

UT-6102 Serial Device Server User Manual

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1. UT-6102 Serial Device Server Overview

1.1 Product Introduction

The UT-6102 is a serial communication device with one fiber optic ports and 2 electrical ports, which allows some RS232/422/485 terminal devices to transfer data in both directions via Ethernet.

Product features: supports dynamic IP (DHCP) and static IP, gateway and proxy server, and can transfer data via the Internet. Provides transparent bi-directional data transmission, realize serial to TCP/IP function, users do not need to make any modification to the original system. Internally integrate of ARP, IP, TCP, HTTP, ICMP, SOCKET, UDP, SNMP, MQTT, MODBUS and other protocols.

1.2 Main feature

Hardware Features

- With serial port, it can connect to various serial devices such as terminal, Modem, barcode machine, cash register, ISDN, terminal adapter, serial printer and PC, and can realize remote control function.
- With Reset key to restore the factory default state.
- With one SC head single-mode fiber optic interface (fiber optic 20km, 40km optional)
- With 2 10/100M adaptive Ethernet ports.
- 2 RS485 channels and 1 RS422 channel, (RS485 and RS422 cannot be used at the same time), and 1 RS232 channel
- 32-bit embedded 400MHz CPU, 128M RAM, powerful overall performance.

Software Features

- Support ARP, IP, ICMP, UDP, TCP, HTTP, DHCP, SNMP, MQTT, MODBUS and other protocols
- Terminal server parameter configuration
You can connect to the terminal server via web for configuration, making it extremely convenient for you to apply the serial server to your work.
- Software upgrade support
Software upgrades are available to facilitate the expansion of product functions, performance improvements and maintenance.
- Support for status monitoring
The device not only provides indicators to analyses the working status of the server, but also provides statistics on the input/output data of the network port and each port, which can be analyzed by the system administrator.

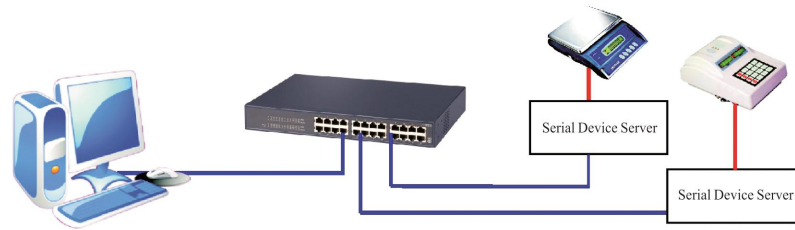
Safety Feature

The UT-6102 serial device server adopts the following kinds of security mechanisms to ensure that users can use this product safely enough.

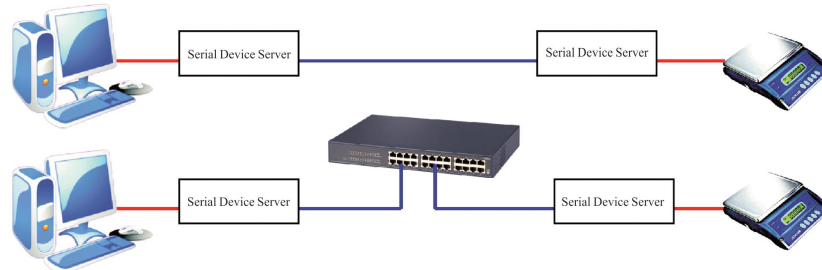
- The server management password can be set so that only the system administrator can manage the terminal server, thus preventing unauthorized persons from making arbitrary changes to the serial server to ensure the security of the serial server configuration.
- The port can be restricted to the host name to be logged in, so that users of hosts that have not been backed up through the restricted port will not be able to access the server, in order to ensure secure access to the server.
- As the serial server is connected to the network during its operation, in order to ensure its security in network access.
- The hosts or network segments that are allowed to access the server can be restricted, and unauthorized users that are not backed up in the host list and network segment list will not be able to access the server through the network.

