

# RS232/485 TO ETH



## Instruction

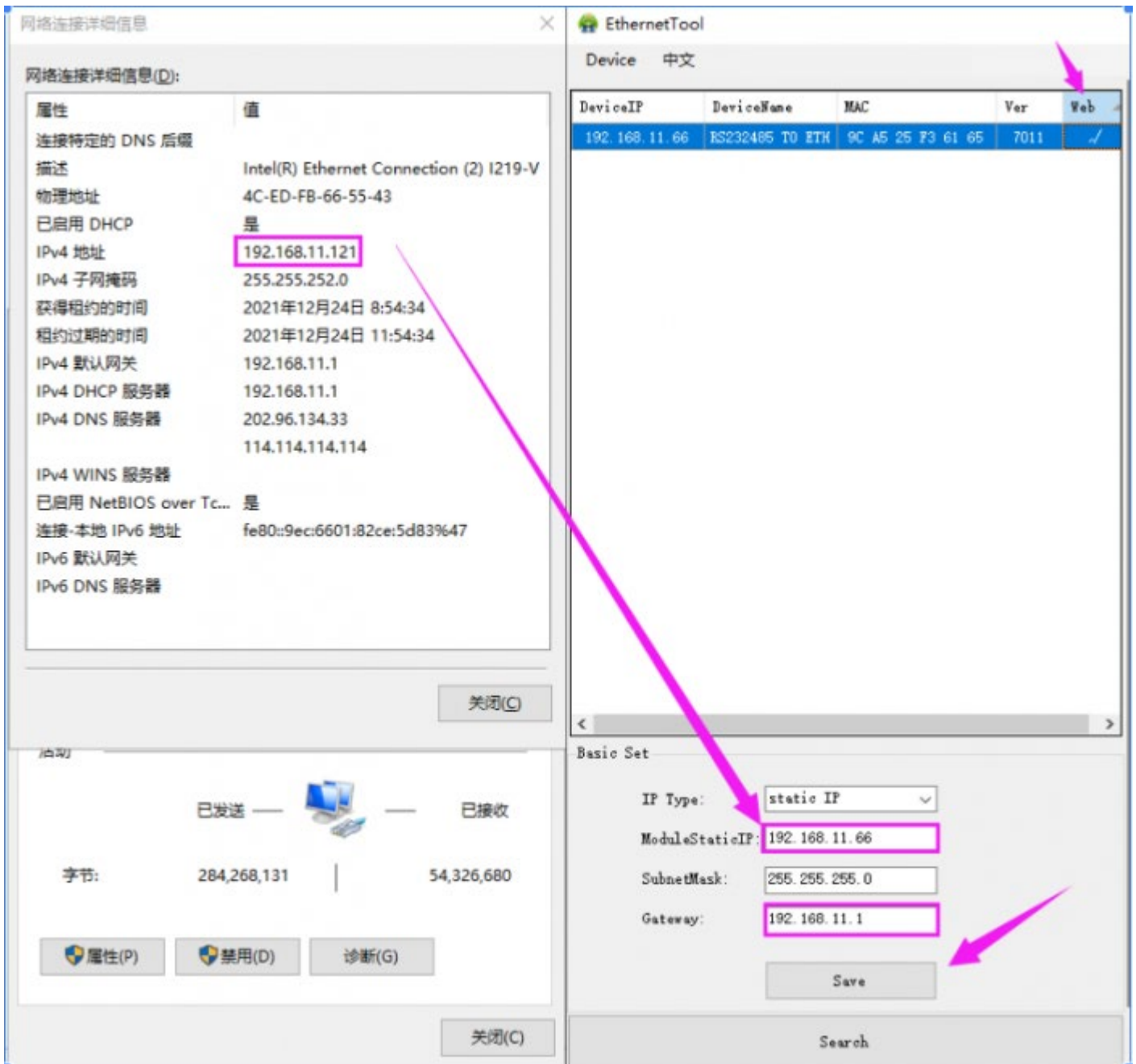
### Internet login

Method 1: Access router or switch test

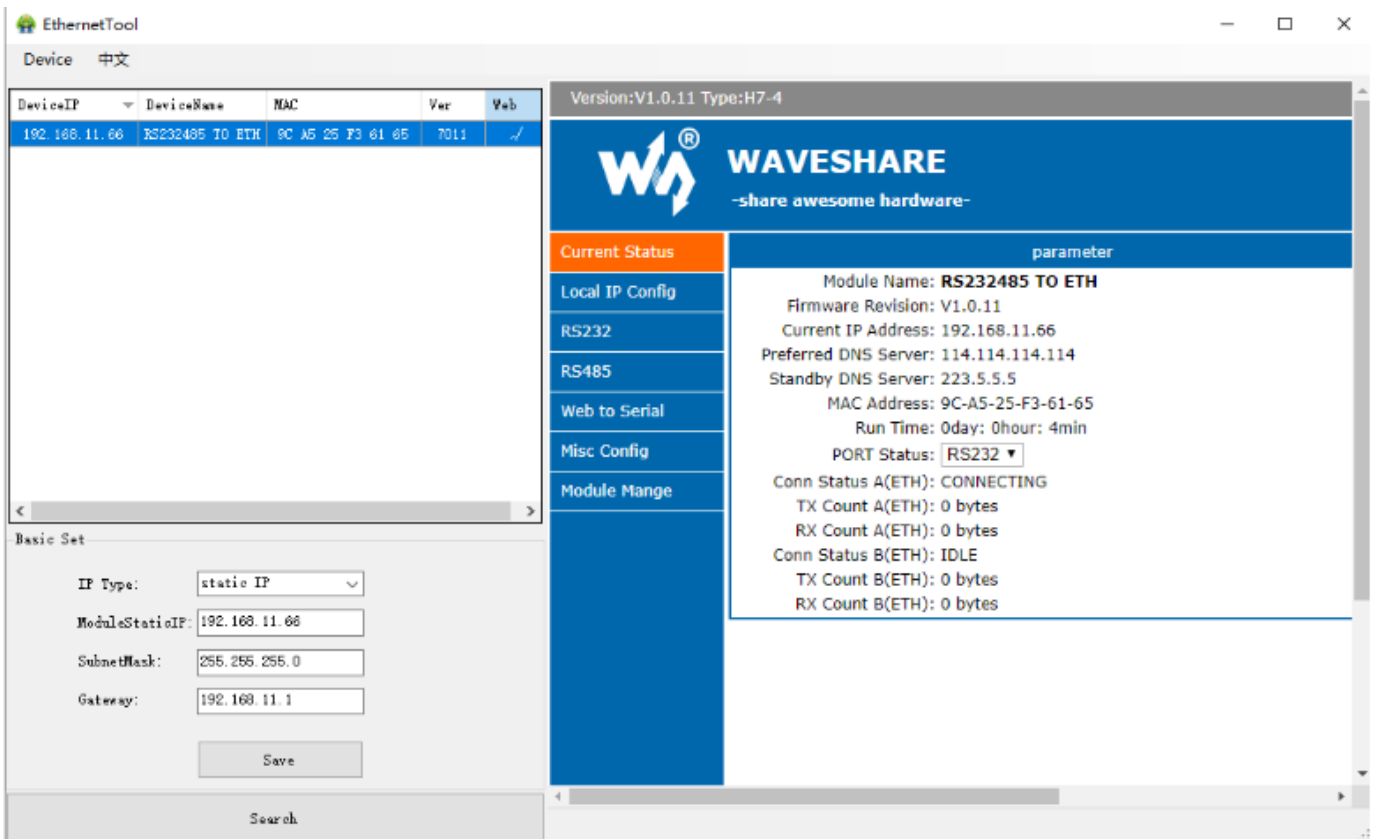
- Connect the RS232/485 TO ETH to the computer and the switch or router connected to the LAN respectively (in this way, firstly, the network cable of the computer does not need to be unplugged to avoid network disconnection; secondly, the RS232/485 TO ETH connected to the Internet can be connected to the public network TCP Server communication), fixed IP of RS232/485 TO ETH
- Control Panel (File Explorer) -> Network Connections -> Double-click the network card -> Details -> See the computer IP (here is 192.168.11.121)



- Click the device factory IP: 192.168.0.7->set the static IP to the same frequency band IP as the computer (->subnet mask default->set the corresponding gateway->click set



