | 0x00 | 只读 | 0 或 1 | 对应数字量输入通道信号状态，<br>0 表示数字输入通道无有效信号入，指示灯灭；<br>1 表示数字输入通道有有效信号输入，指示灯亮。 |
| 数字量输入通道 2 | 10002 | 0x01 | | | |
| 数字量输入通道 3 | 10003 | 0x02 | | | |
| 数字量输入通道 4 | 10004 | 0x03 | | | |
| 数字量输入通道 5 | 10005 | 0x04 | | | |
| 数字量输入通道 6 | 10006 | 0x05 | | | |
| 数字量输入通道 7 | 10007 | 0x06 | | | |
| 数字量输入通道 8 | 10008 | 0x07 | | | |
| 数字量输入通道 9 | 10009 | 0x08 | | | |
| 数字量输入通道 10 | 10010 | 0x09 | | | |
| 数字量输入通道 11 | 10011 | 0x0A | | | |
| 数字量输入通道 12 | 10012 | 0x0B | | | |
| 数字量输入通道 13 | 10013 | 0x0C | | | |
| 数字量输入通道 14 | 10014 | 0x0D | | | |
| 数字量输入通道 15 | 10015 | 0x0E | | | |
| 数字量输入通道 16 | 10016 | 0x0F | | | |

读离散量输入 ModBus RTU 报文示例（0x02 功能码）：

发送 MODBUS RTU 报文读取本机的 1~16 输入通道状态，示例中输入通道 1、3、6、8、12、15 有效。

请求报文（16 进制）：01 02 00 00 00 10 79 C6

| 请求报文 | 01 | 02 | 00 00 | 00 10 | 79 C6 |
|---|---|---|---|---|---|
| 字节数 | 1 | 1 | 2 | 2 | 2 |
| 含义 | 站号 | 功能码 | 离散量起始地址 | 地址数量 | CRC 校验码 |

应答报文（16 进制）：01 02 02 A5 48 C2 DE

| 应答报文 | 01 | 02 | 02 | A5 48 | C2 DE |
|---|---|---|---|---|---|
| 字节数 | 1 | 1 | 1 | 2 | 2 |
| 含义 | 站号 | 功能码 | 数据字节长度 | 16 路数字量输入状态 | CRC 校验码 |

应答报文中的 16 路数字量输入状态值“A5 48”,其中 A5 对应 8 位二进制数 :1010 0101，1 表示输入信号有效，指示灯亮；0 表示无有效输入信号，指示灯灭；从高 bit 位到低 bit 位依次对应数字输入 8-1 通道，则此时 1、3、6、8 输入状态有效，指示灯亮。

48 对应 8 位二进制数 :1010 0101，从高 bit 位到低 bit 位依次对应数字输入 16-9 通道，则此时 12、15 输入状态有效，指示灯亮。

其余输入状态无效，指示灯灭。

## 3.2、输出线圈

| 输出线圈地址（功能码：0x01、0x05、0x0F ） | | | | | |
|---|---|---|---|---|---|
| 名称 | PLC 对应地址 | MODBUS 对应地址 | 读/写 | 数值范围 | 说明 |
| 数字量输出通道 1 | 00001 | 0x00 | 读/写 | 0 或 1 | 对应数字量输出通道信号状态，<br>0 表示数字输出通道断开，指示灯灭；<br>1 表示数字输出通道闭合，指示灯亮。 |
| 数字量输出通道 2 | 00002 | 0x01 | | | |
| 数字量输出通道 3 | 00003 | 0x02 | | | |
| 数字量输出通道 4 | 00004 | 0x03 | | | |
| 数字量输出通道 5 | 00005 | 0x04 | | | |
| 数字量输出通道 6 | 00006 | 0x05 | | | |
| 数字量输出通道 7 | 00007 | 0x06 | | | |
| 数字量输出通道 8 | 00008 | 0x07 | | | |
| 数字量输出通道 9 | 00009 | 0x08 | | | |
| 数字量输出通道 10 | 00010 | 0x09 | | | |
| 数字量输出通道 11 | 00011 | 0x0A | | | |
| 数字量输出通道 12 | 00012 | 0x0B | | | |
| 数字量输出通道 13 | 00013 | 0x0C | | | |
| 数字量输出通道 14 | 00014 | 0x0D | | | |
| 数字量输出通道 15 | 00015 | 0x0E | | | |
| 数字量输出通道 16 | 00016 | 0x0F | | | |

1）读输出线圈 ModBus RTU 报文示例（0x01 功能码）：

发送 MODBUS RTU 报文读取本机的 1~16 输出通道状态，示例中输入通道 2、4、5、11、16 有效。

请求报文（16 进制）：01 01 00 00 00 10 3D C6

| 请求报文 | 01 | 01 | 00 00 | 00 10 | 3D C6 |
|---|---|---|---|---|---|
| 字节数 | 1 | 1 | 2 | 2 | 2 |
| 含义 | 站号 | 功能码 | 线圈起始地址 | 地址数量 | CRC 校验码 |

应答报文（16 进制）：01 01 02 1A 84 B2 FF

| 应答报文 | 01 | 01 | 02 | 1A 84 | B2 FF |
|---|---|---|---|---|---|
| 字节数 | 1 | 1 | 1 | 2 | 2 |
| 含义 | 站号 | 功能码 | 数据字节长度 | 16 路数字量输出状态 | CRC 校验码 |

