

Transparent transmission between USR Serial-to-Ethernet products

File Version: V1.0.0

Overview

User can realize transparent transmission between two USR Serial-to-Ethernet products(one works in TCP Server mode and one works in TCP Client mode). Application diagram as follow:



Figure 1 Data transmission

1.Configuration

Take M0 series products as example(one is USR-TCP232-302 and another is USR-TCP232-304) to test.

Step 1: Hardware connection

Connect 302 and 304 in same network by LAN interface and also connect 302 and 304 to PC through serial port interface which can run USR USR-TCP232-Test-V1.3.exe to test data transmission. User can download USR-TCP232-Test-V1.3 from <http://www.usriot.com/usr-tcp-test-testing-software/>

Step 2: Search modules in LAN and configure IP address.

User can run the setup software for M0 series and search the modules in LAN.(PC which run the setup software needs in same network segment as router, too.). User can download M0 series setup software from <http://www.usriot.com/usr-m0-setup-software/>.

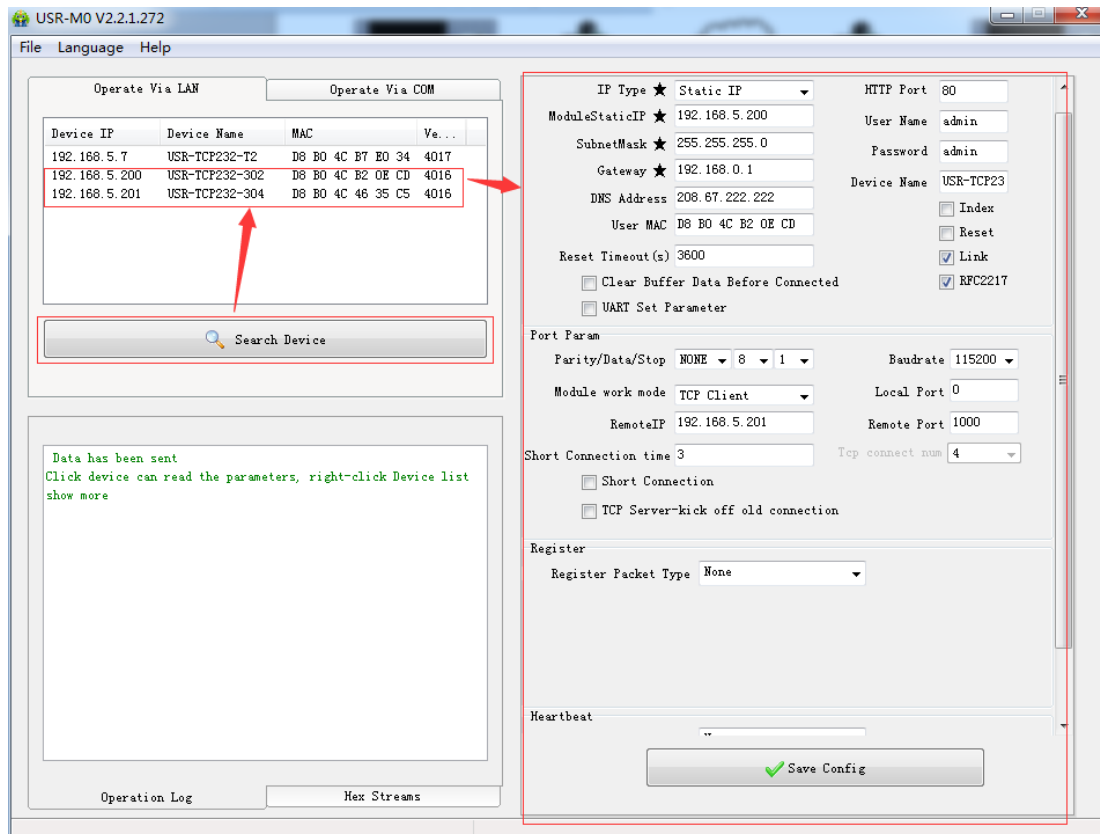


Figure 2 Search module

After searching successfully, 302 and 304 IP address should be changed to in same network segment with router which 302 and 304 connect to(In our test, router gateway is 192.168.5.1,so 302 IP address is changed to 192.168.5.200 and 304 IP address is changed to 192.168.5.201).

