

## COMM-0252 Serial Device Server WEB User Manual

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## Foreword

## Target Demographic

This manual is intended for installers and system administrators who are responsible for installing, configuring, or maintaining networks. This manual assumes that you understand all transport and management protocols used by the network.

This manual also assumes that you are familiar with the terminology, theoretical principles, practical skills, and specific expertise of network devices, protocols, and interfaces related to networking. You must also have experiences working with graphical user interfaces, command-line interfaces, simple network management protocols, and Web browsers.

## Agreed

This manual uses the following conventions

GUI Agreed	Description
<b>Instruction</b>	Descriptions of the content of the operation, with the necessary additions and explanations
▲ Notice	Reminds of the precautions to be taken during operation, improper operation may lead to data loss or equipment damage.



# **1** Overview

## **1.1 Product Description**

COMM-0252 series is a serial port networking server that can provide 1/2 way RS-232/485/422 serial port and 1 way 10/100Base-T(x) network interface, which can centralise and manage dispersed serial devices and host computers easily and conveniently over the network. This series of devices can complete the RS-232/422/485 interface and

the Ethernet interface between the two-way transparent data transmission, can make the serial devices immediately with networking capabilities.

Product feature : Support dynamic IP (DHCP) and static IP, support gateway and proxy server, can transmit data through the Internet. Provide two-way transparent data transmission, serial port to TCP/IP function, the user does not need to make any changes to the original system. Internal integration of ARP, IP, TCP, HTTP, ICMP, SOCKET, UDP and other protocols. All programs provide Chinese interface, with setup wizard, easy to operate.

## **1.2 Product Features**

- supports 1/2-way RS-232/485/422 serial interface for remote control function;
- supports 1 channel 10/100Base-T(x) Ethernet interface;
- supports Reset key to restore factory settings;
- provides 5 channels of signals for each serial port, including RXD, TXD, RTS, CTS, GND;
- supports baud rate range 300-921600bps;
- supports custom baud rates;
- supports MCP, VCOM virtual serial port;
- supports ARP, IP, ICMP, UDP, TCP, HTTP, DHCP, MODBUS, and other protocols;
- support TCP Server, TCP/UDP Client, MCP&VCOM, Modbus Server/Client and other working modes;
- supports serial port ± 4KV anti-static protection, network port 1.5KVAC isolation protection;
- supports  $-40^{\circ}$   $\sim 85^{\circ}$  wide operating temperature;
- supports DC12~48V working voltage;



# **2** Hardware Description

## **2.1 Interface Description**

#### 2.1.1 Power connector input definition

COMM-0252

The front panel of this series of devices provides power access to DC and 3PIN 5.08 power terminals with a power input range of 12-57.6 VDC. It is recommended to use a power adapter with a DC header size of 2.5mm inner diameter and 5.5mm outer diameter.



Terminal	Power
block	
1	V+
2	(PGND)
3	V-

## 2.1.2 Serial Port Pin Assignment (RJ45)

RJ45			RS-422
1	TXD	DATA+	TXD+
2	RXD	DATA-	TXD-
3	RTS		RXD+
4	CTS		RXD-
5	DSR		
6	GND	GND	GND
7	DTR		
8			

## 2.1.3 Serial Port Pin Assignment (DB9)



DB9(PIN)	RS-232C
1	NC
2	RXD
3	TXD
4	NC
5	GND
6	NC
7	RTS
8	CTS
9	NC

2.1.4 Serial Port Pin Assignment (RS-485/422)

Д	Д	囚	囚
	2	2	

3.81/5.08 terminal block	RS-485	RS-422	Explanation
1	T/R+	TX+	T/R+
2	T/R-	TX-	T/R-
3		RX+	RX+
4		RX-	RX-



#### 2.1.5 Ethernet Port PIN Assignment (RJ45)

RJ45	EIA/TIA 568B Assignment		Explanation
1	Orange white	TX+	TX+
2	Orange	TX-	TX-
3	Green white	RX+	RX+
4	Blue	Data+	Data+
5	Blue White	Data-	Data-
6	Green	RX-	RX-
7	Brown white	Data+	Data+
8	Brown	Data-	Data-

#### 1 8 ~ \_\_\_\_

#### 10/100BaseT(X) Ethernet port

10/100BaseT (X) Ethernet port is located in the front panel of the device; the interface type is RJ45, the pin distribution of RJ45 port is defined as below figure. It adopts unshielded twisted pair (UTP) or shielded twisted pair (STP) for connection, the distance should be less than 100m. 100Mbps connection adopts 100  $\Omega$  line cat.5, and 10Mbps connection adopts 100  $\Omega$  cat.3, cat.4, cat.5.





The RJ45 port supports auto MDI/MDI-X. For MDI connection, pins 1, 2, 3 and 6 are connected accordingly. For MDI-X port of serial device server, it adopts cross line:  $1 \rightarrow 3$ ,  $2 \rightarrow 6$ ,  $3 \rightarrow 1$ ,  $6 \rightarrow 2$ . The 10Base-T/100Base-TX pin definitions in MDI/MDI-X applications are shown as below:

			_	
RJ 45	MDI	MDI-X		
	Signal	Signal		
1	TX+	RX+		
2	2 TX- RX-			
3	3 RX+ TX+		1	
6	RX-	TX-		
4、5、7、8	—	—		
RJ45 RJ45 X+1 X-1 K-1 6		3 6 RX+ RX-		
X+i 1	1 1 ITX+			
X-1 2	2 2 TX-			

MDI :

MDI-X:



The MDI/MDI-X adaptive function facilitates the use of the 10/100BaseT(X) Ethernet interface of the series without considering the type of Ethernet cable, and the connection between the series and the equipment can be realised directly through the crossover wire or straight-through wire.



# **3** Web Page

## 3.1 Web Page Login

Users can open a web browser and enter the default address of the serial port server: http://192.168.1.125 and press Enter. The login window will appear, as shown in the figure below, supporting Chinese and English switching. Enter the default user name:admin and password admin. Click <Login> button, you will see the serial server system status information.

💄 user			
password			
	Login		



1. When login the device, the IP network segment of PC should be consistent with the serial device server network segment.

2. When login at the first time, the IP address of PC is set to 192.168.1.x (x represents 1~254, except 125), and the subnet mask is set to 255.255.255.0, but the IP of PC cannot be the same as the serial device server, it means can't be 192.168.1.125.

3. The Web Server of this device only provides read-only mode. If the user or password input is wrong or not entered, the browser will directly jump to read-only mode, and the user cannot set the relevant parameters. If the user needs to modify the corresponding parameters, please fill in the user name and password correctly.



## **3.2 Web page Components**

The client side of the Web-based network management system is shown in the figure below and contains the setup navigation and operation areas.

Server Settings	Server Settings	5	
Serial Port Settings	Server Parameters	5	
Operation Mode Settings	Server Name:	SerialDeviceServer	
System Status	IP Address:	192.168.1.125	
System Management	MAC Addr:	08-d1-f9-a9-0a-77	
Security Settings	Subnet Mask:	255.255.255.0	
User Settings	Gateway:	192.168.1.1	
Save Settings	DNS Server1:	0.0.0.0	
	DNS Server2:	0.0.0.0	
	Ethernet Port Rate:	Auto Negotiation	*
	DHCP:	Disabled	*
	Cancel	ubmit	

District	Instruction
Setting up navigation	Select the corresponding navigation for all operating
	functions.
Operating area	Specific settings and operations for all functional modules

## 3.3 WEB PAGE DESCRIPTION

The menu of the Web network management mainly provides eight menu items: service settings, serial port settings, mode settings, system status, system management, security settings, user settings, and save settings. As shown in the table below.