1.3 Product Application Mode

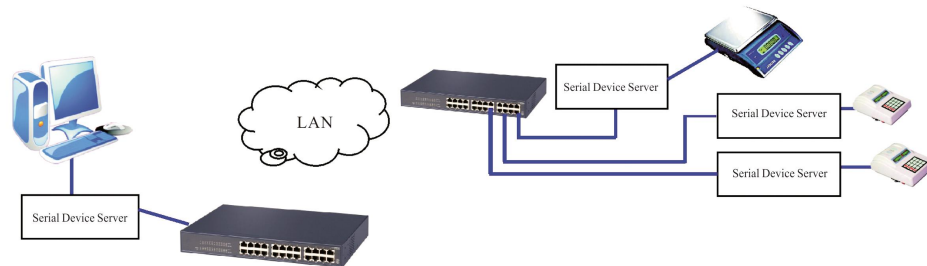
1.3.1 Virtual serial port mode



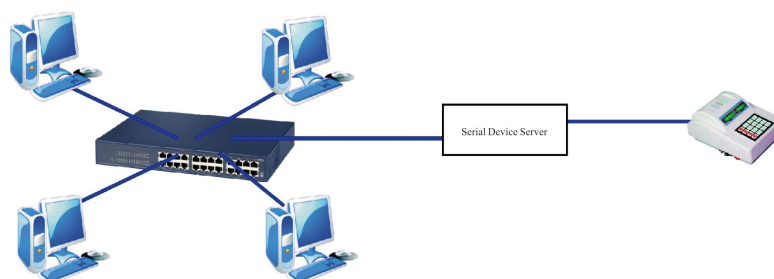
1.3.2 Point-to-point mode



1.3.3 Point-to-multipoint mode



1.3.4 Multi-host mode (up to 6 hosts)



2. UT-6102 Serial Device Server Installation Instruction

2.1 Software Installation Instruction

2.1.1 IP address search and change software

See attachment for details

2.2. Virtual serial port software

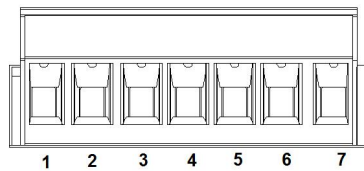
See attachment for details

2.2 LED Indicator Description

Define name	Light Color	Function	Status
P1	Red	Channel 1 power indicator	Always on when powered on, off when powered off
P2	Red	Channel 2 power indicator	Always on when powered on, off when powered off
FDX	Green	Correct fiber connection	Always on
RUN	Green	System operation indicator	0.5S on, 0.5S off alternately flashing
TX	Green	Serial data receive indicator	Flashing with data, extinguished without data
RX	Green	Serial data receive indicator	Flashing with data, extinguished without data

2.3 Interface Definition

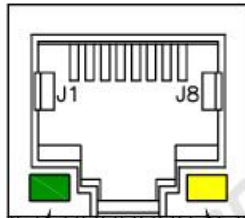
2.3.1 7pin 5.08 terminal serial port interface definition



7Pin 5.08 terminal	Channel 1 RS-485	Channel 2 RS-485	RS422	RS232
1	A(DATA+)	-	A (TxD+)	-
2	B(DATA-)	-	B (TxD-)	-
3	-	A(DATA+)	A (RxD+)	-
4	-	B(DATA-)	B (RxD-)	-
5	-	-	-	TX
6	-	-	-	RX
7	-	-	-	GND

2.3.2 Ethernet RJ45 interface definition

100Base-T pin definition are shown in the table below:



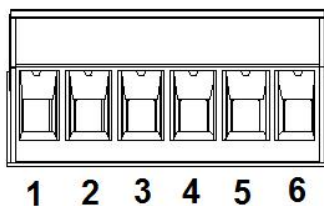
Green light for LINK

Yellow light for ACT

PIN No.	MDI Signal	MDI-X Signal
1	BI_DA+/TX+	BI_DB+/RX+
2	BI_DA-/TX-	BI_DB-/RX-
3	BI_DB+/RX+	BI_DA+/TX+
4	-	-
5	-	-
6	BI_DB-/RX-	BI_DA-/TX-
7	-	-
8	-	-

Note: "TX±" is sending data±, "RX±" is receiving data±, "-" is unused.