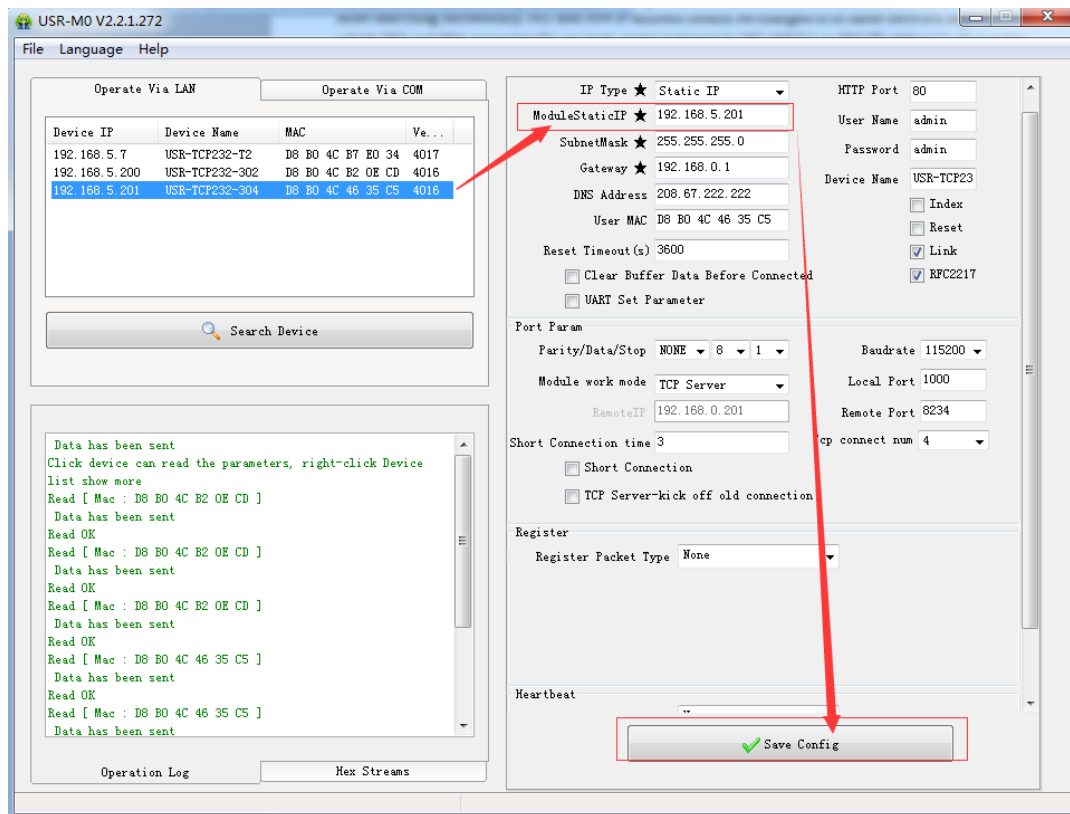
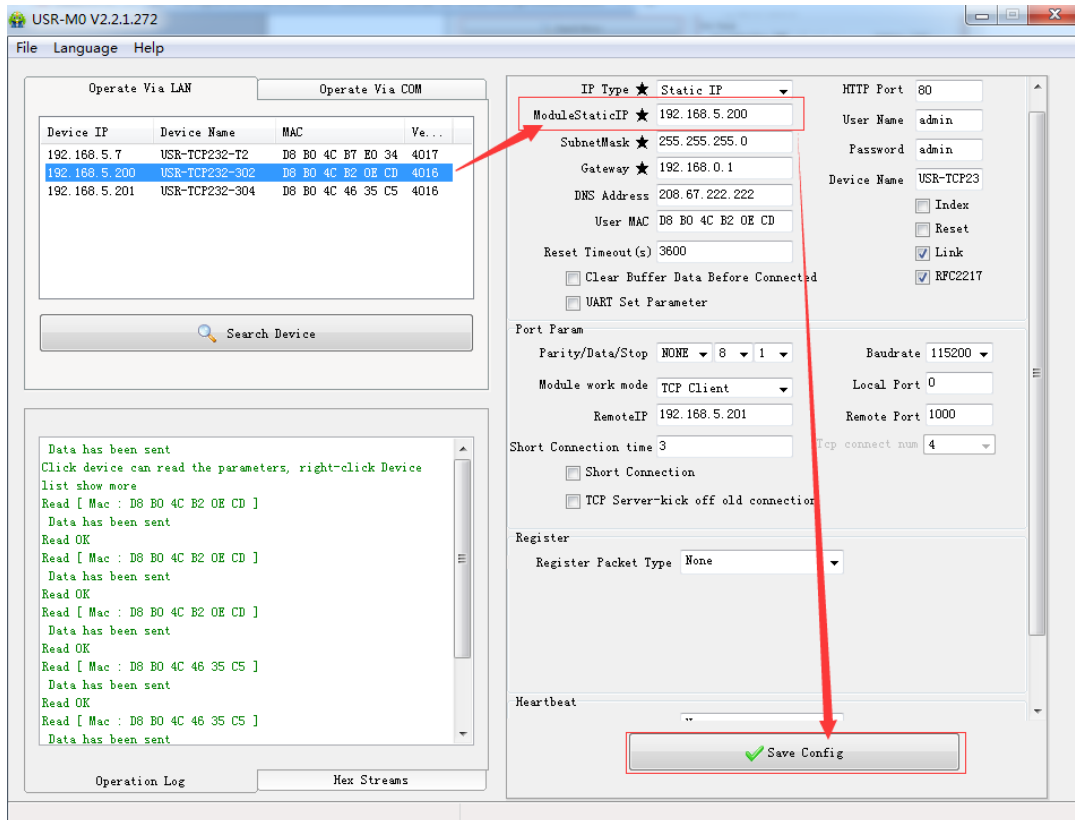