Menu	Submenu	Description
item		
Service	Service	Device model display, IP address, subnet mask, DHCP
Setting	Parameter	and other settings
Serial	Serial por	Serial port type and basic parameter settings
port	setting	
setting		



Mode setting	Working mode	Mode selection, consist of tcp Server/tcp client/udpclient/MCP/VCOM/modbusserver/modbusclient,default to TCP Server mode
System Status	System status information	Tcp, udp connection status, serial port communication statistics display
System Managem	System Information	View software version, hardware version, MAC address
ent	<b>Restore Factory</b>	Restore factory setting
	Upgrade	Upgrade firmware
	Firmware	
Security Setting	IP Filter Setting	IP segments in the filtering range will not be able to access the server via WEB.
User	Logout	Exit web user login
Setting	Change	Change user password
	Password	
Save Setting	Save and reboot	Reboot the device

## **4 BASIC SETTING**

## 4.1 Service Setting

## 1. Panel Description

The panel display area shows the system information of this serial server very intuitively. The interface display is shown below:



## 2. Keyword Description

Device Model	Show device model
IP Address	Device IP Address
Subnet Mask	Device Subnet Mask
Gateway	Device Gateway Address
DNS Service 1	Primary DNS Address
DNS Service 2	Secondary DNS address
Network Port	Auto-negotiation,10M half-duplex/full-duplex,100M
Rate	half-duplex/full-duplex
DHCP	Whether to enable DHCP to get IP address, default disable

## 3. Instructions for operating steps

Step 1	Click	the "S	Service	e Settings"	inter	face in the navig	ation bar	
Step 2	After	the	user	modifies	the	corresponding	configuration,	click
	"Setti	ngs"						

## 4.2 Serial port setting

## 1.Panel description

Users can view and set network interface information and DHCP status, as shown in the figure below.

Server Settings	Serial Port Set	tings									
Serial Port Settings	Serial Port										
Operation Mode Settings	Serial Port:	◉ 1 ○ 2									
	Serial Port Parameters										
System Status											
System Management	Interface:	R\$232	~								
Security Settings	Baud Rate:	9600	~								
User Settings	Data Bits:	8	v								
Save Settings	Stop Bits:	1	v								
	Parity:	None	•								
	Flow Control:	None	•								
	Interval Time:	0	(0-100ms)								
	Packing Length:	0	(0-1440Byte)								
	Cancel	ubmit									

## 2. Keyword description

Serial	Port	Select serial port 1 or serial port 2
Selection		



Interface Type	Serial interface type selection, RS232/RS485/RS422				
Baud Rate	Baud rate of serial port, 300~921600, or select customized,				
	default 9600				
Data Bit	Data bit, can choose 5/6/7/8				
Stop Bit	Stop bit, selectable 1/1.5/2				
Check Bit	Check digit, selectable Odd/Even, default None				
Flow Control	Flow control, selectable None, RTS/CTS				
Interval	Data packing interval, delay time within the packing rule.				
Packing length	Data packing length, if the serial port receives a data frame				
	smaller than this set length, it will delay the interval time to wait				
	for whether there is any subsequent data coming.				

#### 3. Instructions for operating steps

Step 1	Click the "Serial Port Settings" interface in the navigation bar.
Step 2	Users can modify the corresponding serial port parameter configuration
	and click "Settings"

## 4.3 Mode setting

#### 4.3.1 VCOM mode

#### 1.Panel description

TCP/IP virtual serial port mode works in windows system environment, through the driver to the serial port server port mapping into the local host of the virtual COM port, it makes the original COM port based on the operation of the upper end of the software does not need to do any modification like the application of the local real COM port, the driver can support the expansion of up to COM256.And each independent port can support multiple sessions, making the monitoring of serial devices more flexible and convenient, and multiple connection resources can also be connected to backup. The interface is shown as below:

Server Settings	Operation Mode Settings							
Serial Port Settings	Serial Port							
Operation Mode Settings	Serial Port:							
System Status	Operation mode P	arameters						
System Management	Connect Mode:	VCOM	•					
Security Settings	Keep Alive:	60	(30-600s)					
User Settings	Data Port:	966						
Save Settings	Command Port:	967						
	Cancel	bmit						



## 2. Keyword description

Serial Port	Select serial port 1 or serial port 2
Selection	
Connection	Select working mode: VCOM
Mode	
Keep Alive Time	After the connection takes effect, the device will send keep-alive
	detection messages at the interval set by this value to detect
	whether the connection is in a valid state.
Data Port	Cannot be modified, just press the default
Command Port	Cannot be modified, just press the default

## 3. Operation steps instructions

Step 1	Click the "Mode Settings" interface in the navigation bar
Step 2	The user sets the working mode to VCOM mode and clicks "Settings".

## 4. Mode operation instructions

1. Use the VCOM Utility tool, select "Communication Port Mapping", click "Add Communication Port", search for the device, and create a virtual serial port.

🛞 VC	MC						_	×
Remote	Device Manageme	nt COM Mapping Options	About	Exit Lang	Jage			
Add	COM Inpu	t COM Remove COM M		Enable CON	Disable COM     Import COM List     Exp	oort COM List		
#	Туре	IP	Port	COM Port	Connection Status			
1	2 ports	192.168.1.123	1	COM2	N/A			
2	2 ports	192.168.1.123	2	COM3	N/A			

2. Use the serial port debugging assistant to open the virtual serial port and real serial port respectively to communicate.

Seria	l connection —		Data display		Serie	al connection —		Data display
Port:	COM2 👻		2023-12-18 15:51:00.041 SEND 0123456789abc!!!	Ш	Port:	C011/27 💌		2023-12-18 15:51:00.067 RECV 0123456789abe!!!
Baudrate:	115200 -		0123400709400709 2023-12-18 15:51:00.257 SEND 0123456789abe!!!		Baudrate:	115200 👻		2023-12-18 15:51:00.291 RECV 0123466789abs!!!
Parity:	None		0123400709800000 2023-12-18 15:51:01.437 RECV 01234667898be <sup>111</sup>		Parity:	None -		0123400709406799 2023-12-18 15:51:01.417 SEND 0123466789abs!!!
Databit:	8 👻		2023-12-18 15:51:01.636 RECV 0123466789abc!!!		Databit:	8 👻		2023-12-18 15:51:01.616 SEND 0123466789abe!!!
Stopbit:	1 -				Stopbit:	1 -		
Flow:	NONE				Flow:	NONE		
🔽 DTR	🔽 RTS				🔽 DTR	MTS		
DSR	🔲 CTS	«			🔲 DSR	CTS	«	
🔲 DCD	🔲 RI				🔲 DCD	🔲 RI		
	Close					Close		
•	sign 📕		🔲 HEX 🗹 Timestamp 🔽 Display data 🔲 Save as file Clear	Л	•	sign		🔲 HEX 🔽 Timestamp 🔽 Display data 🔲 Save as file 🔃
	^		Sending space	5		^		Sending space
			0123456789abo!!!					0123466789abe!!!
	<b>.</b>		🗌 HEX 🔽 Timestamp 📃 Timer 1000 韋 (ms/time)	Ш		<b>.</b>		🗌 HEX 🗹 Timestamp 🔲 Timer 10 🚖 (ms/time)
		5	Enter Add check NONE Send as file	Л				Enter Add check NDEE  Send as file
TX: 32	RX: 32	F	rame ratio: 2 \ 2 Count reset 🔤 Version: V1.0.6	.:.	TX: 32	RX: 32	F	rame ratio: 2 \ 2 Count reset 🖳 Version: V1.0.6

