



IOTZONE®

Modbus RTU控制 I/O用户手册

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1. 概述

贞明电子的QL 485系列网络继电器支持Modbus RTU，本文档使用Modbus Poll作为测试工具，设备Slave ID是1。

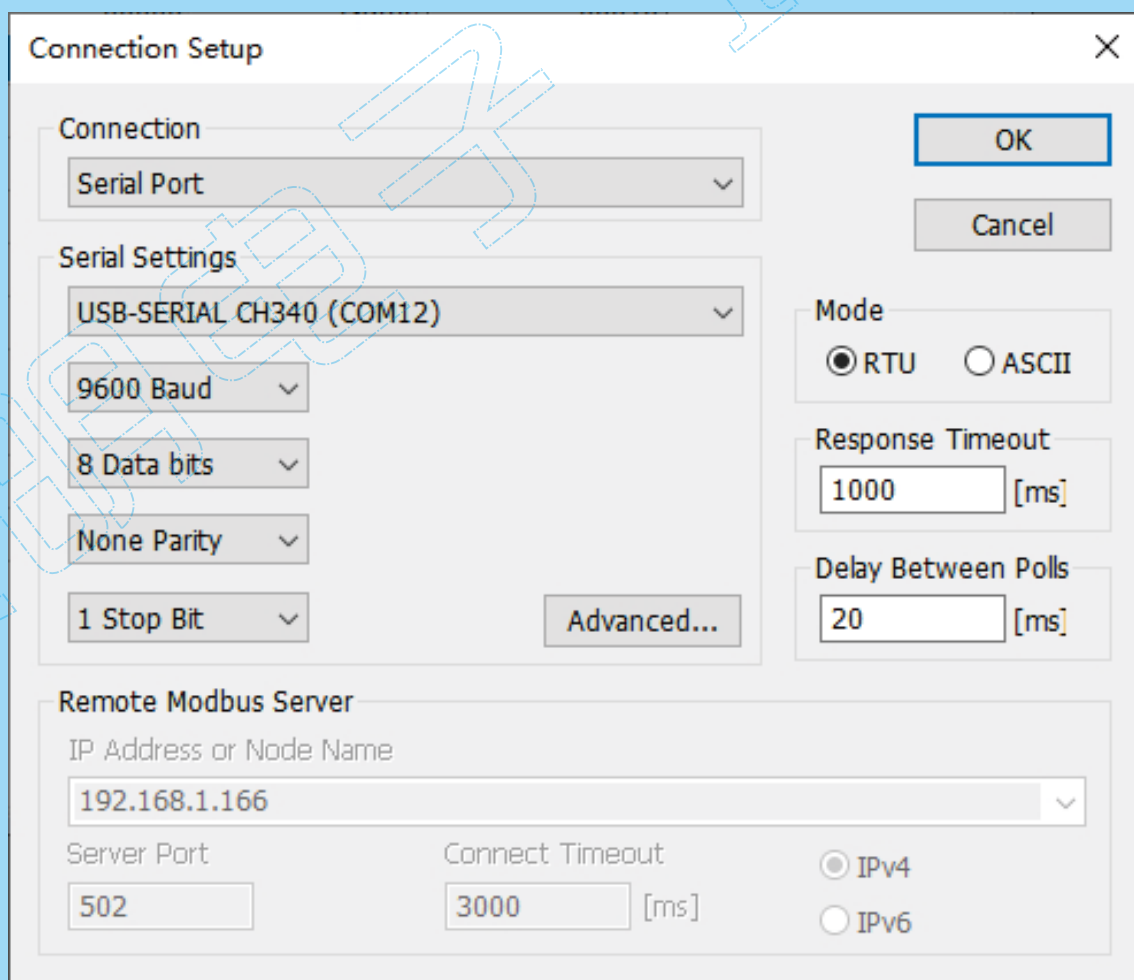
2. 步骤

(1) 使用USB转485工具连接设备和电脑。

(2) 设备上电。

(3) 打开Modbus Poll软件

(4) 在“Connection”中选择Serial Port，在“Serial settings”中选择对应的COM端口，选择None Parity，波特率为9600，其他默认设置如下图。



Connection Setup

Connection: Serial Port

Serial Settings: USB-SERIAL CH340 (COM12)

9600 Baud

8 Data bits

None Parity

1 Stop Bit

Advanced...