应答报文中的 16 路数字量输出状态值“1A 84”，其中 1A 对应 8 位二进制数 :0001 1010，1 表示输出信号有效，指示灯亮；0 表示无有效输出信号，指示灯灭；从高 bit 位到低 bit 位依次对应数字输出 8-1 通道，则此时 2、4、5 输出状态有效，指示灯亮。

84 对应 8 位二进制数 :1000 0100 ,从高 bit 位到低 bit 位依次对应数字输出 16-9 通道，则此时 11、16 输出状态有效，指示灯亮。

其余输出状态无效，指示灯灭。

2）写单个输出线圈 ModBus RTU 报文示例（0x05 功能码）：

发送 MODBUS RTU 报文写本机的单个输出线圈状态，示例中通过报文使通道 7 闭合。

请求报文（16 进制）：01 05 00 06 FF 00 6C 3B

| 请求报文 | 01 | 05 | 00 06 | FF 00 | 6C 3B |
|---|---|---|---|---|---|
| 字节数 | 1 | 1 | 2 | 2 | 2 |
| 含义 | 站号 | 功能码 | 线圈地址 | 写入值：FF 00 使通道闭合，00 00 使能通道断开 | CRC 校验码 |

应答报文（16 进制）：01 05 00 06 FF 00 6C 3B

| 请求报文 | 01 | 05 | 00 06 | FF 00 | 6C 3B |
|---|---|---|---|---|---|
| 字节数 | 1 | 1 | 2 | 2 | 2 |
| 含义 | 站号 | 功能码 | 线圈地址 | 写入值：FF 00 使通道闭合，00 00 使能通道断开 | CRC 校验码 |

3）批量写多个输出线圈 ModBus RTU 报文示例（0x0F 功能码）：

发送 MODBUS RTU 报文写本机的多个输出线圈状态，示例中通过报文使通道 1、3、8、10、15 闭合，其余通道断开。

请求报文（16 进制）：01 0F 00 00 00 10 02 85 42 00 81

| 请求报文 | 01 | 0F | 00 00 | 00 10 | 02 | 85 42 | 00 81 |
|---|---|---|---|---|---|---|---|
| 字节数 | 1 | 1 | 2 | 2 | 1 | 2 | 2 |
| 含义 | 站号 | 功能码 | 线圈起始地址 | 地址数量 | 数据字节数 | 写入状态值 | CRC 校验码 |

应答报文（16 进制）：01 0F 00 00 00 10 54 07

| 请求报文 | 01 | 05 | 00 00 | 00 10 | 54 07 |
|---|---|---|---|---|---|
| 字节数 | 1 | 1 | 2 | 2 | 2 |
| 含义 | 站号 | 功能码 | 线圈起始地址 | 地址数量 | CRC 校验码 |

发送报文中的 16 路数字量输出写入状态值“85 42”，其中 85 对应 8 位二进制数：1000 0101，1 表示使输出通道闭合，指示灯亮；0 表示使输出通道断开，指示灯灭；从高 bit 位到低 bit 位依次对应数字输出 8-1 通道，则此时 1、3、8 数字量输出通道闭合，指示灯亮。

42 对应 8 位二进制数：0100 0010，从高 bit 位到低 bit 位依次对应数字输出 16-9 通道，则此时使 10、15 输出状态有效，指示灯亮。

其余通道断开，指示灯灭。

# 四、产品功能

## 4.1、开关量采集控制功能

本模块开关量采集控制的功能，可以支持采集按钮开关、接近开关等开关量信号状态，控制电磁阀、接触器、指示灯、报警器等开关量。

## 4.2、MODBUS RTU 通讯功能

本模块 485 串口为 A、B 端子。只要支持标准的 MODBUS RTU 的主站设备（PLC、组态、触摸屏、上位机等），通过连接模块 485 串口即可采集控制模块的开关量数据。

## 4.3、修改总线错误模式

总线错误的判断功能主要用于在连接本模块的通讯出现总线错误后，决定本模块的所有数字量输出状态时继续保持，或是复位为关断状态。

当连接本模块 RS485 串口的 MODBUS RTU 主站通讯正常时，总线通讯即正常；当 MODBUS RTU 主站无成功连接模块并超过一定时间时，总线通讯即判断总线错误复位。

用户可通过“艾莫迅 MODBUS 调试工具”设置总线错误模式（复位或保持）、总线错误判定时间（阀值），具体操作请参考章节 6.3.3 内容。

## 4.4、按键复位功能

由于波特率与站号均通过拨码设置，因此 Reset 按键只复位总线错误的参数。

在模块上电后 25 秒内，按住 Reset 复位按钮，直到 SYS 灯闪烁 5 次后松开按钮，接着 SYS 灯变快闪，等 SYS 灯恢复慢闪后，再将模块断电至少 3S 后上电，模块即恢复出厂参数，如下表。

| 参数名称 | 参数默认值 |
| --- | --- |
| 总线错误模式 | 总线错误保持 |
| 总线错误判断时间阀值 | 200（单位 10ms） |

# 五、参数配置说明

本章节针对 JY-MODUBS-IO16T 的参数配置进行介绍，波特率、站地址需要结合 DIP 拨码开关，部分参数用户需选择艾莫迅 MODBUS 调试工具，以实现相应功能需求。

## 5.1、修改 COM 口波特率

### ➢ COM 口的通讯参数说明

| COM 口（485）通讯参数类型 | | | |
|---|---|---|---|
| 波特率 | 数据位 | 停止位 | 校验位 |
| 1200~115200<br>仅支持拨码开关设置 | 8 位（固定） | 1<br>（固定） | None（固定） |