4.3.2 TCP Server mode



## 1.Panel description

In TCP server mode, the serial server is assigned an IP port number and passively waits for host connection. When the host initiates a connection request and establishes a connection with the serial port server, the host can realize two-way transparent data transmission through the network connection and the serial port. TCP server mode supports up to 6 session connections at the same time, allowing multiple hosts to read or send Ethernet data to a serial device at the same time. The interface displays as shown below:

Server Settings	Operation Mode Settings		
Serial Port Settings	Serial Port		
Operation Mode Settings	Serial Port:	● 1 ○ 2	
	Operation mode P	arameters	
System Status			
System Management	Connect Mode:	DataSocket	<b>`</b>
Security Settings	Connect Type:	TCP Server Mode	~
User Settings	Connect Num:	2	(1-6)
Save Settings	Local Port:	10000	(0-65534)
	Keep Alive:	60	(30-600s)
	Cancel	ıbmit	

## 3. Keyword description

Serial Port	Select Serial Port 1 or Serial Port 2		
Selection			
Connection Mode	Select the working mode as DataSocket		
Connection Type	Select TCP Server Mode		
Number of	Maximum number of client connections, 1-6		
Connections			
Local Port	Listening port number, default 10000		
Keep Alive Time	After the connection takes effect, the device will send alive		
	probe messages at the interval of this setting to detect		
	whether the connection is in a valid state or not.		

## 4. Instructions for operating steps

Step 1	Click the "Mode Settings" interface in the navigation bar.
Step 2	The user selects the connection mode as DataSocket, the connection type
	as TCP Server Mode, sets the listening port, and clicks "Set".

## 4.3.3 TCP Client Mode

## 1. Panel Description

In TCP Client Mode, the Serial Server can actively establish a network connection with a user-specified host when the serial data arrives, and when the data transmission is finished, the Serial Server will automatically close the network connection according to the parameters of keep-alive time/idle timeout. Similarly, TCP client mode can support up to 6 session connections at the same time, enabling multiple hosts to read or send Ethernet data to a serial device at the same time. The interface is shown below:

Server Settings	Operation Mod	Operation Mode Settings					
Serial Port Settings	Serial Port						
Operation Mode Settings	Serial Port:	● 1 ○ 2					
System Status	Operation mode P	Operation mode Parameters					
System Management	Connect Mode:	DataSocket	•				
Security Settings	Connect Type:	TCP Client Mode	•				
User Settings	Connect Num:	1		(1-6)			
Save Settings	Keep Alive:	60		(30-600s)			
	Heartbeat Enable:	Heartbeat Disable	~				
	Register Type:	Register Package Disable	~				
		Remote IP		Remote Port		Local Port (If	0, the system automatically allocates)
	Remote IP1:	0.0.0.0		10000	(0-65534)	10000	(0-65534)
	Remote IP2:	0.0.0.0		10001	(0-65534)	10001	(0-65534)
	Remote IP3:	0.0.0.0		10002	(0-65534)	10002	(0-65534)
	Remote IP4:	0.0.0.0		10003	(0-65534)	10003	(0-65534)
	Remote IP5:	0.0.0.0		10004	(0-65534)	10004	(0-65534)
Heartbeat Pac	ks and Reg	istration Packs:					
	Heartbeat Enable:	Network Heartbeat Packet	~				
	Heartbeat Time:	30		(1-65535s)			
	Heartbeat Encoding:	ASCII	~	(1-055553)			
	Heartbeat Content:	AUUI					
	Register Type:	Custom Register Package	~				
			•				
	Register Location: Registration		•				
	Encoding:	ASCII	~				
	Register Content:						
		Remote IP		Remote Port		Local Port (If 0,	the system automatically allocates)
	Remote IP1:	0.0.0.0		10000	(0-65534)	10000	(0-65534)

## 2.Keyword description

Serial Port	Select Serial Port 1 or Serial Port 2
-------------	---------------------------------------



Selection				
Connection	Select the working mode as DataSocket			
Mode				
Connection	Select TCP Client Mode			
Туре				
Number of	Maximum number of client connections, 1-6			
Connections				
Keep Alive Time	After the connection takes effect, the device will send out alive			
	probe messages at this interval to detect whether the connection			
	is in a valid state or not.			
Heartbeat	Turn off heartbeat packets: Not enabled			
Packet Enable	Network heartbeat packets: send heartbeat packets to the			
	server at regular intervals.			
Heartbeat	Heartbeat packet sending interval, 1-65535s			
Packet Time				
Heartbeat	Encoding format: Ascii or Hex			
Packet Code				
Heartbeat Pack	Customize heartbeat packet content			
Contents				
Package Type	Registration packet off: not enable			
	MAC registration packet: send MAC address to server side			
	Customized Registration Packet: Send customized registration packet to server side			
Package	Connection Send: Sent when a connection is established with the			
Location	server			
	Data Carrying Send: Access the registration packet data at the			
	top of each packet.			
De elve e a Carda	Full Registration: Includes the above two cases			
Package Code	Encoding format: Ascii or Hex			
Packet Content	Customize the content of the registration packet			
Remote IP/Port	Set the IP address and port number of the target host for connection			

## 4. Instructions for operating steps

Step 1	Click the "Mode Settings" interface in the navigation bar.	
Step 2	The user selects the connection mode as DataSocket and the connection	
	type as TCP Client Mode.	
Step 3	Set the IP address and port number of the server and click "Settings".	

## 4.3.4 UDP Client mode



## 1.Panel description

In UDP mode, the interface displays as shown below:

Server Settings	Operation Mo	Operation Mode Settings				
Serial Port Settings	Serial Port					
Operation Mode Settings	Serial Port:	● 1 ○ 2				
System Status	Operation mode	Parameters				
System Management	Connect Mode:	DataSocket 🗸				
Security Settings	Connect Type:	UDP Client Mode 🗸				
User Settings	Connect Num:	1	(1-6)			
Save Settings		Remote IP	Remote Port		Local Port (If 0	), the system automatically allocates)
	Remote IP1:	0.0.0.0	10000	(0-65534)	10000	(0-65534)
	Remote IP2:	0.0.0.0	10001	(0-65534)	10001	(0-65534)
	Remote IP3:	0.0.0.0	10002	(0-65534)	10002	(0-65534)
	Remote IP4:	0.0.0.0	10003	(0-65534)	10003	(0-65534)
	Remote IP5:	0.0.0.0	10004	(0-65534)	10004	(0-65534)
	Remote IP6:	0.0.0.0	10005	(0-65534)	10005	(0-65534)
	Cancel	ubmit				

## 2. Keyword Description

Serial Port	Port Select Serial Port 1 or Serial Port 2		
Selection			
Connection Mode Select the operating mode as DataSocket			
Connection Type	Select UDP Client Mode		
Number of Maximum number of client connections, 1-6			
Connections			
Remote IP Set the IP address and port number of the targe			
	connect to		

## 3. Instructions for operating steps

Step 1	Click the "Mode Settings" interface in the navigation bar.	
Step 2	The user selects the connection mode as DataSocket and the connection	
	type as UDP Client Mode.	
Step 3	Set the IP address and port number of the server and click "Settings".	

## 4.3.5 Modbus Server mode

#### 1.Panel description

The device is set as a Modbus server and acts as a slave station to respond to transaction requests. The interface displays as shown below:



Server Settings	Operation Mode Settings			
Serial Port Settings	Serial Port			
Operation Mode Settings	Serial Port:	● 1 ○ 2		
	Operation mode Parameters			
System Status	Connect Mode:	Modbus		
System Management				
Security Settings	Connect Type:	TCP Server Mode		
User Settings	Connect Num:	2	(1-6)	
Save Settings	Local Port:	10000	(0-65534)	
	Keep Alive:	60	(30-600s)	
	Cancel	bmit		
	Cancer	billic		

#### 2. KEYWORD DESCRIPTION

Serial Port	Select serial port 1 or serial port 2	
Selection		
Connection Mode	Select the operating mode as Modbus	
Connection Type	Select TCP Server Mode	
Number of	Maximum number of client connections, 1-6	
Connections		
Local Port	Listening port number, default 10000	
Keep Alive Time	After the connection takes effect, the device will send out alive	
	detection messages at the interval of this setting to detect	
	whether the connection is in a valid state.	