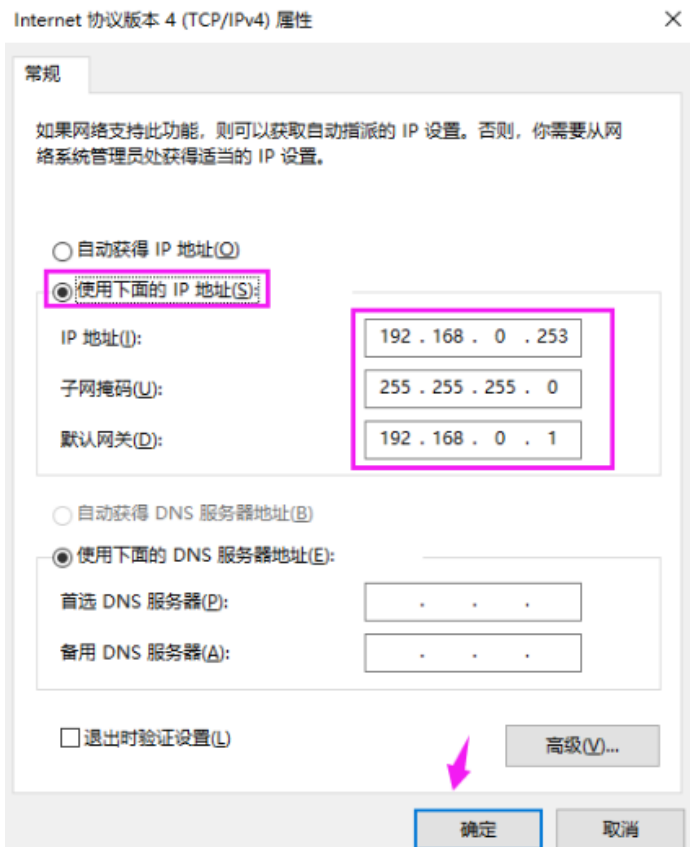
- Double-click the upper right corner of the webpage -> enter the account and password (the initial value is: admin)



## Method 2: Test directly with the computer

If you only have one network cable and no router or switch, you can connect the computer and RS232/485 TO ETH through a single network cable (similar to one-to-one communication between two computers through a network cable)

- Control Panel (File Explorer)->Network Connections->Double-click the network card->Properties->Internet Protocol Sakamoto 4 (TCP/IPV4)->Use the following IP address->Set the IP of the same frequency band as RS232/RS485 TO ETH -> OK