### ➢ 485 口的波特率设置

RS485 接口的波特率由模块上的“波特率”拨码开关状态决定，注意当模块上电时调整拨码状态时，需将模块断电至少 3S，再上电方可生效。具体关系可见下表（出厂时所有拨码为 OFF）。




**波特率拨码对应串口波特率对应表**

| 1号开关状态 | 2号开关状态 | 3号开关状态 | 波特率 |
|---|---|---|---|
| OFF | OFF | OFF | 9600 |
| ON | OFF | OFF | 19200 |
| OFF | ON | OFF | 38400 |
| ON | ON | OFF | 57600 |
| OFF | OFF | ON | 115200 |
| ON | OFF | ON | 1200 |
| OFF | ON | ON | 2400 |
| ON | ON | ON | 4800 |

**特别注意：**

**☞当站地址拨码全 OFF 时，无论波特率拨码多少，波特率固定 9600**

## 5.2、修改本机地址

### ➢ 设置 1~32 站号

修改站号的范围在 1~32，必须通过调整模块上“站地址”拨码开关的状态设置，注意当模块上电时调整拨码状态时，需将模块断电至少 3S，再上电方可生效。具体对应关系如下表中所示（出厂时所有拨码为 OFF）。




**站地址拨码对应JY-MODBUS模块站号表（1-31）**

| 1号开关状态 | 2号开关状态 | 3号开关状态 | 4号开关状态 | 5号开关状态 | 6号开关状态 | 7号开关状态 | 8号开关状态 | 站号 |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | 1 |
| ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | 1 |
| OFF | ON | OFF | OFF | OFF | OFF | OFF | OFF | 2 |
| ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | 3 |
| OFF | OFF | ON | OFF | OFF | OFF | OFF | OFF | 4 |
| ON | OFF | ON | OFF | OFF | OFF | OFF | OFF | 5 |
| OFF | ON | ON | OFF | OFF | OFF | OFF | OFF | 6 |
| ON | ON | ON | OFF | OFF | OFF | OFF | OFF | 7 |
| OFF | OFF | OFF | ON | OFF | OFF | OFF | OFF | 8 |
| ON | OFF | OFF | ON | OFF | OFF | OFF | OFF | 9 |
| OFF | ON | OFF | ON | OFF | OFF | OFF | OFF | 10 |
| ON | ON | OFF | ON | OFF | OFF | OFF | OFF | 11 |
| OFF | OFF | ON | ON | OFF | OFF | OFF | OFF | 12 |
| ON | OFF | ON | ON | OFF | OFF | OFF | OFF | 13 |
| OFF | ON | ON | ON | OFF | OFF | OFF | OFF | 14 |
| ON | ON | ON | ON | OFF | OFF | OFF | OFF | 15 |
| OFF | OFF | OFF | OFF | ON | OFF | OFF | OFF | 16 |
| ON | OFF | OFF | OFF | ON | OFF | OFF | OFF | 17 |
| OFF | ON | OFF | OFF | ON | OFF | OFF | OFF | 18 |
| ON | ON | OFF | OFF | ON | OFF | OFF | OFF | 19 |
| OFF | OFF | ON | OFF | ON | OFF | OFF | OFF | 20 |
| ON | OFF | ON | OFF | ON | OFF | OFF | OFF | 21 |
| OFF | ON | ON | OFF | ON | OFF | OFF | OFF | 22 |
| ON | ON | ON | OFF | ON | OFF | OFF | OFF | 23 |
| OFF | OFF | OFF | ON | ON | OFF | OFF | OFF | 24 |
| ON | OFF | OFF | ON | ON | OFF | OFF | OFF | 25 |
| OFF | ON | OFF | ON | ON | OFF | OFF | OFF | 26 |
| ON | ON | OFF | ON | ON | OFF | OFF | OFF | 27 |
| OFF | OFF | ON | ON | ON | OFF | OFF | OFF | 28 |
| ON | OFF | ON | ON | ON | OFF | OFF | OFF | 29 |
| OFF | ON | ON | ON | ON | OFF | OFF | OFF | 30 |
| ON | ON | ON | ON | ON | OFF | OFF | OFF | 31 |

**特别注意：**

**☞当站地址拨码全 OFF 时，无论波特率拨码多少，波特率固定 9600**

### ➢ 设置 33~255 站号

修改该范围站号的方式一样通过站地址拨码决定，由于拨码状态表太长，请到附录 A 中查询对应站号与拨码的关系。

## 5.3、使用“艾莫迅 MODBUS 调试工具”配置

### 5.3.1、配置前准备

- 使用 USB 转 485 串口线连接模块 485 口和电脑 USB 口
- 将 DC 24V 外部电源接入模块并通电，通电前请检查电源正负极是否连接正确
- 到艾莫迅官网下载“艾莫迅 MODBUS 调试工具”