## 3. Instructions for operating steps

Step 1	Click the "Mode Settings" interface in the navigation bar.
Ste 2	The user selects the connection mode as Modbus, the connection
	type as TCP Server Mode, sets the listening port, and clicks "Set".

## 4.3.6 Modbus Client Mode

## 1. Panel Description

The device is set as a Modbus client, which is acting as a master and initiating the transaction request on its own initiative. The interface is displayed as below:



Server Settings	Operation Mo	de Settings				
Serial Port Settings	Serial Port					
Operation Mode Settings	Serial Port:	● 1 ○ 2				
System Status	Operation mode	Parameters				
	Connect Mode:	Modbus				
System Management						
Security Settings	Connect Type:	TCP Client Mode				
User Settings	Connect Num:	1	(1-6)			
Save Settings		Remote IP	Remote Port		Local Port (If 0	), the system automatically allocates)
	Remote IP1:	0.0.0.0	10000	(0-65534)	10000	(0-65534)
	Remote IP2:	0.0.0.0	10001	(0-65534)	10001	(0-65534)
	Remote IP3:	0.0.0.0	10002	(0-65534)	10002	(0-65534)
	Remote IP4:	0.0.0.0	10003	(0-65534)	10003	(0-65534)
	Remote IP5:	0.0.0.0	10004	(0-65534)	10004	(0-65534)
	Remote IP6:	0.0.0.0	10005	(0-65534)	10005	(0-65534)
	Cancel	ubmit				

## 2. Keyword Description

Serial Port	Select serial port 1 or serial port 2
Selection	
Connection Mode	Select the operating mode as Modbus
Connection Type	Select TCP Client Mode
Number of	Maximum number of client connections, 1-6
Connections	
Remote IP	Set the IP address and port number of the target host to be
	connected.

## 3. Instructions for operating steps

Step 1	Click on the "Mode Setting" screen in the navigation bar.
Step 2	User selects Modbus as the connection mode and TCP Client Mode as the
	connection type.
Step 3	Set the IP address and port number of the server and click "Set".

#### 4.3.7 MCP Mode

#### 1. Panel Description

TCP/IP virtual serial port mode works in windows system environment, through the driver to the serial port server port mapping into the local host of the virtual COM port, so that the original COM port based on the operation of the upper end of the software without any modification, like applying the local real COM port, the driver can support the expansion of up to COM256, and each independent port can support multiple sessions, making the monitoring of the



serial port device more flexible and convenient. And each independent port can support multiple sessions, making the monitoring of serial devices more flexible and convenient, and multiple connection resources can also be connected to backup. The interface is shown as below:

Server Settings	Operation Mod	le Settings					
Serial Port Settings	Serial Port						
Operation Mode Settings	Serial Port:	● 1 ○ 2					
System Status	Operation mode Parameters						
System Management	Connect Mode:	МСР					
	Keep Alive:	60	(30-600s)				
Security Settings	Data Port:	950					
User Settings							
Save Settings	Command Port:	966					
	Cancel	ıbmit					

#### 2. KEYWORD DESCRIPTION

Serial Port	Select serial port 1 or serial port 2
Selection	
Connection	Select the operating mode: MCP
Mode	
Keep Alive Time	After the connection takes effect, the device will send alive
	detection messages at the set time interval to detect whether the
	connection is in a valid state.
Data Port	No modification, just press default
Command Port	No modification, just press default

#### 3. Instructions for operating steps

Step 1	Click the "Mode Setting" screen in the navigation bar.
Step 2	The user can set the working mode as MCP mode and click "Set".

## 4. Mode operation instructions

1,.Using the Nport Administrator tool, select the "COM-Mapping" option, click the "Add" button to create a virtual serial port, and then click "Apply". After creating the virtual serial port, click "Apply".

<u>File</u>	OM Mapping Co	onfiguration ⊻iew <u>H</u> elp							
 Exit	💼 🗰 🕼 🖳 🔛 🗃 Exit Add Remove Apply Undo Setting								
No	COM Port 🛛		Address 2						
	COM2	192.168.1.123 950:966 (Port1)							

2. Use the serial port debugging assistant to open the virtual serial port and the real

serial port respectively to communicate.

	串口连接	数据显示		串口连接	数据显示
串口:	C0112 -	2023-09-07 16:51:12.038 SEND 0123456789aba(!)	串口:	COM5 -	2023-09-07 16:51:12.051 RECV 0123456789abc!!!
波特率:	115200 -		波特率:	115200 -	2023-09-07 16:51:13.486 SEND 0123456789abc!!!
棱验位:	无校验		校验位:	无枝验	0123400/09400:::
数据位:	8 👻		数据位:	8 👻	
停止位:	1 -		停止位:	1 -	
流控制:	无		流控制:	无	
🔽 DTR	MTS		🗾 DTR	🗹 RTS	
DSR	CTS	*	🔲 DSR	CTS	«
🔲 DCD	EI RI		🔲 DCD	🔲 RI	
	关闭			关闭	
	标识	🔲 HEX 🔽 时间戳 🔽 显示数据 📃 以文件保存 清除数据	•		🔲 HEX 🔽 时间戳 🔽 显示数据 🔲 以文件保存 清除数据
	<u>^</u>	发送区		<u>^</u>	发送区
		0123456789abe!!!			0123456789abe!!!
	~	HEX ✓ 时间戳 定时 1000		~	HEX ✓ 时间戳 □ 定时 1000 ◆ (ms/次)
	)	│ □ 加回车 加校验 无   _ □ 以文件发送			
TX: 16	RX: 16	帧数比: 1 \ 1 计数清零 版本号: V1.0.6 1	TX: 16	RX: 16	帧数比: 1 \ 1 计数清零     版本号: ∀1.0.6



#### 4.4 System Status

#### **1.** Panel Description

#### **TCP** Status

Displays the current system TCP connection status

Server Settings	System Status							
Serial Port Settings	Device Sta	tus Display						
Operation Mode Settings	Status:	TCP Status	~					
System Status	Туре	Local IP	Remote IP	Local Port	Remote Port	Snd_nxt	Rcv_nxt	Status
System Management				No	Data			
Security Settings								
User Settings								
Save Settings								

#### **UDP** Status

Displays the current system UDP connection status

Server Settings	System Status								
Serial Port Settings	Device Status Display								
Operation Mode Settings	Status: UDP Status	~							
System Status	Local IP	Remote IP	Local Port	Remote Port					
System Management		No	Data						
Security Settings									
User Settings									
Save Settings									

#### Serial Port Status

Displays the current system serial port configuration status and send/receive data statistics.