Mode: ☒ RTU ☐ ASCII

Response Timeout: 1000 [ms]

Delay Between Polls: 20 [ms]

Remote Modbus Server

IP Address or Node Name: 192.168.1.166

Server Port: 502

Connect Timeout: 3000 [ms]

☒ IPv4 ☐ IPv6

OK

Cancel



(5) 在“Setup”中设置“Read/Write Definition”，“Slave Id”是1，在“Function”中选择“01 Read Coils”，Address是0，Quantity根据设备继电器数量设置，其他默认，如下图设置。

Read/Write Definition

Slave ID: 1

Function: 01 Read Coils (0x)

Address mode: ☒ Dec ☐ Hex

Address: 0 PLC address = 00001

Quantity: 12

Scan Rate: 1000 [ms]

Disable: ☐ Read/Write Disabled ☐ Disable on error

Read/Write Once

View: Rows ☒ 10 ☐ 20 ☐ 50 ☐ 100 ☐ Fit to Quantity

☐ Hide Name Columns ☐ PLC Addresses (Base 1)

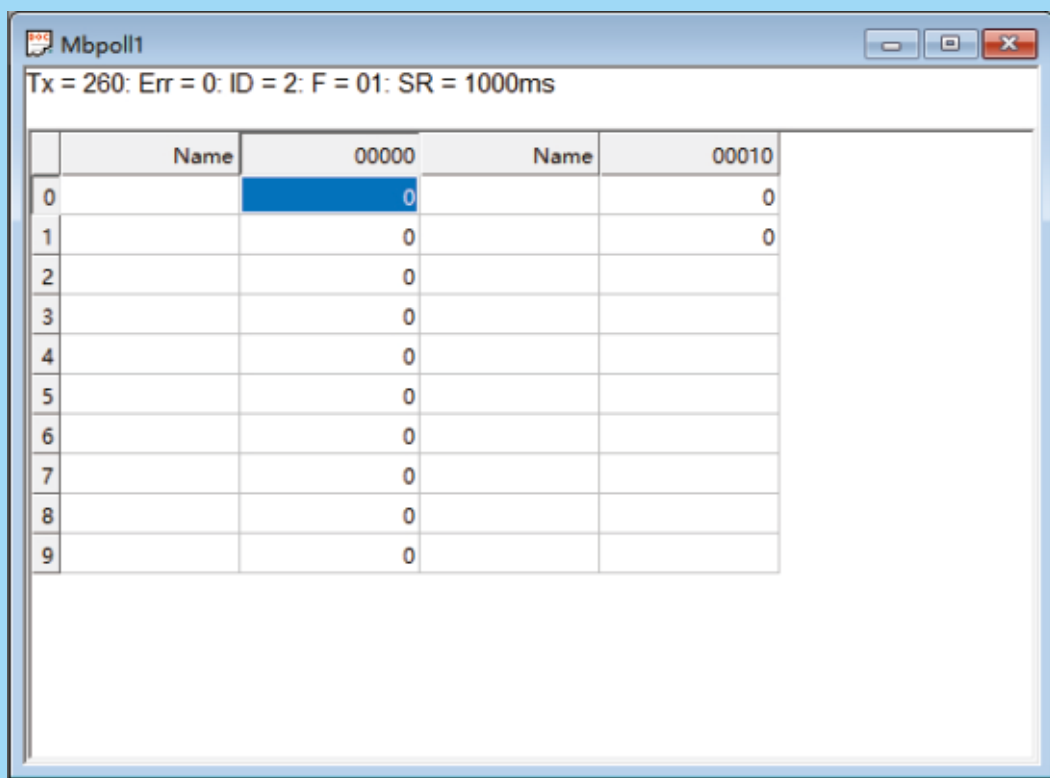
☐ Address in Cell ☐ Enron/Daniel Mode

Request: RTU 01 01 00 00 00 0C 3C 0F