### 5.3.2、调试工具的连接步骤

艾莫迅 MODBUS 调试工具的使用（配置或调试功能）与其他上位机一样，需要建立上位机与模块的通讯，请按照以下步骤进行配置工具的连接：

A. 打开配置工具，在“接口型号”栏选择“MODBUS RTU-JY”

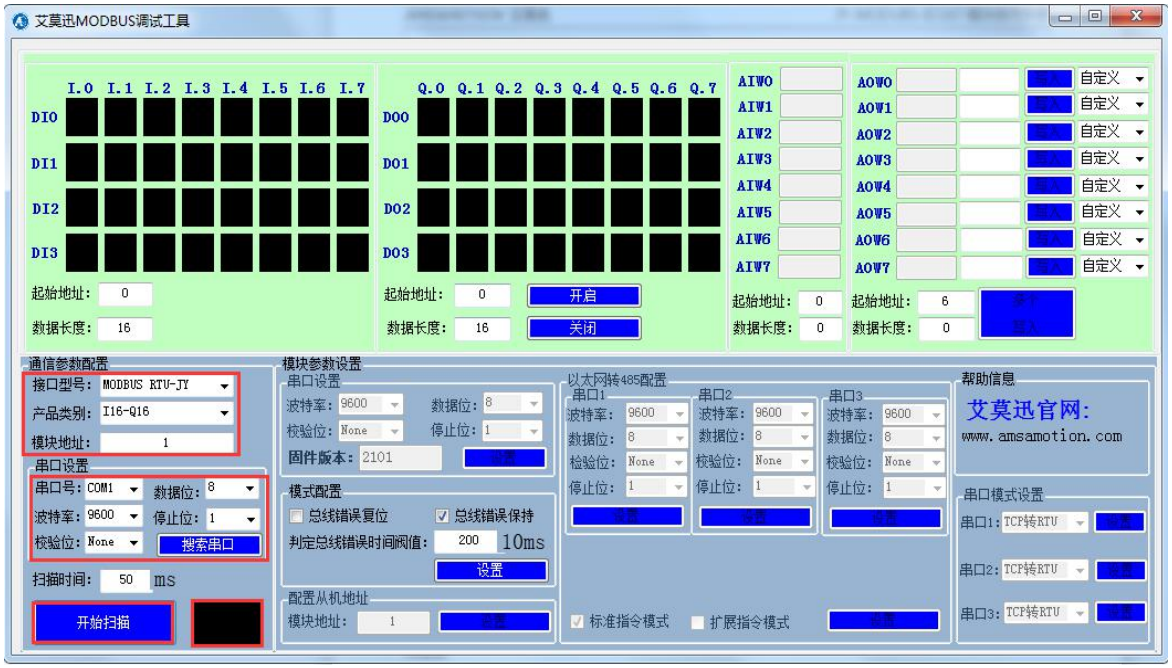
B. 选择对应的产品类别（主机型号），本主机为 I16-Q16

C. 填写模块地址（1~255），出厂时本模块地址为 1

D. 选择串口号，即连接模块的 USB 转 485 串口线在电脑设备管理器中的端口号

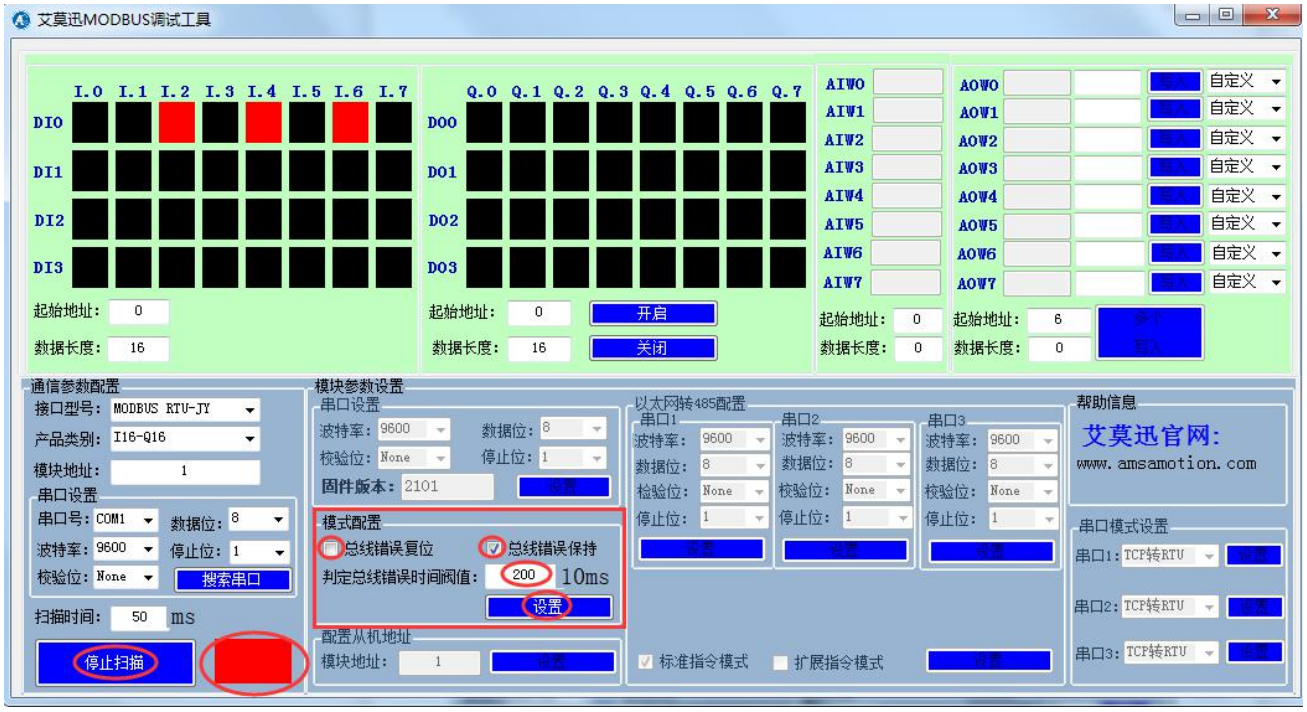
E. 选择波特率、校验位、数据位、停止位，应与模块当前参数一致，一般默认无需选择