2.3.3 Power supply interface definition:



6pin 5.08 Terminal	Definition	Description
1	V2-	2-channel Power input positive
2	V2+	2-channel Power input negative
3	PG	Access ground
4	PG	Access ground
5	V1-	1-channel Power input positive
6	V1+	1-channel Power input negative

3. UT-6102 Serial Device Server Technical Parameter

3.1 Product technical parameter

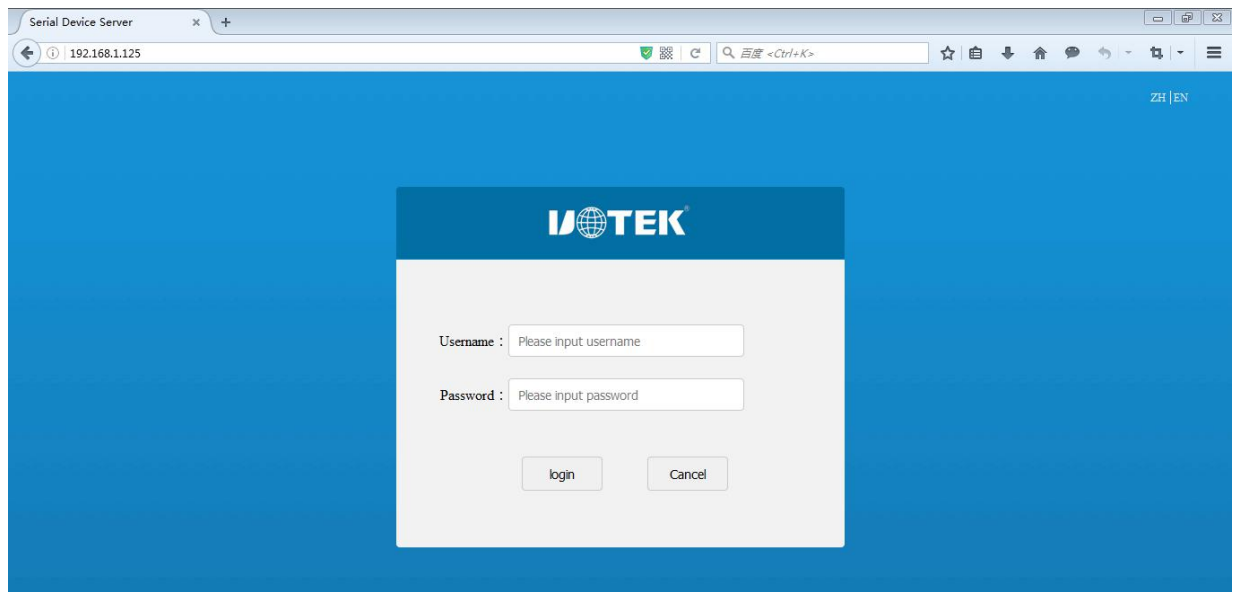
Processor	32bit 400MHZ
RAM	128M
Ethernet electrical port	2-channel 10/100M (embedded 1.5KV electromagnetic isolation) adaptive MDI/MDI-X Ethernet interface, interface type RJ45
Ethernet optical port	1-channel 100Base-FX port Interface type SC/ ST
Serial port standard	RS-232, RS-485, RS-422 (RS422 and RS485 channel 1 share a serial port)
Serial port	7 x 5.08 terminal
Indicator light	Power indicator P1, P2, Run indicator RUN, Optical indicator FDX, Serial data receive indicator RX, Serial data send indicator TX
Power connector	6Pin 5.08 terminal dual-channel power supply with built-in anti-reverse connection protection to avoid damage to the device by wrong positive and negative connections
Scope of power supply	DC12~48V
Function button	1 factory reset button RESET
Max. power consumption	3W
Housing	Metal housing, protection level: IP30
Operating environment	Storage temperature: -40~85°C Operating temperature: -40~85°C Relative humidity: 5 ~95% (non-condensing)
Dimension LxWxH	150mm x 100mm x 37mm (without mountings)
Weight	350g