Server Settings	System Status									
Serial Port Settings	Device Status Display									
Operation Mode Settings	Status: Ser	Status: Serial Port Status								
System Status	Ser	Total RX	Total Tx	RTS	стѕ	DTR	DSR			
System Management	1	0	0	OFF	OFF	OFF	OFF			
Security Settings	2	0	0	OFF	OFF	OFF	OFF			
User Settings										
Save Settings										

#### 4.5 System Management

#### 1. Panel Description

Server Settings	System management
Serial Port Settings	System Information
Operation Mode Settings	Firmware Version: V1.27.6 Build20240506
System Status	Hardware Version: 40021254
System Management	Load Factory Default
Security Settings	
User Settings	Load Factory Default settings: Load Factory Default
Save Settings	Upgrade Firmware
	Select The Firmware And Upgrade: Select File Upgrade

#### 2.Keyword Description

Firmware Version	Display the firmware version number of the current device
Hardware Version	Display the hardware version number of the current device
Restore Factory	Restore factory settings
Firmware Upgrade	Software upgrade

#### 4.6 Security Setting

#### 1. Panel description

IP filtering settings, IP segments within the filtering range will not be able to access the server via WEB, the interface is displayed as below:

Security Settings						
IP Filter Settings						
	Start IP Address	End IP Address	Status			
Rule 1:	0.0.0.0	0.0.0.0	Disabled			
Rule 2:	0.0.0.0	0.0.0.0	Disabled			
Rule 3:	0.0.0.0	0.0.0.0	Disabled			
Rule 4:	0.0.0.0	0.0.0.0	Disabled			
Cancel	Submit					
	IP Filter S Rule 1: Rule 2: Rule 3: Rule 4:	IP Filter Settings           Start IP Address           Rule 1:         0.0.0.0           Rule 2:         0.0.0.0           Rule 3:         0.0.0.0           Rule 4:         0.0.0.0	Start IP Address         End IP Address           Rule 1:         0.0.0         0.0.0           Rule 2:         0.0.0         0.0.0           Rule 3:         0.0.0         0.0.0           Rule 4:         0.0.0         0.0.0			

#### 4.7 User Setting

#### **1. Panel Description**

Server Settings	User Settings
Serial Port Settings	Logout
Operation Mode Settings	Logout
System Status	Change Password
System Management	
Security Settings	Original Password:
User Settings	New Password:
Save Settings	Confirm Password:
	Cancel Submit

#### 2.Keyword Description

Logging Out	Click to exit web login
Change Password	Enter your original and new passwords to change your user password



#### 4.8 Save Setting

#### **1. Panel description**

Click restart to make the configuration take effect

Server Settings	Save Settings
Serial Port Settings	Save And Restart
Operation Mode Settings	Please check all Settings and press the restart button to take effect Restart
System Status	
System Management	
Security Settings	
User Settings	
Save Settings	

#### 5. Troubleshooting instruction

#### a) Unable to find the IP address of the serial server by running search

1. Firstly, check whether the physical connection is normal, the network cable (distinguishing between cross-wire and direct line) and the power supply is connected, observe the power indicator, LAN light, ACT (connected to the 10M network, the light is not lit, 100M when it is lit).

2. Is the host network card available and can it communicate with other local hosts

3. Close all the tools and software that can block broadcast packets (do not open the firewall that comes with the system)

4. Sudden abnormal disconnection while entering the configuration through the browser and setting the IP. For example: power failure, after which the device is not searched for and the IP is reset by entering the configuration through the console port.



#### b) Cannot open serial port

- 1. Ensure the normal operation of the network and whether it can ping the server.
- 2. Check the working status to see if the port is occupied.
- 3. If using VCOM mode to check if the configuration of the VCOM Utility is correct.
- 4. Delete the corresponding COM port from the registry and remap it.

#### c) Cannot transmit or receive data

1. Ensure that the serial port can be opened normally.

2. Check the frequency of the system light flashing, as fast flashing indicates data transmission and reception. If the light is not flashing fast, check the connection between the serial port and the top network, and the bottom serial device for wiring.

#### d) Forgot the set password

1. Press and hold the "reset" button for 5 seconds to restore the factory settings.

#### e) Transmiting and receiving data is garbled

1. Check if the wiring is correct. Our 485 wiring is 1A+, 2B -

2. Check if the line distance exceeds the standard distance and the quality of the line (which can also be achieved through extended line transceivers or optical isolation).

3. Check if the set baud rate matches the bottom device.

4. Detach from the client's top software and use the network or serial port to debug whether the assistant can receive normal data. If you can receive normal data, the problem may be related to the packing mechanism, you can go to the "Port Configure" to set the length of the packing and the waiting time of the packing.

f) The serial communication server acts as a dial-up server, and the connection has been established normally, but the client PC cannot open the web page when it enters the domain name in the address bar with IE browser; it can open the web



#### page when it enters the IP address.

1. Whether the DNS set in the serial communication server is real and valid.

g) The serial communication server acts as a dial-up server, and the connection has been established normally, but when the client PC opens a complex web page or downloads a large file using Internet Explorer, it often fails to open or download.

1. Check the [Serial Port] in the serial communication server settings to ensure that the [Flow Control] is consistent with the flow control of the MODEM. Usually MODEM flow control is RTS/CTS (Hardware Flow Control).

2. The negotiated DCE rate between MODEMs is too low, please dial again.

#### i) Cannot be connected as a TCP server

1. Confirm that there is no other PC connected to the corresponding port of the serial communication server: Enter the [Statistics] of the serial communication server to check the [Active TCP Information].

2. Whether [Authentication] in [Detailed Parameters] is [none].

If none of the above methods solves your problem, please contact the manufacturer.

#### **6 Vcom Software Operating Instruction**

#### 6.1 Remote Devices Management

#### 6.1.1 Device Search

After connecting the device, start the software "VCOM".

As in Figure 1, select remote devices Management--Add Device to bring up the search interface to find the IP address of the devices in your network.

Figure 2, select the "Search" button, you can find the IP address and basic information of all the devices in your network.



Figure 3, and then select Figure 3 "cancel", and Figure 2 "ok" button, you can find the device information displayed in the VCOM interface, the results are shown in Figure

:					
🖹 VCOM	-		/ ing * 0-00	A same as X	
	ice Managemen		Options <u>A</u> bout <u>E</u> xit		
Add Devic	Type	Device Login	Settings Assign IP L	ogout Import Settings Export Settings Device Description Info	COM Number



🚯 VCOM	1.1.1				*	Autor Auto	the suffer-the	
Remote Dev	vice Manageme	ent <u>C</u> OM Ma	apping Option	s <u>A</u> bout	<u>E</u> xit			
Add Devi	ice Remov	e Device	Login	ettings A	ssign IP Logo	ut Import Setting	s Export Settings	Firmware Update Open in Browser
#	Туре	MAC	IP			Device Description	Info	COM Number
			Add Device				×	Ŋ
			Select/Clea	ar All				
			#	Туре	MAC	IP		
			-					
			Search	IPv6		ОК	Cancel	
			Search	IPV6		UK	Cancel	



emote De	evice Manageme	ent <u>C</u> ON	1 Mapping	Options	<u>A</u> bout <u>E</u> xit			
Add Dev	vice Remov	ve Device	Logir	n Setting	is Assign IP Lo	ogout   Import	Settings Export Setting	gs Firmware Update Open in Brows
ŧ ^	Туре	MAC		IP		Device Descript	tion Info	COM Number
		_	Searchi	ng				
			#	Туре	MAC	IPv4	IPv6	
			1	1 Port	90:7E:BA:84:93:E2	192.168.1.125		



emote	Device Manager	ment <u>C</u> OM M	apping Optic	ns <u>A</u> bout	Exit			
Add D	Rem	ove Device	Login	Settings As	sign IP Logout	Import Settings Exp	ort Settings Firmwa	open in Browse
^	Туре	MAC	IF	, ,	De	vice Description Info	COM Nu	mber
			Add Device					
			Select/Cl	ear All				
			#	Туре	MAC	IP		
			☑ 1	1 Port	90:7E:BA:84:93:E	2 192, 168, 1, 125		
		_						





#### 6.1.2 Deleting Serial Device Information

In the software "VCOM", first select the device information, and then in the Remote Device Management interface, click "Remove Devive" to delete the device information, as shown in the following figure:

🚯 VCOM		_		-		
Remote Dev	vice Management	COM Mapping O	otions <u>A</u> bout <u>E</u> xit			
Add Devi	ce Remove	Device Login	Settings Assign IP Logo	ut Import Setting	s Export Settings	Firmware Update Open in Browser
#	Туре	MAC	IP	Device Description	Info	COM Number
1	1 Port	90:7E:BA:84:93:E2	192.168.1.125	Server	Latched	3,4,5,6

#### 6.1.3 Login Device

In the software "VCOM", select remote devices Management interface, click the "Login" button to pop up, as shown in Figure 1 below, enter the password to complete the login, after the success of the following Figure 2 shows.