F. 点击开始扫描按钮，成功连接后按钮文字变为停止扫描，其右边通讯状态图标颜色将由黑色变为红色



## 5.3.3、修改总线错误模式

如下图所示，在“模式配置”区域，根据需求进行总线错误复位或者总线错误保持的勾选，以及在判定总线错误时间阀值（200~32000，单位 10ms）处填入数值(即通过 485 串口访问本模块的 MODBUS RTU 主站与本模块无成功连接的时间超过这一设置数值后，判定为总线错误），点击”设置“按钮，新设置的总线错误模式和判定时间即生效。




注意：

☞出厂或者按键复位时，模式为总线错误复位，总线错误判断时间阀值为 2s

☞总线错误判断时间阀值设置范围为：2s~320.00s,设置值超出范围时默认 2ms

☞总线错误判定时间为持续时间，即当无连接时间未超过总线错误时间内再次连接本模块后，判定时间待下次无连接开始从零秒计时。

# 附录 A、32-255 站地址拨码状态表

## 站地址拨码对应JY-MODBUS模块站号表（32-63）




| 1号开关状态 | 2号开关状态 | 3号开关状态 | 4号开关状态 | 5号开关状态 | 6号开关状态 | 7号开关状态 | 8号开关状态 | 站号 |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | ON | OFF | OFF | 32 |
| ON | OFF | OFF | OFF | OFF | ON | OFF | OFF | 33 |
| OFF | ON | OFF | OFF | OFF | ON | OFF | OFF | 34 |
| ON | ON | OFF | OFF | OFF | ON | OFF | OFF | 35 |
| OFF | OFF | ON | OFF | OFF | ON | OFF | OFF | 36 |
| ON | OFF | ON | OFF | OFF | ON | OFF | OFF | 37 |
| OFF | ON | ON | OFF | OFF | ON | OFF | OFF | 38 |
| ON | ON | ON | OFF | OFF | ON | OFF | OFF | 39 |
| OFF | OFF | OFF | ON | OFF | ON | OFF | OFF | 40 |
| ON | OFF | OFF | ON | OFF | ON | OFF | OFF | 41 |
| OFF | ON | OFF | ON | OFF | ON | OFF | OFF | 42 |
| ON | ON | OFF | ON | OFF | ON | OFF | OFF | 43 |
| OFF | OFF | ON | ON | OFF | ON | OFF | OFF | 44 |
| ON | OFF | ON | ON | OFF | ON | OFF | OFF | 45 |
| OFF | ON | ON | ON | OFF | ON | OFF | OFF | 46 |
| ON | ON | ON | ON | OFF | ON | OFF | OFF | 47 |
| OFF | OFF | OFF | OFF | ON | ON | OFF | OFF | 48 |
| ON | OFF | OFF | OFF | ON | ON | OFF | OFF | 49 |
| OFF | ON | OFF | OFF | ON | ON | OFF | OFF | 50 |
| ON | ON | OFF | OFF | ON | ON | OFF | OFF | 51 |
| OFF | OFF | ON | OFF | ON | ON | OFF | OFF | 52 |
| ON | OFF | ON | OFF | ON | ON | OFF | OFF | 53 |
| OFF | ON | ON | OFF | ON | ON | OFF | OFF | 54 |
| ON | ON | ON | OFF | ON | ON | OFF | OFF | 55 |
| OFF | OFF | OFF | ON | ON | ON | OFF | OFF | 56 |
| ON | OFF | OFF | ON | ON | ON | OFF | OFF | 57 |
| OFF | ON | OFF | ON | ON | ON | OFF | OFF | 58 |
| ON | ON | OFF | ON | ON | ON | OFF | OFF | 59 |
| OFF | OFF | ON | ON | ON | ON | OFF | OFF | 60 |
| ON | OFF | ON | ON | ON | ON | OFF | OFF | 61 |
| OFF | ON | ON | ON | ON | ON | OFF | OFF | 62 |
| ON | ON | ON | ON | ON | ON | OFF | OFF | 63 |