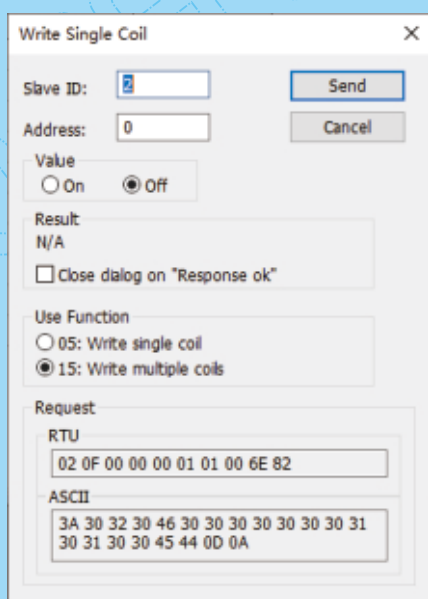
ASCII 3A 30 31 30 31 30 30 30 30 30 30 30 43 46 32 0D 0A

（6）控制继电器

继电器的所有状态在下图显示，'05' 功能控制单个继电器，'15' 控制多个继电器打开或关闭(在functions中选择)。



	Name	00000	Name	00010
0		0		0
1		0		0
2		0		
3		0		
4		0		
5		0		
6		0		
7		0		
8		0		
9		0		



Write Single Coil

Slave ID: 2 Send Cancel

Address: 0

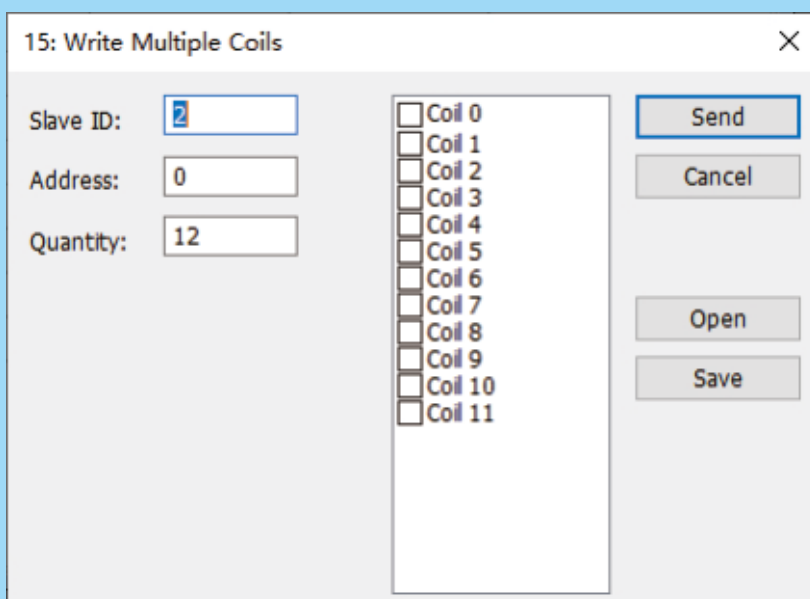
Value
☐ On ☒ Off

Result
 N/A

☐ Close dialog on "Response ok"

Use Function
☐ 05: Write single coil
☒ 15: Write multiple coils

Request
 RTU
 02 0F 00 00 00 01 01 00 6E 82
 ASCII
 3A 30 32 30 46 30 30 30 30 30 31
 30 31 30 30 45 44 0D 0A



15: Write Multiple Coils

Slave ID: 2 Send Cancel

Address: 0

Quantity: 12

☐ Coil 0
☐ Coil 1
☐ Coil 2
☐ Coil 3
☐ Coil 4
☐ Coil 5
☐ Coil 6
☐ Coil 7
☐ Coil 8
☐ Coil 9
☐ Coil 10
☐ Coil 11

Open Save