🕯 VCOM		_			22.1					
Remote Device Management COM Mapping Options About Exit										
Add Dev	vice Remove	Device Login	Settings Assign IP Logo	ut Import Setting	s Export Settings	Firmware Update	Open in Browser			
#	Туре	MAC	IP	Device Description	Info	COM Number				
1	1 Port	90:7E:BA:84:93:E2	192. 168. 1. 125	Server	Latched	3,4,5,6				
		-	Login		× ]					
			Enter Password admin							
			ОК	Cancel						



	Device Manage		Options About Exit			11 <b>(</b>	(
Add D	Ren	nove Device Login	Settings Assign IP	Logout Import Settin	igs Export Settings	Firmware Update	Open in Browse
# ^	Туре	MAC	IP	Device Description	Info	COM Number	
			192,168.1.125	Server	Logged in		
			Information				
			Logged in.				



#### 6.1.4 Configuration Information

After completing the device login, click the "Setting" button to pop up the interface as shown in the following figures:

#### 6.1.4.1 Basic

Display basic device information, maintain the following default states



VCOM	
Remote Device Management COM M	Tapping Options About Exit
Add Device Remove Device	Login Settings Assign IP Logout Import Settings Export Settings Firmware Update Open in Browser
*         Type         MAC           1         1 Port         90:7E:BA	Settings COM Number 3,4,5,6
	MAC: 90:7E:BA:84:93:E2 Firmware Version: v.4.180423_1008 Basic Network Serial SNMP Change Password
	Device Description Server Time Zone UTC+08:00
	Local Date 2000/ 1/ 1
	Image: State
	Enable Reset button protect
	OK Cancel

#### 6.1.4.2 Network

Used for IP related configuration, consistent with serial server configuration

( VCOM	
Remote Device Management         COM Mapping         Options         About         Exit	
Add Device Remove Device Login Settings Assign IP Logo	ut   Import Settings Export Settings   Firmware Update Open in Browser
# Type MAC Continue	COM Number
#         Type         MAC         Settings           1         1 Port         90:7E:BA         Settings	3,4,5,6
Type: 1 Port MAC: 90:7E:BA:84:93:E2 Firm	ware Version: v.4.180423_1008
Basic Network Serial SNMP	Change Password
IP Configuration Static	
IP Address 192.168.1.125	
Netmask 255.255.0	
Gateway	
DNS Server	
IPv6 Configuration Static	
IPv6 Address	
Prefix Length 64	
Gateway (v6) DNS Server (v6)	
	OK Cancel

#### 6.1.4.3 Serial

The basic information configuration for ports is shown in Figure 1.



Double click on the corresponding item of "Settings" for the selected serial port, or select the corresponding serial port and click the "Configure" button to open the configuration interface as shown in Figure 2.

Remote Device       COM Mapping       Options       About       Exit         Add Device       Remove Device       Login       Settings       Assign IP       Logout       Import Settings       Firmware Update       Open in Brows         #       Type       MAC       Settings       Settings       COM Number         1       1 Port       9017E:BA       Settings       COM Number         JAdd       9017E:BA       Firmware Version:       v.4.180423_1008
#         Type         MAC         Settings         COM Number           1         1 Port         90:7E:8A         Type: 1Port         3,4,5,6
1         1 Port         90:7E:8A           Type:         1 Port
Basic Network Serial SNMP Change Password
Port Description Settings
1 921600,8,N,1,No flowctrl
Configure
OK Cancel
图 1
Remote Device Management COM Mapping Options About Exit
Add Device Remove Device Login Settings Assign IP Logout Import Settings Export Settings Firmware Update Open in Brows
# Type MAC Settings 23 COM Number
1 1 Port 90:7E:BA
Type: 1 Port
Type: 1 Port
Type: 1 Port MAC: 90:7E:BA:84:93:E2 Firmware Version: v.4.180423_1008 Basic Networ Serial Port Settings
Type: 1 Port MAC: 90:7E:BA:84:93:E2 Firmware Version: v.4.180423_1008 Basic Networ Serial Port Settings
Type: 1 Port MAC: 90:7E:BA:84:93:E2 Firmware Version: v.4.180423_1008 Basic Networ Serial Port Settings
Type:       1 Port         MAC:       90:7E:8A:84:93:E2       Firmware Version:       v.4.180423_1008         Basic       Networ       Serial Port Settings         Port       Basic       Port Description         Baud Rate       921600       Data Bits         Stop Bits       1       •
Type:       1 Port         MAC:       90:7E:BA:84:93:E2         Basic       Networ         Port       Port Settings         Port       Basic         Basic       Port         Basic
Type:       1 Port         MAC:       90:7E:BA:84:93:E2         Basic       Networ         Port       Basic         Parity       None
Type:       1 Port         MAC:       90:7E:8A:84:93:E2       Firmware Version:       v.4.180423_1008         Basic       Networ       Serial Port Settings         Port       Baud Rate       921600         Data Bits       8         Stop Bits       1         Parity       None         Flow Control       None
Type:       1 Port         MAC:       90:7E:BA:84:93:E2       Firmware Version:       v.4.180423_1008         Basic       Networ       Serial Port Settings         Port       Baud Rate       921600         Data Bits       8         Stop Bits       1         Parity       None         Interface       RS-232
Type:       1 Port         MAC:       90:7E:BA:84:93:E2         Basic       Networ         Port       Port Description         Baud Rate       921600         Data Bits       8         Stop Bits       1         Parity       None         Flow Control       None         Interface       RS-232         OK       Cancel
Type:       1 Port         MAC:       90:7E:BA:84:93:E2       Firmware Version:       v.4.180423_1008         Basic       Networ       Serial Port Settings         Port       Baud Rate       921600         Data Bits       8         Stop Bits       1         Parity       None         Interface       RS-232
Type:       1 Port         MAC:       90:7E:BA:84:93:E2         Basic       Networ         Port       Port Description         Baud Rate       921600         Data Bits       8         Stop Bits       1         Parity       None         Pitterface       R5-232         OK       Cancel

图 2

#### 6.1.4.4 SNMP

It is used to enable SNMP function, the configuration is the same as



#### serial device server.

emote	e Device M	lanagement	t <u>C</u> OM I	Mapping O	otions <u>A</u> b	out <u>E</u> xit					
Add	Device	Remove	Device	Login	Settings	Assign IP	Logout	Import Settings	Export Settings	Firmware Update	Open in Browse
ŧ ^	Typ 1 Po		MAC 90:7E:BA	Settings	*		-	an Teacogram	×	COM Number 3,4,5,6	
					1 Port 90:7E:BA:	34:93:E2	Firmware	Version: v.4.180423_	1008		
				Basic	Network	Serial	SNMP Char	nge Password			
					mmunity	Discontine public					
					cation intact	SZ SZUTEK					
				-							
								ок	Cancel		

#### 6.1.4.5 Change Password

It is used to change the password for the serial device server, the configuration is the same as serial device server.