3.2 Fiber optic parameter

Indicator parameter			Technical parameter			
			Multi-mode (MM)	Single-mode (SM)		
Optical characteristics	Dual fiber transmit and receive wavelengths		1310	1310	1310	1550
	Transmitting single fiber (T model)	Transmitting wavelength nm	1310	1310	1310	1490
		Receiving wavelength nm	1550	1550	1550	1550
	Receiving single fiber (R type)	Transmitting wavelength nm	1550	1550	1550	1550
		Receiving wavelength nm	1310	1310	1310	1490
	Transmission distance km		2	20	40	80
	Transmitted power dBm		-15~-2	-15~-2	-5~-0	-5~-0
	Receiving sensitivity dBm(≤)		-32	-34	-34	-34
	Optical saturation dBm		-3	-3	-3	-3
	Optical loss dBm/km		0.5	0.5	0.3	0.25

4. UT-6102 Serial Device Server WEB Operating Instruction

4.1 Web administration login page



System default IP address: 192.168.1.125. Username/Password: admin

4.2 System menu list

Contents	Function
System home page	Setting up device related information
System setup	Set up device network configuration, user management, SNMP settings, mqtt settings
Serial port setup	Set serial port related parameter
Working mode	Setting the device's operating mode
Status search	Check various configurations and status of the device
Device management	Managing equipment operation

4.3 System Home Page

System Home - System Information (displaying serial device server information)

Device number	Serial device server number
Device name	Serial device server name
Company name	User company name
Maintenance staff, contact details	Fill in the name of the maintenance staff and their contact details to facilitate internal management by the user company

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 admin [Logout](#)

System Home

System Information

System setting

Serial port setting

Operation mode

Status Search

Device Management

Device information

Device number	UT-6102		
Device name	Serial Server	Maintenance staff	SZUTEK
Company name	UTEK	Contact	400-1144-149

Hardware Information

Product serial number	UT-6102		
Hardware version	v1.0.1		

Software information

App version	v40.60701_1012_P03		Release date	2022-04-12
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Copyright information

Manufacture	UTEK TECHNOLOGY(SHENZHEN) CO., LTD.		
Company Address	Floor 8-10, Building 7, Skyworth Innovation Valley, No. 8, Tangtou No.1 Road, Shiyan Street, Bao an District, Shenzhen		
Contact number	086-0755-27886063	Enterprise URL	www.szutek.com

Time information

Operation hours	00:04:02		System time	2022-05-19 13:39:31
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4.4 System setup

4.4.1 System setup --- IP address setting (set serial device service networking IP parameter)

Server name	Set the serial device server name.
Enable DHCP	Select the check box to get the IP address of the serial device server automatically.
Ethernet IP address	Set the Ethernet IP address of the serial device server.
Ethernet subnet mask	Set the Ethernet subnet mask of the serial device server.
Default gateway	Set the default gateway of the serial device server
Main DNS	Set the main DNS
Backup DNS	Set the backup DNS
Submit, Cancel	Submit (must be submitted after setting the above options to complete the settings, and the new IP address takes effect immediately after submission, you can use the newly set IP address to access the device). Cancel (no changes).