## 站地址拨码对应JY-MODBUS模块站号表（64-95）




| 1号开关状态 | 2号开关状态 | 3号开关状态 | 4号开关状态 | 5号开关状态 | 6号开关状态 | 7号开关状态 | 8号开关状态 | 站号 |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | OFF | ON | OFF | 64 |
| ON | OFF | OFF | OFF | OFF | OFF | ON | OFF | 65 |
| OFF | ON | OFF | OFF | OFF | OFF | ON | OFF | 66 |
| ON | ON | OFF | OFF | OFF | OFF | ON | OFF | 67 |
| OFF | OFF | ON | OFF | OFF | OFF | ON | OFF | 68 |
| ON | OFF | ON | OFF | OFF | OFF | ON | OFF | 69 |
| OFF | ON | ON | OFF | OFF | OFF | ON | OFF | 70 |
| ON | ON | ON | OFF | OFF | OFF | ON | OFF | 71 |
| OFF | OFF | OFF | ON | OFF | OFF | ON | OFF | 72 |
| ON | OFF | OFF | ON | OFF | OFF | ON | OFF | 73 |
| OFF | ON | OFF | ON | OFF | OFF | ON | OFF | 74 |
| ON | ON | OFF | ON | OFF | OFF | ON | OFF | 75 |
| OFF | OFF | ON | ON | OFF | OFF | ON | OFF | 76 |
| ON | OFF | ON | ON | OFF | OFF | ON | OFF | 77 |
| OFF | ON | ON | ON | OFF | OFF | ON | OFF | 78 |
| ON | ON | ON | ON | OFF | OFF | ON | OFF | 79 |
| OFF | OFF | OFF | OFF | ON | OFF | ON | OFF | 80 |
| ON | OFF | OFF | OFF | ON | OFF | ON | OFF | 81 |
| OFF | ON | OFF | OFF | ON | OFF | ON | OFF | 82 |
| ON | ON | OFF | OFF | ON | OFF | ON | OFF | 83 |
| OFF | OFF | ON | OFF | ON | OFF | ON | OFF | 84 |
| ON | OFF | ON | OFF | ON | OFF | ON | OFF | 85 |
| OFF | ON | ON | OFF | ON | OFF | ON | OFF | 86 |
| ON | ON | ON | OFF | ON | OFF | ON | OFF | 87 |
| OFF | OFF | OFF | ON | ON | OFF | ON | OFF | 88 |
| ON | OFF | OFF | ON | ON | OFF | ON | OFF | 89 |
| OFF | ON | OFF | ON | ON | OFF | ON | OFF | 90 |
| ON | ON | OFF | ON | ON | OFF | ON | OFF | 91 |
| OFF | OFF | ON | ON | ON | OFF | ON | OFF | 92 |
| ON | OFF | ON | ON | ON | OFF | ON | OFF | 93 |
| OFF | ON | ON | ON | ON | OFF | ON | OFF | 94 |
| ON | ON | ON | ON | ON | OFF | ON | OFF | 95 |

## 站地址拨码对应JY-MODBUS模块站号表（96-127）




| 1号开关状态 | 2号开关状态 | 3号开关状态 | 4号开关状态 | 5号开关状态 | 6号开关状态 | 7号开关状态 | 8号开关状态 | 站号 |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | ON | ON | OFF | 96 |
| ON | OFF | OFF | OFF | OFF | ON | ON | OFF | 97 |
| OFF | ON | OFF | OFF | OFF | ON | ON | OFF | 98 |
| ON | ON | OFF | OFF | OFF | ON | ON | OFF | 99 |
| OFF | OFF | ON | OFF | OFF | ON | ON | OFF | 100 |
| ON | OFF | ON | OFF | OFF | ON | ON | OFF | 101 |
| OFF | ON | ON | OFF | OFF | ON | ON | OFF | 102 |
| ON | ON | ON | OFF | OFF | ON | ON | OFF | 103 |
| OFF | OFF | OFF | ON | OFF | ON | ON | OFF | 104 |
| ON | OFF | OFF | ON | OFF | ON | ON | OFF | 105 |
| OFF | ON | OFF | ON | OFF | ON | ON | OFF | 106 |
| ON | ON | OFF | ON | OFF | ON | ON | OFF | 107 |
| OFF | OFF | ON | ON | OFF | ON | ON | OFF | 108 |
| ON | OFF | ON | ON | OFF | ON | ON | OFF | 109 |
| OFF | ON | ON | ON | OFF | ON | ON | OFF | 110 |
| ON | ON | ON | ON | OFF | ON | ON | OFF | 111 |
| OFF | OFF | OFF | OFF | ON | ON | ON | OFF | 112 |
| ON | OFF | OFF | OFF | ON | ON | ON | OFF | 113 |
| OFF | ON | OFF | OFF | ON | ON | ON | OFF | 114 |
| ON | ON | OFF | OFF | ON | ON | ON | OFF | 115 |
| OFF | OFF | ON | OFF | ON | ON | ON | OFF | 116 |
| ON | OFF | ON | OFF | ON | ON | ON | OFF | 117 |
| OFF | ON | ON | OFF | ON | ON | ON | OFF | 118 |
| ON | ON | ON | OFF | ON | ON | ON | OFF | 119 |
| OFF | OFF | OFF | ON | ON | ON | ON | OFF | 120 |
| ON | OFF | OFF | ON | ON | ON | ON | OFF | 121 |
| OFF | ON | OFF | ON | ON | ON | ON | OFF | 122 |
| ON | ON | OFF | ON | ON | ON | ON | OFF | 123 |
| OFF | OFF | ON | ON | ON | ON | ON | OFF | 124 |
| ON | OFF | ON | ON | ON | ON | ON | OFF | 125 |
| OFF | ON | ON | ON | ON | ON | ON | OFF | 126 |
| ON | ON | ON | ON | ON | ON | ON | OFF | 127 |