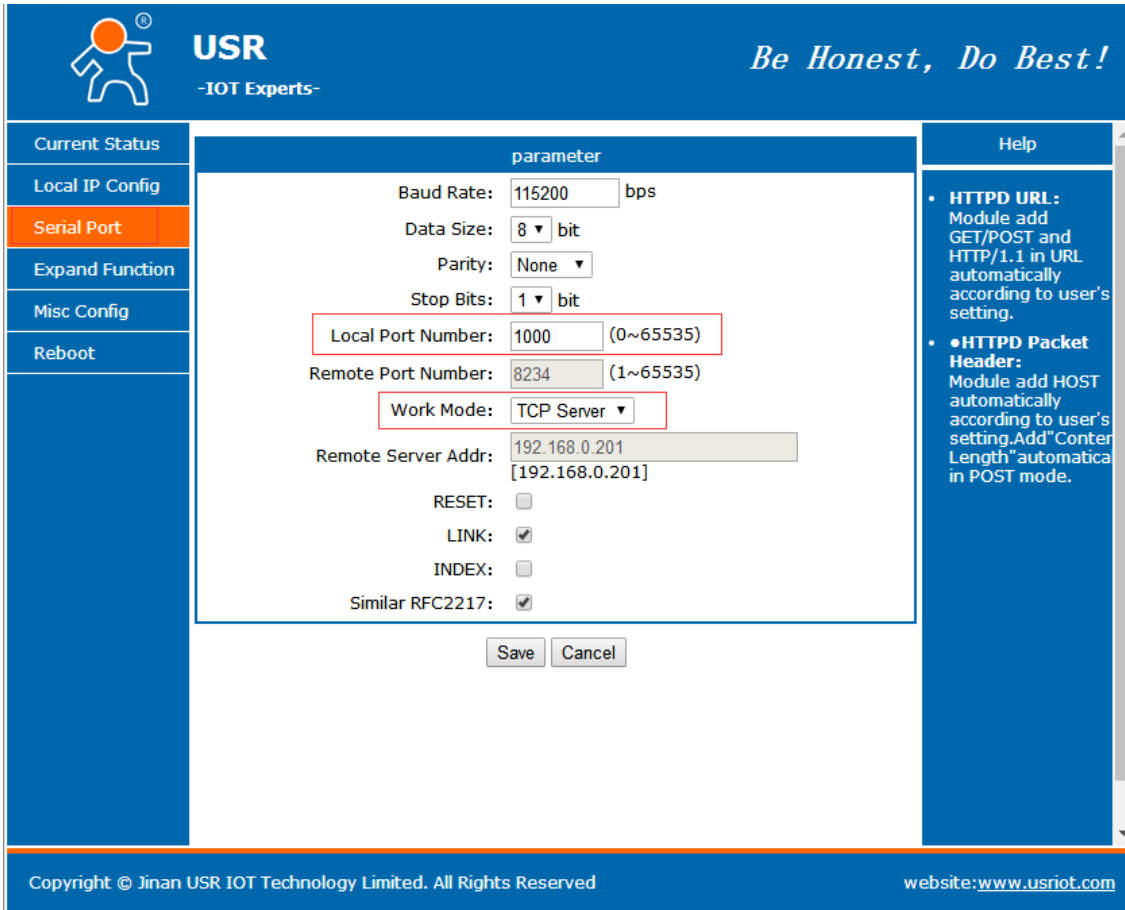