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System Home

System setting

Ip Address Setting

Address Filter

User Management

SNMP Setting

MQTT Setting

Serial port setting

Operation mode

Status Search

Server configuration

Server name :	Serial Device Server
---------------	----------------------

Network port configuration

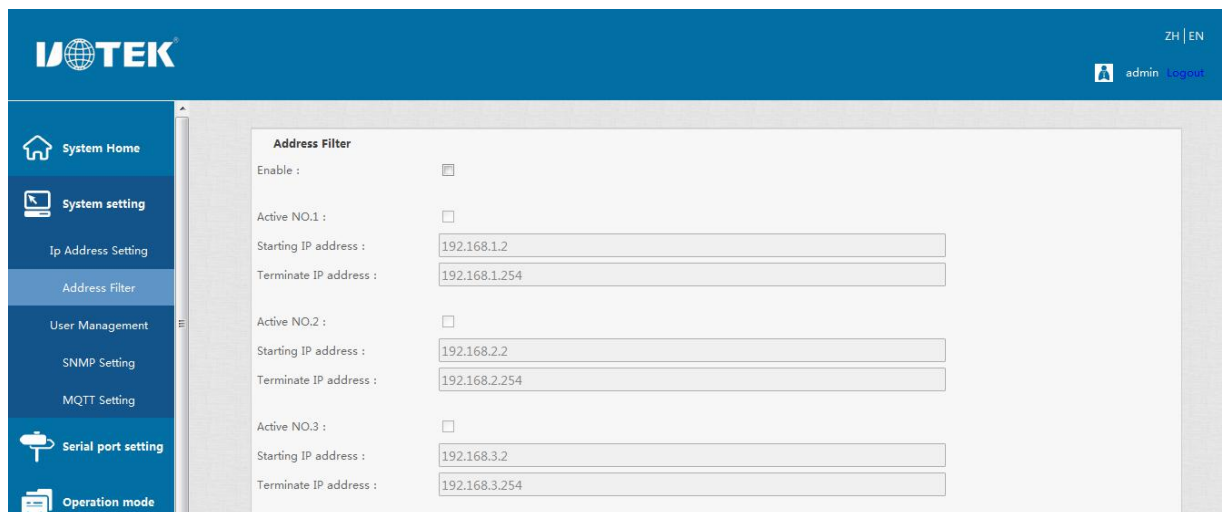
Enable DHCP :	☐
Ethernet IP address :	192.168.1.125
Ethernet subnet mask :	255.255.255.0
Default gateway :	192.168.1.1
Primary DNS :	192.168.1.2
Backup DNS :	192.168.1.3

Submit

Cancel

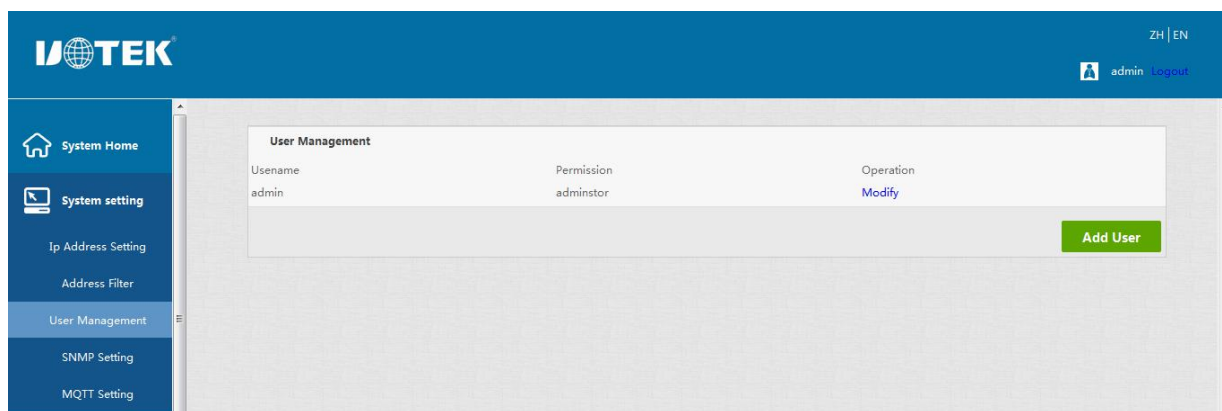
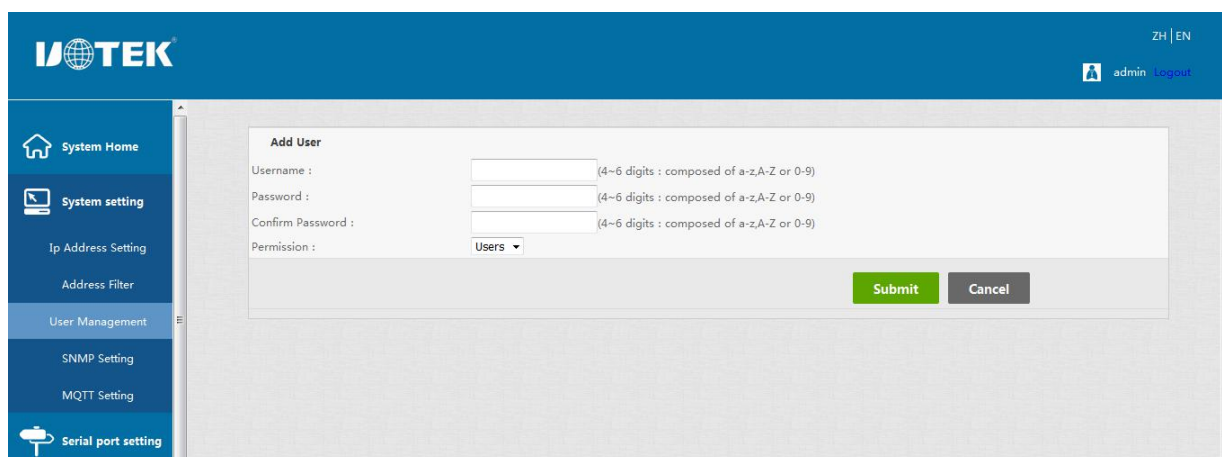
4.4.2 System setup --- address filtering (set up serial device service to filter networking addresses)