## 站地址拨码对应JY-MODBUS模块站号表（128-159）




| 1号开关状态 | 2号开关状态 | 3号开关状态 | 4号开关状态 | 5号开关状态 | 6号开关状态 | 7号开关状态 | 8号开关状态 | 站号 |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON | 128 |
| ON | OFF | OFF | OFF | OFF | OFF | OFF | ON | 129 |
| OFF | ON | OFF | OFF | OFF | OFF | OFF | ON | 130 |
| ON | ON | OFF | OFF | OFF | OFF | OFF | ON | 131 |
| OFF | OFF | ON | OFF | OFF | OFF | OFF | ON | 132 |
| ON | OFF | ON | OFF | OFF | OFF | OFF | ON | 133 |
| OFF | ON | ON | OFF | OFF | OFF | OFF | ON | 134 |
| ON | ON | ON | OFF | OFF | OFF | OFF | ON | 135 |
| OFF | OFF | OFF | ON | OFF | OFF | OFF | ON | 136 |
| ON | OFF | OFF | ON | OFF | OFF | OFF | ON | 137 |
| OFF | ON | OFF | ON | OFF | OFF | OFF | ON | 138 |
| ON | ON | OFF | ON | OFF | OFF | OFF | ON | 139 |
| OFF | OFF | ON | ON | OFF | OFF | OFF | ON | 140 |
| ON | OFF | ON | ON | OFF | OFF | OFF | ON | 141 |
| OFF | ON | ON | ON | OFF | OFF | OFF | ON | 142 |
| ON | ON | ON | ON | OFF | OFF | OFF | ON | 143 |
| OFF | OFF | OFF | OFF | ON | OFF | OFF | ON | 144 |
| ON | OFF | OFF | OFF | ON | OFF | OFF | ON | 145 |
| OFF | ON | OFF | OFF | ON | OFF | OFF | ON | 146 |
| ON | ON | OFF | OFF | ON | OFF | OFF | ON | 147 |
| OFF | OFF | ON | OFF | ON | OFF | OFF | ON | 148 |
| ON | OFF | ON | OFF | ON | OFF | OFF | ON | 149 |
| OFF | ON | ON | OFF | ON | OFF | OFF | ON | 150 |
| ON | ON | ON | OFF | ON | OFF | OFF | ON | 151 |
| OFF | OFF | OFF | ON | ON | OFF | OFF | ON | 152 |
| ON | OFF | OFF | ON | ON | OFF | OFF | ON | 153 |
| OFF | ON | OFF | ON | ON | OFF | OFF | ON | 154 |
| ON | ON | OFF | ON | ON | OFF | OFF | ON | 155 |
| OFF | OFF | ON | ON | ON | OFF | OFF | ON | 156 |
| ON | OFF | ON | ON | ON | OFF | OFF | ON | 157 |
| OFF | ON | ON | ON | ON | OFF | OFF | ON | 158 |
| ON | ON | ON | ON | ON | OFF | OFF | ON | 159 |

## 站地址拨码对应JY-MODBUS模块站号表（160-191）




| 1号开关状态 | 2号开关状态 | 3号开关状态 | 4号开关状态 | 5号开关状态 | 6号开关状态 | 7号开关状态 | 8号开关状态 | 站号 |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | ON | OFF | ON | 160 |
| ON | OFF | OFF | OFF | OFF | ON | OFF | ON | 161 |
| OFF | ON | OFF | OFF | OFF | ON | OFF | ON | 162 |
| ON | ON | OFF | OFF | OFF | ON | OFF | ON | 163 |
| OFF | OFF | ON | OFF | OFF | ON | OFF | ON | 164 |
| ON | OFF | ON | OFF | OFF | ON | OFF | ON | 165 |
| OFF | ON | ON | OFF | OFF | ON | OFF | ON | 166 |
| ON | ON | ON | OFF | OFF | ON | OFF | ON | 167 |
| OFF | OFF | OFF | ON | OFF | ON | OFF | ON | 168 |
| ON | OFF | OFF | ON | OFF | ON | OFF | ON | 169 |
| OFF | ON | OFF | ON | OFF | ON | OFF | ON | 170 |
| ON | ON | OFF | ON | OFF | ON | OFF | ON | 171 |
| OFF | OFF | ON | ON | OFF | ON | OFF | ON | 172 |
| ON | OFF | ON | ON | OFF | ON | OFF | ON | 173 |
| OFF | ON | ON | ON | OFF | ON | OFF | ON | 174 |
| ON | ON | ON | ON | OFF | ON | OFF | ON | 175 |
| OFF | OFF | OFF | OFF | ON | ON | OFF | ON | 176 |
| ON | OFF | OFF | OFF | ON | ON | OFF | ON | 177 |
| OFF | ON | OFF | OFF | ON | ON | OFF | ON | 178 |
| ON | ON | OFF | OFF | ON | ON | OFF | ON | 179 |
| OFF | OFF | ON | OFF | ON | ON | OFF | ON | 180 |
| ON | OFF | ON | OFF | ON | ON | OFF | ON | 181 |
| OFF | ON | ON | OFF | ON | ON | OFF | ON | 182 |
| ON | ON | ON | OFF | ON | ON | OFF | ON | 183 |
| OFF | OFF | OFF | ON | ON | ON | OFF | ON | 184 |
| ON | OFF | OFF | ON | ON | ON | OFF | ON | 185 |
| OFF | ON | OFF | ON | ON | ON | OFF | ON | 186 |
| ON | ON | OFF | ON | ON | ON | OFF | ON | 187 |
| OFF | OFF | ON | ON | ON | ON | OFF | ON | 188 |
| ON | OFF | ON | ON | ON | ON | OFF | ON | 189 |
| OFF | ON | ON | ON | ON | ON | OFF | ON | 190 |
| ON | ON | ON | ON | ON | ON | OFF | ON | 191 |