COM	
Remote Device Management COM N	Mapping <u>Options</u> <u>About</u> <u>Exit</u>
Add Device Remove Device	Login Settings Assign IP Logout Import Settings Export Settings Firmware Update Open in Browser
# Type MAC	Settings COM Number
1 1 Port 90:7E:BA	Type:         1 Port           MAC:         90:7E:BA:84:93:E2           Firmware Version:         v.4.180423_1008
	Basic Network Serial SNMP Change Password
	Current Password
	Confirm Password
	OK Cancel

#### 6.1.5 Assign IP

In "VCOM", select "remote devices Management", and click the "Assign



IP" button, it is shown as below. User can reset the IP address of serial device server (login operation is required before changing the IP).

VCOM				A 8444		
Add Devi	vice Managemen		ptions <u>A</u> bout <u>E</u> xit Settings Assign IP Logo	ut Import Settings	s Export Settings	Firmware Update Open in Browser
# ^	Туре	MAC	IP	Device Description	Info	COM Number
1	1 Port	90:7E:BA:84:93:E2	192.168.1.125	Server	Logged in	3,4,5,6
		Assig	n IP Address		×	
		N	ew IP Address 192.168.0.125		(For IPv4 Only)	
			OK	Cancel		

#### 6.1.6 Logout

In "VCOM", select "remote devices Management", and click "Logout" button, it is shown as below.

	И					and a	alling Aut	ante e	aller of	A 5	
<u>R</u> emote D	evice Manageme	nt <u>C</u> OM Mapp	ing <u>O</u> ption	ns <u>A</u> bout	Exit						
Add De	evice Remov	e Device	.ogin S	ettings A	ssign IP	Logout	Import Settin	ngs E	xport Settings	Firmware Update	Open in Browser
# ^	Type	MAC	IP			Devic	e Description	Info		COM Number	
1	1 Port	90:7E:BA:84:	93:E2 19	2.168.1.125		Serve	r	Latch	ed	3,4,5,6	
			Informat	ion				x			
			0	Devices are	logged ou	ıt.					
							Oł				

#### 6.1.7 Import setting

In "VCOM", after login successfully, select "remote devices Management", click "Import Settings" button, it is shown as figure 1; click "Browse" to choose the saved or exported file(shown as figure 2), then click "ok" and wait(shown as figure 3).

	N				-	Audited Audio	the Address	A 5	
<u>R</u> emote [	Device Managem	ent <u>C</u> OM Mapping	<u>O</u> ptions	<u>A</u> bout <u>E</u> xit					
Add D	evice Remov	ve Device	in Setti	ngs Assign IP	Logou	It Import Setting	s Export Settings	Firmware Update	Open in Browser
# ^	Туре	MAC	IP			Device Description	Info	COM Number	
1	1 Port	90:7E:BA:84:93	E2 192.1	68.1.125		Server Logged in		3,4,5,6	
			Import Set	tings			X		
			File Name:						
				Browse		ОК	Cancel		
			<u></u>		_		1		

图 1



#### COMM-0252 WEB User Manual

VCON	1		-	A ADDRESS IN A ADDRESS	to sale-re-	
<u>R</u> emote D	evice Managemer	nt <u>C</u> OM Mapping	Options About Exit			
Add De	evice Remove	Device Login	Settings Assign IP Logo	ut Import Setting	Export Settings	Firmware Update Open in Browser
# ^	Туре	MAC	IP	Device Description	Info	COM Number
1	1 Port	90:7E:BA:84:93:E2	192.168.1.125	Server	Logged in	3,4,5,6
		Im	port Settings		X	
		Fi	le Name: Z:\zxj\UT-6001.ini			
			Browse	ОК	Cancel	

图 2

emote De	evice Manageme	nt <u>C</u> OM N	Napping Options Al	bout <u>E</u> xit				
Add Dev	vice Remove	e Device	Login Settings	Assign IP Log	out Import Settings	Export Settings	Firmware Update	Open in Browse
^	Туре	MAC	Settings		Server Security 1	×	COM Number	
	1 Port	90:7E:BA	Type: 1 Port MAC: 90:7E:BA Basic Network		mware Version: v.4.180423 Change Password	3_1008	3,4,5,6	
			Device Descrip					
			Time Zone Local Date	UTC+08:00 2000/ 1/ 1		<b>▼</b>		
			Local Time	0:21:37				
			Time Server	h Consulta				
			V Enable We					
			🔲 Enable Res	set button protect				
							-	
					ОК	Cancel		

#### 图 3

#### 6.1.8 Export setting

In "VCOM", after login successfully, select "remote devices Management", and click "Export Settings" button, it is shown as Figure 1; click "Browse" to choose the saved or exported file(shown as figure 2), then click "ok", and wait(shown as figure 3).

Č.	VCOM		· · ·				
ſ	<u>R</u> emote Dev	vice Management	t <u>C</u> OM Mapping <u>O</u>	ptions <u>A</u> bout <u>E</u> xit			
	Add Devi	ce Remove	Device Login	Settings Assign IP Logo	ut Import Settings	s Export Settings	Firmware Update Open in Browser
	#	Туре	MAC	IP	Device Description	Info	COM Number
		1 Port 90:7E:BA:84:93:E2		192.168.1.125	Server	Logged in	3,4,5,6
			Expo	rt Settings			
			File	Name: Browse	ОК	Cancel	

图 1



VCON	/ Device Management	COM Mapping	<u>O</u> ptions	<u>A</u> bout	<u>E</u> xit		-	-	-	-	-		
Add De	evice Remove [	Device Login	Setti	ngs Ass	ign IP	Logout	Imp	oort Settings	Ex	port Settin	gs	Firmware Update	Open in Browser
# ^	Туре	MAC	IP			C	evice Desc	ription	Info			COM Number	
		90:7E:BA:84:93:E	2 192.1	58.1.125		S	erver		Logged	lin			
			Export Setti	ings						23	♪		
			File Name:	Z:\zxj\UT-60 Browse	101.ini			ОК		Cancel			
							2						
	1				۰.	-	1.000	i Autor				4 5	
emote D	evice Management	COM Mapping	Options	About	Exit								

Add De	evice Rem	iove Device	Login	Settings Assign IP L	ogout Import Sett	ings Export Settings	Firmware Update Open in Browse
ŧ ^ .	Туре	MAC		IP	Device Description	Info	COM Number
L	1 Port	90:7E:BA:8	34:93:E2	192. 168. 1. 125	Server	Logged in	3,4,5,6
			Inf	formation Export Configuration	ок.		
				-		ок	

#### 6.1.9 Firmware update

In "VCOM", after the device login successfully, select "remote devices Management", and click "Firmware Update" button, then click "Browse" to choose the updated file, click "ok"; After waiting 240s, the firmware update is completed.

3

Add De	evice Remo	ve Device Logir	Settings	Logout Import Settings	Export Settings	Firmware Update Open in Brow	vser
^	Type	MAC	IP	Device Description	Info	COM Number	
	2 Port	90:7E:BA:8C:35:0	192, 168, 3, 18	Server	Logged in		
		_					
		Fir	nware Update		×		
			e Name:				
			Browse	ſ	K Cancel		

#### 6.1.10 Open in Browser

In "VCOM", select "remote devices Management", and click "Open in Browser", it is shown as below.