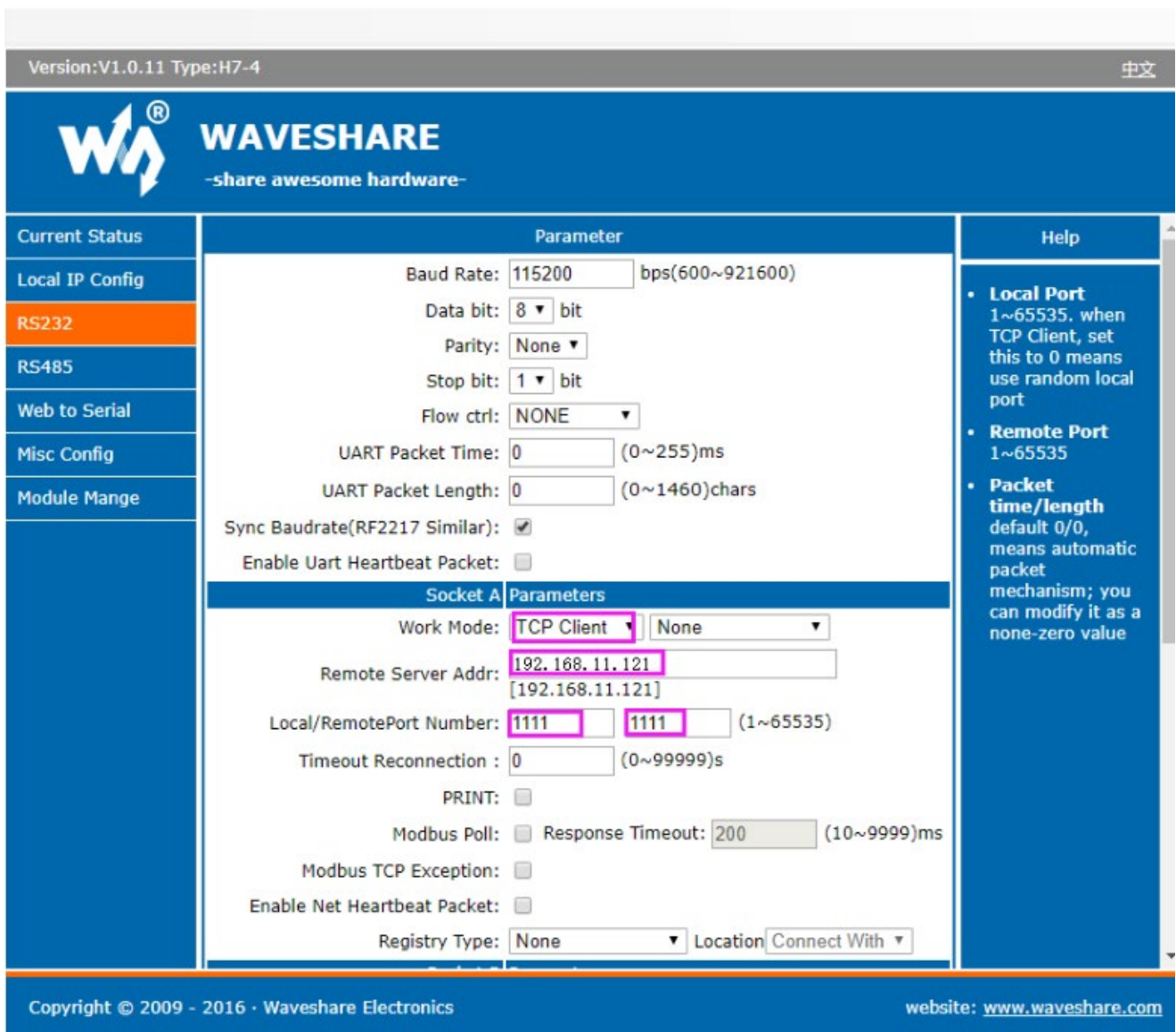
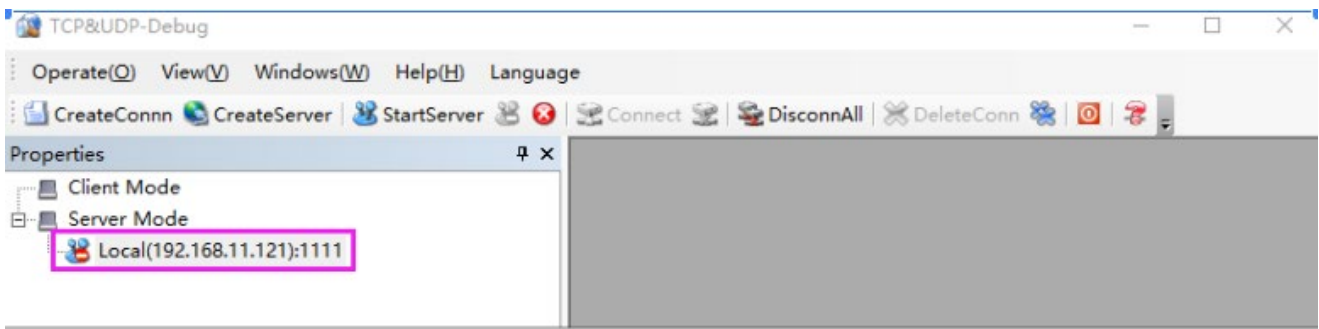
## RS232 TCP communication

### Hardware connection

- Connect [RS232/485 TO ETH](#) and [USB TO RS232/485/TTL](#) via female to female crossover serial cable:



- Open the [TCPIP/UDP debugging software](#), set the computer as the server, RS232/485 TO ETH as the client,



- Start the server -> open the serial port assistant -> select the corresponding serial port

- 启动服务器->打开串口助手->选择对应的串口

▼ 端口 (COM 和 LPT)

USB Serial Port (COM112) ←

通信端口 (COM1)

The screenshot displays two software windows. The top window, titled "SSCOM V5.13.1 Serial/Net data debugger", shows a log of data sent and received. The bottom window, titled "TCP&UDP测试工具 - [192.168.11.66:1111]", shows the configuration for a network connection and a log of received data.