## 站地址拨码对应JY-MODBUS模块站号表（192-223）




| 1号开关状态 | 2号开关状态 | 3号开关状态 | 4号开关状态 | 5号开关状态 | 6号开关状态 | 7号开关状态 | 8号开关状态 | 站号 |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | OFF | ON | ON | 192 |
| ON | OFF | OFF | OFF | OFF | OFF | ON | ON | 193 |
| OFF | ON | OFF | OFF | OFF | OFF | ON | ON | 194 |
| ON | ON | OFF | OFF | OFF | OFF | ON | ON | 195 |
| OFF | OFF | ON | OFF | OFF | OFF | ON | ON | 196 |
| ON | OFF | ON | OFF | OFF | OFF | ON | ON | 197 |
| OFF | ON | ON | OFF | OFF | OFF | ON | ON | 198 |
| ON | ON | ON | OFF | OFF | OFF | ON | ON | 199 |
| OFF | OFF | OFF | ON | OFF | OFF | ON | ON | 200 |
| ON | OFF | OFF | ON | OFF | OFF | ON | ON | 201 |
| OFF | ON | OFF | ON | OFF | OFF | ON | ON | 202 |
| ON | ON | OFF | ON | OFF | OFF | ON | ON | 203 |
| OFF | OFF | ON | ON | OFF | OFF | ON | ON | 204 |
| ON | OFF | ON | ON | OFF | OFF | ON | ON | 205 |
| OFF | ON | ON | ON | OFF | OFF | ON | ON | 206 |
| ON | ON | ON | ON | OFF | OFF | ON | ON | 207 |
| OFF | OFF | OFF | OFF | ON | OFF | ON | ON | 208 |
| ON | OFF | OFF | OFF | ON | OFF | ON | ON | 209 |
| OFF | ON | OFF | OFF | ON | OFF | ON | ON | 210 |
| ON | ON | OFF | OFF | ON | OFF | ON | ON | 211 |
| OFF | OFF | ON | OFF | ON | OFF | ON | ON | 212 |
| ON | OFF | ON | OFF | ON | OFF | ON | ON | 213 |
| OFF | ON | ON | OFF | ON | OFF | ON | ON | 214 |
| ON | ON | ON | OFF | ON | OFF | ON | ON | 215 |
| OFF | OFF | OFF | ON | ON | OFF | ON | ON | 216 |
| ON | OFF | OFF | ON | ON | OFF | ON | ON | 217 |
| OFF | ON | OFF | ON | ON | OFF | ON | ON | 218 |
| ON | ON | OFF | ON | ON | OFF | ON | ON | 219 |
| OFF | OFF | ON | ON | ON | OFF | ON | ON | 220 |
| ON | OFF | ON | ON | ON | OFF | ON | ON | 221 |
| OFF | ON | ON | ON | ON | OFF | ON | ON | 222 |
| ON | ON | ON | ON | ON | OFF | ON | ON | 223 |

# 站地址拨码对应JY-MODBUS模块站号表（224-255）




| 1号开关状态 | 2号开关状态 | 3号开关状态 | 4号开关状态 | 5号开关状态 | 6号开关状态 | 7号开关状态 | 8号开关状态 | 站号 |
|---|---|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | ON | ON | ON | 224 |
| ON | OFF | OFF | OFF | OFF | ON | ON | ON | 225 |
| OFF | ON | OFF | OFF | OFF | ON | ON | ON | 226 |
| ON | ON | OFF | OFF | OFF | ON | ON | ON | 227 |
| OFF | OFF | ON | OFF | OFF | ON | ON | ON | 228 |
| ON | OFF | ON | OFF | OFF | ON | ON | ON | 229 |
| OFF | ON | ON | OFF | OFF | ON | ON | ON | 230 |
| ON | ON | ON | OFF | OFF | ON | ON | ON | 231 |
| OFF | OFF | OFF | ON | OFF | ON | ON | ON | 232 |
| ON | OFF | OFF | ON | OFF | ON | ON | ON | 233 |
| OFF | ON | OFF | ON | OFF | ON | ON | ON | 234 |
| ON | ON | OFF | ON | OFF | ON | ON | ON | 235 |
| OFF | OFF | ON | ON | OFF | ON | ON | ON | 236 |
| ON | OFF | ON | ON | OFF | ON | ON | ON | 237 |
| OFF | ON | ON | ON | OFF | ON | ON | ON | 238 |
| ON | ON | ON | ON | OFF | ON | ON | ON | 239 |
| OFF | OFF | OFF | OFF | ON | ON | ON | ON | 240 |
| ON | OFF | OFF | OFF | ON | ON | ON | ON | 241 |
| OFF | ON | OFF | OFF | ON | ON | ON | ON | 242 |
| ON | ON | OFF | OFF | ON | ON | ON | ON | 243 |
| OFF | OFF | ON | OFF | ON | ON | ON | ON | 244 |
| ON | OFF | ON | OFF | ON | ON | ON | ON | 245 |
| OFF | ON | ON | OFF | ON | ON | ON | ON | 246 |
| ON | ON | ON | OFF | ON | ON | ON | ON | 247 |
| OFF | OFF | OFF | ON | ON | ON | ON | ON | 248 |
| ON | OFF | OFF | ON | ON | ON | ON | ON | 249 |
| OFF | ON | OFF | ON | ON | ON | ON | ON | 250 |
| ON | ON | OFF | ON | ON | ON | ON | ON | 251 |
| OFF | OFF | ON | ON | ON | ON | ON | ON | 252 |
| ON | OFF | ON | ON | ON | ON | ON | ON | 253 |
| OFF | ON | ON | ON | ON | ON | ON | ON | 254 |
| ON | ON | ON | ON | ON | ON | ON | ON | 255 |

# 修订历史

| 版本 | 修订日期 | 修订说明 | 维护人 |
|---|---|---|---|
| 1.0 | 2021.04.17 | 初始版本 | LIN |
| | | | |
| | | | |

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