Figure 3 Configure IP address

Step 3: Change work mode and configure related parameters.(User can do this step by Web Server or setup software, we take Web Server as example in our test).

User can enter Web Server by modules' IP(Must ensure modules' IP have been changed to in same network segment as router).

Configure 304 as TCP server as follow:



parameter	value	range
Baud Rate:	115200	bps
Data Size:	8	bit
Parity:	None	
Stop Bits:	1	bit
Local Port Number:	1000	(0~65535)
Remote Port Number:	8234	(1~65535)
Work Mode:	TCP Server	
Remote Server Addr:	192.168.0.201	[192.168.0.201]
RESET:	<input type="checkbox"/>	
LINK:	<input checked="" type="checkbox"/>	
INDEX:	<input type="checkbox"/>	
Similar RFC2217:	<input checked="" type="checkbox"/>	

Save Cancel

Figure 4 Configure TCP Server module

Note: When configure module in TCP Server, user just needs to select 'TCP Server' in 'Work Mode' and configure 'Local Port Number'(I configure 1000 here).

Configure 302 as TCP Client as follow:

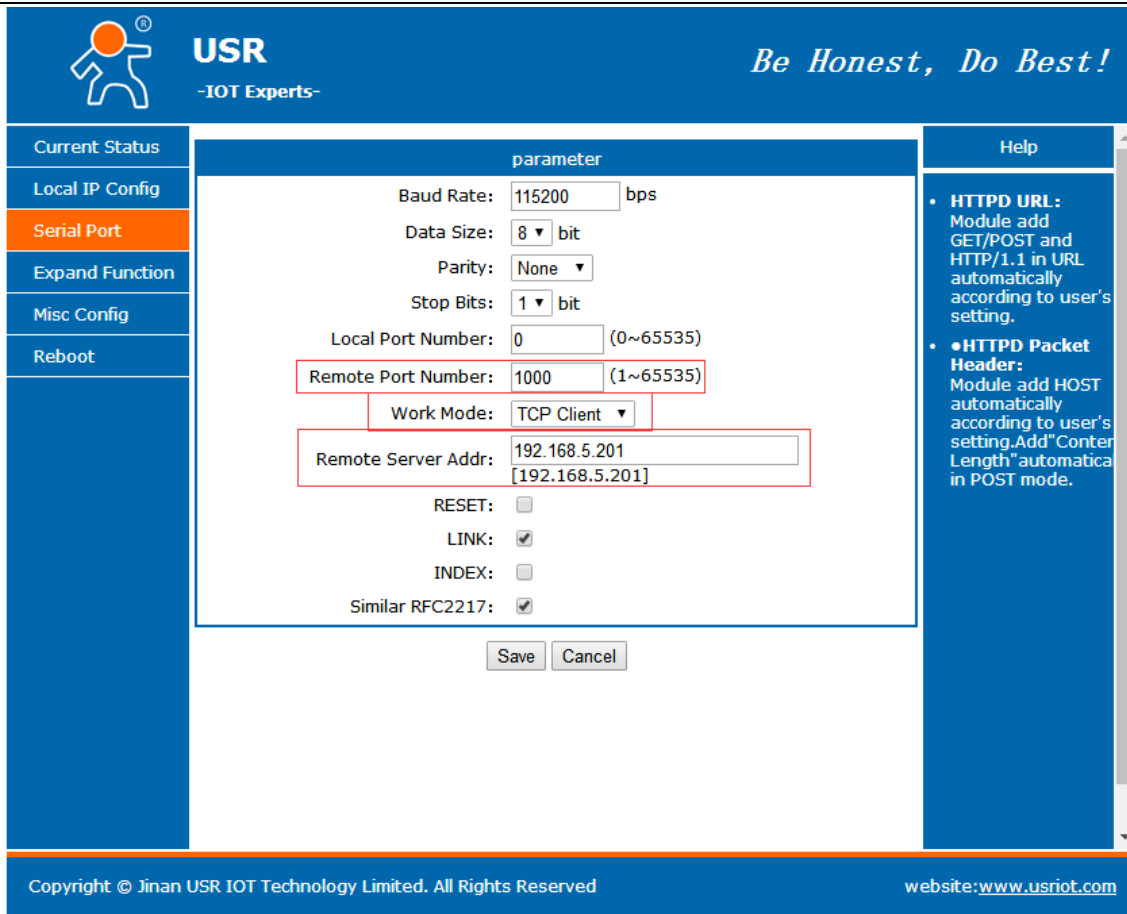


Figure 5 Configure TCP Client module

Note: When configure module in TCP Client, user just needs to select 'TCP Client' in 'Work Mode' and configure 'Remote Port Number'/'Remote Server Addr'. And 'Remote Port Number'/'Remote Server Addr' must same as TCP server local port number/local IP address(1000/192.168.5.201 here).