**SSCOM V5.13.1 Serial/Net data debugger**

```
[11:09:25.231]OUT->◇Hello, Computer!  
[11:09:26.023]OUT->◇Hello, Computer!  
[11:09:26.903]OUT->◇Hello, Computer!  
[11:09:29.660]IN<-◆RS232/485 TO ETH  
[11:09:30.396]IN<-◆RS232/485 TO ETH  
[11:09:31.003]IN<-◆RS232/485 TO ETH  
[11:09:31.610]IN<-◆RS232/485 TO ETH  
[11:09:32.185]IN<-◆RS232/485 TO ETH
```

**TCP&UDP测试工具 - [192.168.11.66:1111]**

Properties: 192.168.11.66:1111

DestIP: 192.168.11.66  
DestPort: 1111  
Type: TCP  
AutoSend: [checked] 42772264 ms

Count: Send 95, Recv 239

Log: RS232/485 TO ETH  
Hello, Computer!  
Hello, Computer!  
Hello, Computer!  
Hello, Computer!  
Hello, Computer!  
Hello, Computer!

# Resources

- [User Manual](#)
- [Code](#)
- [Software](#)

# FAQ

**Question:** [Why can't the configuration web page be opened in the computer's browser and cannot communicate with TCP?](#)

**Answer:**

Set the IP of RS232/485 TO ETH and computer to the same network address and different node address IP:

For example, If RS232/485 TO ETH IP is 192.168.0.7; computer IP is 192.168.0.8

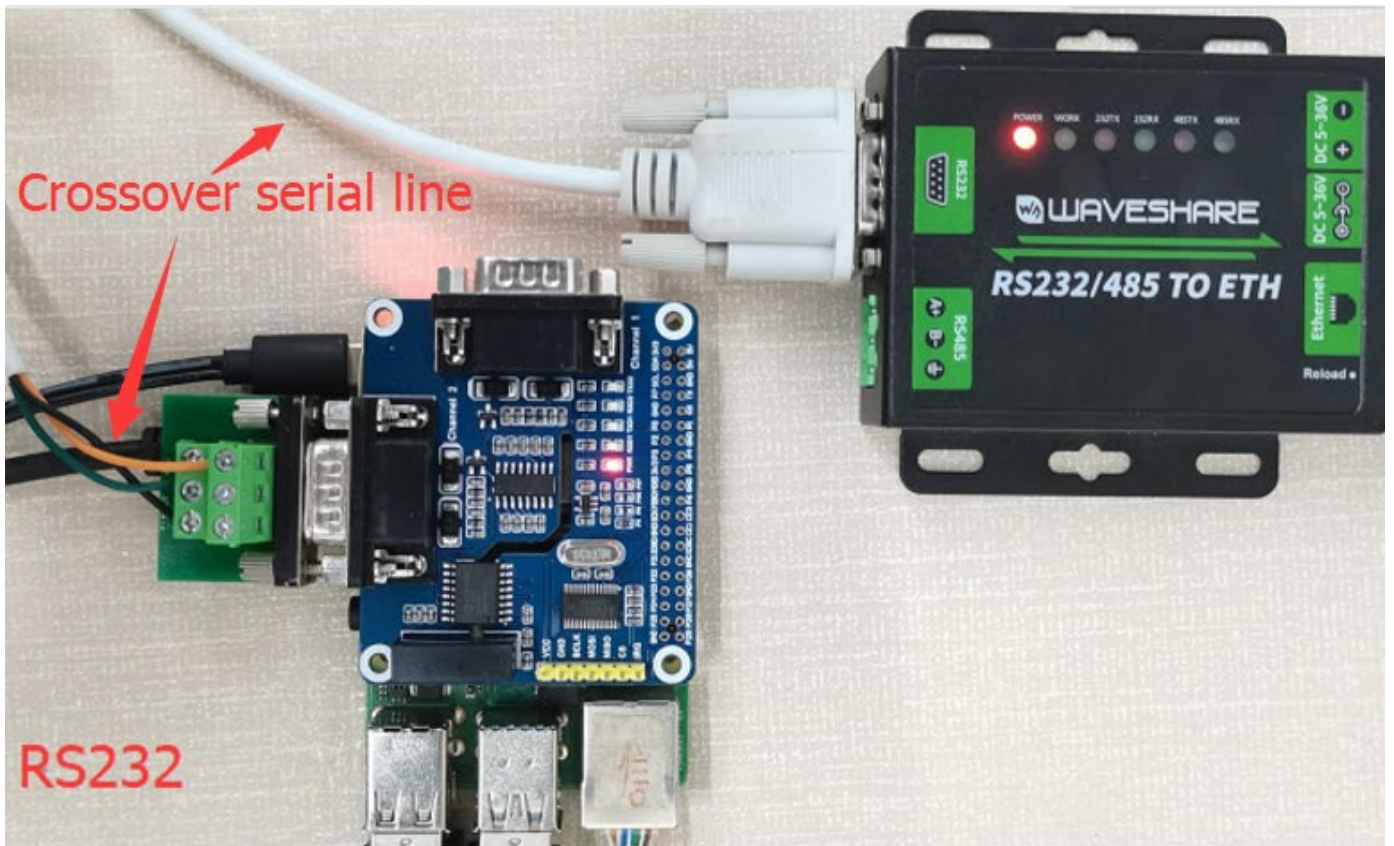
**Question:** [Why can I use USB TO RS232/RS485 to communicate normally, but cannot send and receive data when connecting to sensors and other devices through 485/232?](#)