Enable address filtering	Select this item to enable the address filtering function, a total of 4 groups of Ethernet IP segments can be filtered
Activate NO.x	Select this item to filter the current group IP network segment
Start IP address	Set the start IP address of the filter segment
Termination of IP address	Set the termination IP address of the filtered network segment
Submit, Cancel	Submit (must be submitted after setting the above options to complete the settings), Cancel (no changes)



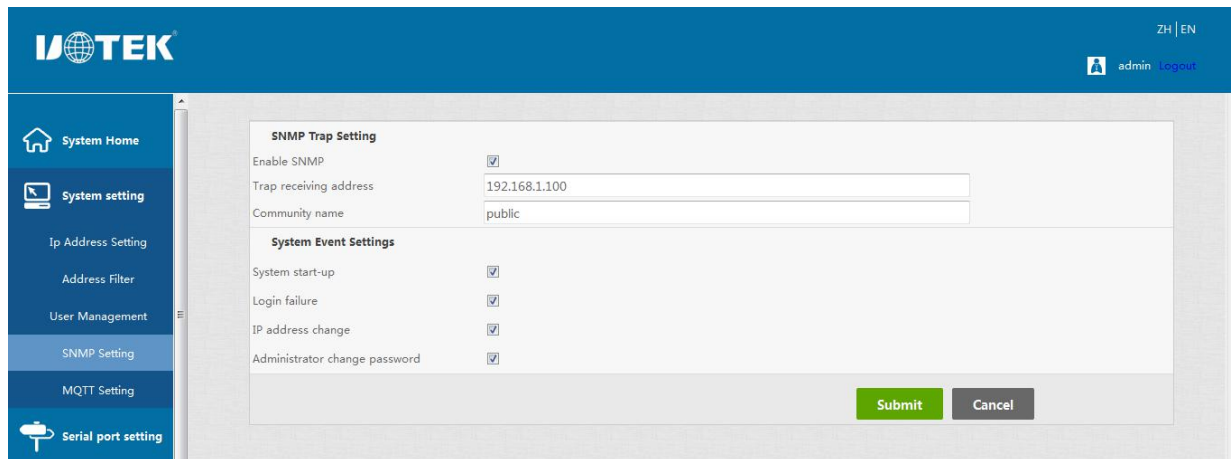
4.4.4 System setup --- User management (set the user management account information for the serial device service)