After configuring and saving, user should reset modules to make parameters take effect.

2.Data transmission

After configuring successfully, user can run the USR-TCP232-Test-V1.3.exe to test data transmission.

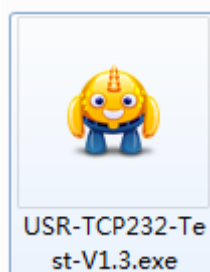


Figure 6 USR-TCP232-TEST-V1.3.exe

After step 1, we have connected 302 and 304 to PC through serial port interface. Then running the software above and choosing the correct COM port which connected to 302 and 304. After opening COM successfully, data transmission can be realized as follow:

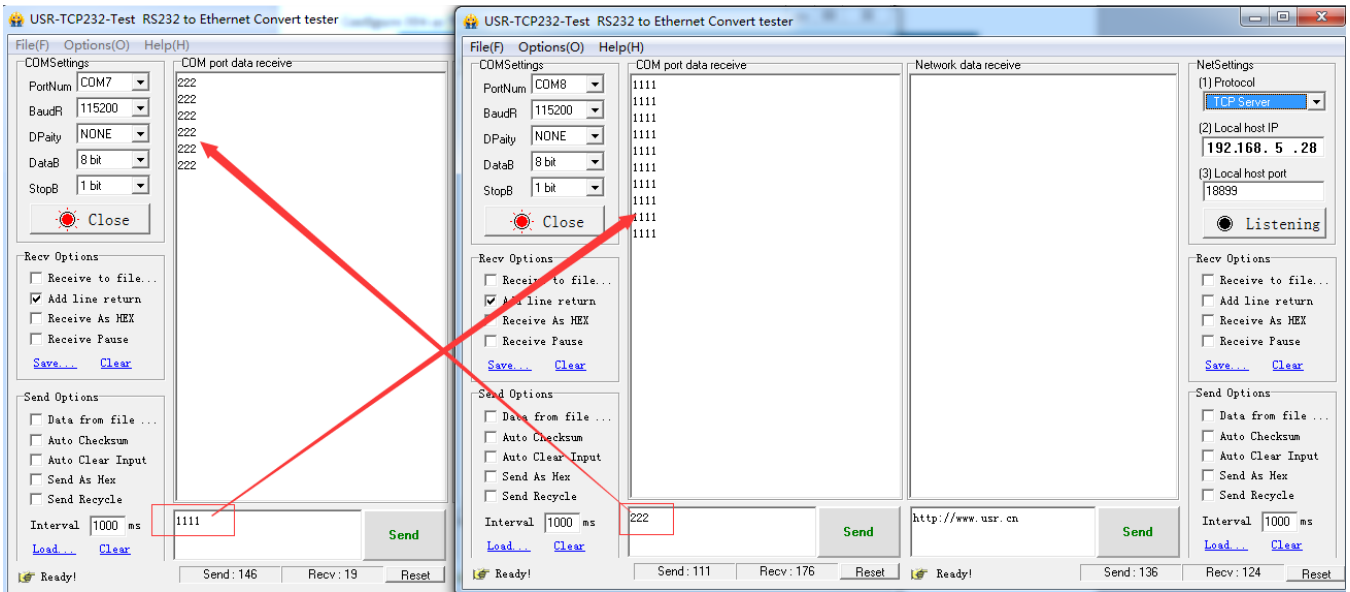


Figure 7 Data transmission

3.Contact Us

Company: Jinan USR IOT Technology Limited

Address: Floor 11, Building 1, No. 1166 Xinluo Street, Gaoxin District, Jinan, Shandong, 250101, China

Web: www.usriot.com

Support: h.usriot.com

Email: sales@usr.cn

Tel: 86-531-88826739/86-531-55507297

4.Disclaimer

This document provides the information of Serial-to-Ethernet products, it hasn't been granted any intellectual property license by forbidding speak or other ways either explicitly or implicitly. Except the duty declared in sales terms and conditions, we don't take any other responsibilities. We don't warrant the products sales and use explicitly or implicitly, including particular purpose merchant-ability and marketability, the tort liability of any other patent right, copyright, intellectual property right. We may modify specification and description at any time without prior notice.

5.Update History

2017-12-05 V1.0.0 established.