**Answer:**

- After confirming that the network communication is normal, you can observe whether the 232RX (485RX) light is flashing. If it does not flash, it means that there is no data in the RS232/485 TO ETH. Check whether the RS232/RS485 wiring is correct.

If the RXD and TXD of some RS232 lines are not cross-connected, they cannot communicate (check with a multimeter, if 2 and 2 are connected, 3 and 3 are directly connected to the serial line; if 2 and 3 are connected, 3 and 2 are connected. .), you can replace the crossover serial cable:

- If the indicator light is normal, please turn off the tool and then turn it on to test.



Here use Raspberry Pi instead of sensors and other devices.

USR-TCP232-Test 串口转网络调试助手

文件(F) 选项(O) 帮助(H)

串口设置  
 串口号: COM112  
 波特率: 115200  
 校验位: NONE  
 数据位: 8 bit  
 停止位: 1 bit  
 关闭

接收区设置  
 接收转向文件...  
 自动换行显示  
 十六进制显示  
 暂停接收显示  
 保存数据 清除显示

发送区设置  
 启用文件数据源...  
 自动发送附加位  
 发送完自动清空  
 按十六进制发送  
 数据流循环发送  
 发送间隔: 1000 毫秒  
 文件载入 清除输入

网络数据接收  
 77 88 99  
 11 22 33 44 55  
 66 77 88 99  
 22 33 22 33 22 99 AA FF

网络设置  
 (1) 协议类型: TCP Server  
 (2) 本地IP地址: 192.168.11.121  
 (3) 本地端口号: 666  
 打开

接收区设置  
 接收转向文件...  
 自动换行显示  
 十六进制显示  
 暂停接收显示  
 保存数据 清除显示

发送区设置  
 启用文件数据源...  
 自动发送附加位  
 发送完自动清空  
 按十六进制发送  
 数据流循环发送  
 发送间隔: 1000 毫秒  
 文件载入 清除输入

hex

发送: 582 接收: 71 字节计数 就绪!

发送: 111 接收: 506 字节计数

```

pi@raspberrypi:~/HAT/RS485_CAN_HAT_Code/485/python/RS485-CAN-HAT-For-Hex $ sudo python3 RS485-CAN-HAT-send-hex.py
You can always send hex, press Ctrl + C to exit
77 88 99
11 22 33 44 55 66 77 88 99
22 33 22 33 22 99 AA FF
    
```



# Support

If you require technical support, please go to the [Support](#) page and open a ticket.