Modify	Change current user password
Delete	Delete current user information
Add User	Add a new user account name
User name	Set the username of the new user added
Password, Confirm Password	Set the password of the new user added
Permission	Select the newly added user permissions, Users is the user permissions account, by default only one administrators user is allowed for a device.
Submit, Cancel	Submit (must be submitted after setting the above options to complete the settings), Cancel (no changes)

4.4.5 System setup --- SNMP setup (Set SNMP Trap parameters and options for serial device service)

Enable SNMP	Select the check box to enable Simple Network Management Protocol
Trap receiving address	Set the Trap server address
Community name	Set the community name of the network management protocol
System start-up	Select this option to enable sending system start time signals
Login failure	Select this option to enable sending login failure event signals
IP address change	Select this option to enable sending IP address change event signals
Administrator change password	Select this option to enable sending administrator password change event signals
Submit, Cancel	Submit (must be submitted after setting the above options to complete the settings), Cancel (no changes)



4.4.6 System setup --- MQTT setup (set MQTT parameters and options for the serial device server)

Enable MQTT	Select this to enable MQTT and the device will create MQTT client tasks
Server address	Set the MQTT server address
Server port	Set the MQTT server port number
MQTT Username	Set the username information for MQTT login
MQTT Password	Set the user password information for MQTT login
Uplink device ID	Set the client ID of the published topic
Uplink theme	Set the posting theme
Downlink device ID	Set the client ID of the subscription topic
Downside theme	Set subscription topics
Submit, Cancel	Submit (must be submitted after setting the above options to complete the settings), Cancel (no changes)



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System Home

System setting

Ip Address Setting

Address Filter

User Management

SNMP Setting

MQTT Setting

Serial port setting

Operation mode

MQTT Settings

Enable MQTT : ☐

Server address :

Server port :

MQTT username :

MQTT password :

Uplink device ID :

Upside theme :

Downlink device ID :

Downside theme :

Submit

Cancel

4.5 Serial port setup

Serial port setup (serial communication setup)

Alias	Set the serial port alias of the serial port server
Interface type	Interface type (including RS232/485/422)
Baud rate	Serial port baud rate (the value should be the same as the baud rate of the device connected to the serial port)
Data bits	Data bits (default is 8, specific should be consistent with the device connected to the serial port)
Parity bits	Parity bits (including None, Even, Odd, default to None, the specific should be consistent with the device connected to the serial port)
Stop bits	Stop bit (default is 8, specific should be consistent with the device connected to the serial port)
RTS control	Auto, XON/XOFF, CTS/RTS are optional.
Interval time	Data packing interval
Packing length	Data packing length
Delimiter enablement	Select the enable delimiter
Delimiter	Set the encoding of the delimiter for the transmitted data (0-0xff)
Delimiter handling	Select to keep or discard
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters are set to the rules to save to the device), Cancel (no changes)
Note	Channel 1 supports RS-485/RS422, channel 2 only supports RS-485, if channel 1 is set to RS-422, channel 2 will not be available. Channel 3 only supports RS-232, baud rate up to 115200, need to restart the corresponding serial port to take effect after modification, or restart the device to take effect.

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Serial Port Setting

CH1-RS485/RS422
CH2-RS485
CH3-RS232

Serial Port Parameter

Alias :

(Range:0-20 characters)

Interface type :

RS485

Baud rate :

115200

Data bit :

8

Parity check :

none

Stop bit :

1

RST Control :

Auto

Data Packaging Settings

Interval time :

(0-6000 milliseconds)

Packing length :

(0-1000 byte)

Delimiter enabling :

☐

4.6 Working mode (server working mode)

4.6.1 TCP server mode

Working mode	Working mode options
Command protocol compatibility	No other compatible protocols
Data protocol conversion	Only transparent transmission is supported
Listening port	Set the command port of the serial port (range 0-65534)
Max. number of connections	Number of hosts connected to the device (up to 8)
TCP preservation time	Set the retention time for TCP connections
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), cancel (no changes)
Apply to all serial ports	Apply all serial ports (you can check this if the settings for each serial port are the same)