	用户登录	
admin		
•••••		
	登录	

## 6.2 COM Mapping

6.2.1 Create COM

1. In the software "VCOM", select COM Mapping—Add COM, "Add Device" interface is shown as below:

<u>R</u> emote De	evice Man	agement		Mapping Op	tions <u>A</u> bout	Exit			
Add CC	М	Remove (	сом ]	Modify COM	Enable COM	1 Disable COM	Import COM List Ex	port COM List	
¥ ^	Туре		IP		Port	COM Port Co	nnection Status		
				Add Devic	e				
				Select/0	Clear All				
				#	Туре	MAC	IP		
				☑ 1	1 Port	90:7E:BA:84:93:E	2 192.168.1.125		
				Search	IPv6		ОК	Cancel	

2. Select the device, and click "ok" in the "Add Device" interface:



emote [	Device Managem	ent <u>C</u> OM	Mapping Options	<u>A</u> bout	Exit			
Add	COM Rem	ove COM	Modify COM	Enable COM	Disable COM	Import COM List Expo	t COM List	
^	Туре	IP		Port	COM Port Conn	ection Status		
			Add Device				×	
			Select/Clear	All				
			#	Туре	MAC	IP		
			☑ 1	1 Port	90:7E:BA:84:93:E2	192.168.1.125		
			Search	IPv6		ОК	Cancel	

3. Then it is shown as below figure, the corresponding COM port is created successfully.

() VCON	1	_									
Remote D	evice Managemen	t <u>C</u> OM Mapping <u>O</u> ptions	<u>A</u> bout	<u>E</u> xit							
Add C	Add COM Remove COM Modify COM Enable COM Disable COM Import COM List Export COM List										
#	Туре	IP	Port	COM Port	Connection Status						
1	1 Port	192.168.1.125	1	COM3	N/A						

#### 6.2.2 Remove COM

In the software "VCOM", first select the COM port to be removed, then select the COM  $\,$ 

Mapping interface and click "Remove COM" to delete the COM port, it is as shown in the figure below:

🗿 VCOM											
Remote Device Management Options About Exit											
Add COM Remove COM Modify COM Enable COM Disable COM Import COM List Export COM List											
# ^	Туре	IP	Port	COM Port	Connection Status						
	1765	1	FUIL	COMPORT	Connection Status						
1	1 Port	192.168.1.125	1	COM3	N/A						

#### 6.2.3 Modify COM

In the software "VCOM", first select the COM port that needs to be deleted, then select the COM Mapping interface, click "Modify COM", the interface is as shown in figure 1 below, and then select "COM6" to change the corresponding "COM2" of Port1 to "COM6", it is as shown in figure 2:



VCOM	ice Manageme	nt <u>C</u> OM Mapping <u>O</u> ptic	ons <u>A</u> bout	Exit		
Add CO	M Remo	ve COM Modify COM	Enable COM	Disable CO	M Import COM List Export COM List	st
÷ ^	Туре	IP	Port	COM Port	Connection Status	
	1 Port	192.168.1.125	1	COM3	N/A	
		СОМ Г	Port Settings	-		
		со	M number of the	first selected por	t COM3 (in use)	
					COM7 (in use) COM8 COM9 COM9	

冬	1
---	---

(	🗿 VCOM			-								
	Remote Device Management COM Mapping Options About Exit											
	Add COM Remove COM Modify COM Enable COM Disable COM Import COM List Export COM List											
	#	Туре	IP	Port	COM Port	Connection Status						
Γ	1	1 Port	192.168.1.125	1	COM4	N/A						
Ι												

图 2

#### 6.2.4 Enable COM

In the software "VCOM", first select the COM port that needs to be disabled, then select the

COM Mapping interface, click "Enable COM" to disable the corresponding COM port, it is as shown below:

Ć	🗎 VCOM	1	-								
	Remote Device Management COM Mapping Options About Exit										
	Add CON	M Remove									
	#	Туре	IP	Port	COM Port	Connection Status					
	1	1 Port	192.168.1.125	1	COM4	IN/A					

#### 6.2.5 Disable COM list

In the software "VCOM", first select the COM port that needs to be disabled, then select the COM Mapping interface and click "Disable COM" to disable the corresponding COM port, it is as shown in the figure below:

VCOM									
Remote Device Management COM Mapping Options About Exit									
Add COM Remove COM Modify COM Enable COM Disable COM Import COM List Export COM List									
#	Туре	IP	Port	COM Port	Connection Status				
<del>1</del>	1 Port	<del>192.168.1.125</del>	4	COM4	N <del>/A</del>				

#### 6.2.6 Import COM list

In the software "VCOM", select the "COM Mapping" interface, click "Import COM List", the interface is as shown in figure 1 below, and click "Browse" to select the path of COM port configuration information to be saved as shown in figure 2. Click "OK", then it is exported successfully as



#### shown in figure 3:

VCON				
mote D	Device Manageme	nt <u>C</u> OM Mapping <u>O</u> ptio	s <u>A</u> bout <u>E</u> xit	
Add (	COM Remo	ve COM Modify COM	Enable COM Disable COM Import COM List Export COM List	
^	Туре	IP	Port COM Port Connection Status	
		Import (	OM List	-
		File Nam		
			Browse OK Cancel	
			· · · · · · · · · · · · · · · · · · ·	
			图 1	
vco		Citera C	CAO	
<u>R</u> emote	Device Managem	ent COM Mapping Optic	ns <u>A</u> bout <u>E</u> xit	
Add	COM Rem	ove COM Modify COM	Enable COM Disable COM Import COM List Export COM List	]
# ^	Туре	IP	Port COM Port Connection Status	
1	1 Port	192.168.1.125	1 COM4 N/A	
		Import	OM List	
		File Nan	ی [Z:\zxj\UT-6001-1.ini	
			Browse OK Cancel	
			图 2	
) vcc	M			
	Device Managen	nent <u>C</u> OM Mapping <u>O</u> pt	ns <u>A</u> bout <u>E</u> xit	
۵dd	d COM Ren	nove COM Modify COM	Enable COM Disable COM Import COM List Export COM List	
#	Туре	IP	Port COM Port Connection Status	
	1701	192,10010.22		
			图 3	

#### 6.2.7 Export COM list

In the software "VCOM", select the COM Mapping interface, click "Export COM List", the interface is as shown in figure 1 below, and click "Browse" to select the path of COM port configuration information to be saved as shown in figure 2. Click "OK", then it is exported successfully as shown in figure 3:

🖹 VCON	1							
<u>R</u> emote De	evice Manageme	ent <u>C</u> OM Mapping	Options	<u>A</u> bout	<u>E</u> xit			
Add C	OM Remo	ve COM Modify	сом	inable COM	Disable CO	M Import COM List E	xport COM List	
# ^	Туре	IP		Port	COM Port	Connection Status		
1	1 Port	192.168.1.125		1	COM4	N/A		
			Export CC	OM List			x	
			File Name:	:				
			-	Browse	-	ОК	Cancel	

图 1



🚯 VCOM										
Remote Dev	Remote Device Management COM Mapping Options About Exit									
Add CO	M Remove	COM Modify	y COM En	able COM	Disable COM	Import COM List Exp	ort COM List			
#	Туре	IP		Port	COM Port	Connection Status				
			Import COM	List			×			
			File Name: Z:	\zxj\UT-600	)1-1.ini					
				Browse		ОК	Cancel			

2

🌐 vco	M						
<u>R</u> emote	Device Manageme	ent <u>C</u> OM Mapping <u>O</u> ptions	About	<u>E</u> xit			
Add	COM Remo	ve COM Modify COM	Enable COM	Disable CON	Import COM List Expo	ort COM List	
# ^	Type	IP	Port	COM Port	Connection Status		
1	1 Port	192.168.1.125	1	COM4	N/A		
1	1 Port	192.168.1.125	1	COM4	N/A		

## 6.3 Options

Select whether to open VCOM software directly or to minimize opening it in the taskbar; the software is opened in the taskbar as a minimization by default. It is shown as below:

🚯 VCOM									
Remote Dev	ice Management	<u>COM Mapping</u> Options	<u>A</u> bout	Exit					
Add CO	Add COM Remove COM Modify CO Start Minimized OM Import COM List Export COM List								
#	Туре	IP	Port	COM Port 0	Connection Status				
1	1 Port	192.168.1.125	1	COM4 N	V/A				

## 6.4 Exit

Click "Exit" button to exit the software.