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Operation mode

CH1-RS485/RS422
CH2-RS485
CH3-RS232

Basic Settings

Operating mode :

TCP Server Mode

Command protocol compatibility :

none

Data protocol conversion :

Transparent transmission

Listening port :

(0-65534)

Maximum number of connection :

(0-8)

TCP preservation time :

(0-120 minutes)

Resting time :

(0-120 minutes,0 is to turn off this feature)

应用选项

设置应用到所有串口 :

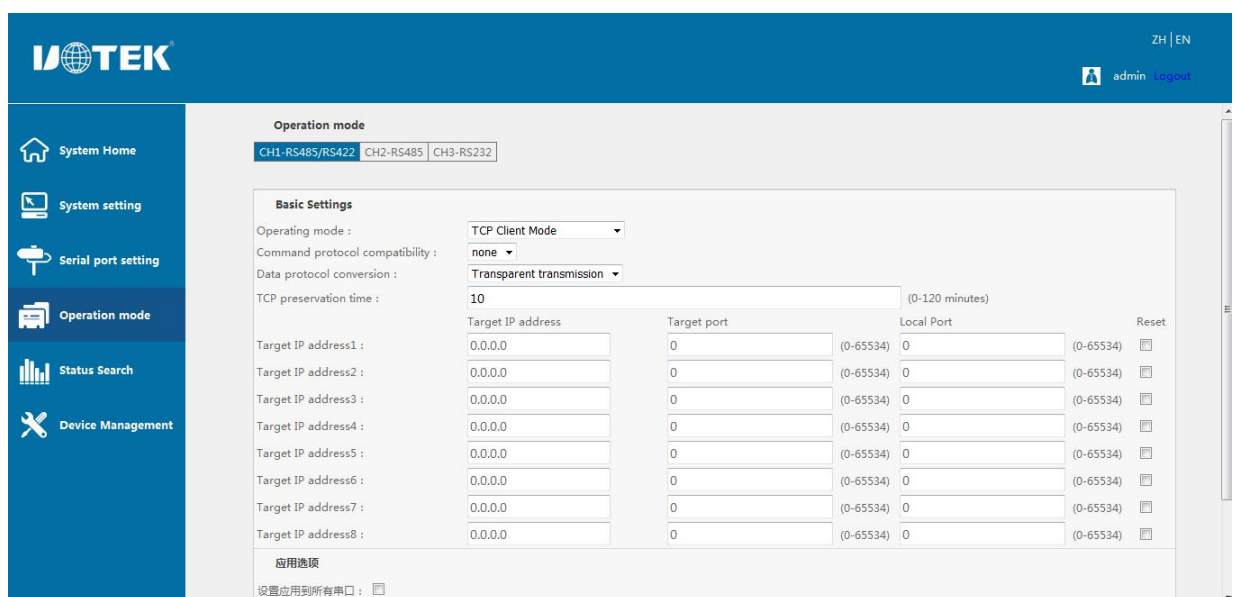
☐

提交

取消

4.6.2 TCP Client Model

Working mode	Working mode options
Command protocol compatibility	No other compatible protocols
Data protocol conversion	Only transparent transmission is supported
TCP preservation time	Set the retention time for TCP connections
Target IP address	Set the IP address of the connected target host
Target port	Set the target port for the connection
Local port	Set the local port number of the serial port service
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), Cancel (no changes)
Apply to all serial ports	Apply all serial ports (if the settings are the same for each serial port, you can check the sub-item)



4.6.3 UDP Client Model

Working mode	Working mode options
Command protocol compatibility	No other compatible protocols
Data protocol conversion	Only transparent transmission is supported
TCP preservation time	Set the retention time for TCP connections
Target IP address	Set the IP address of the connected target host
Target port	Set the target port for the connection
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), Cancel (no changes)
Apply to all serial ports	Apply all serial ports (if the settings are the same for each serial port, you can check the sub-item)

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System Home

System setting

Serial port setting

Operation mode

Status Search

Device Management

Operation mode

CH1-RS485/RS422

CH2-RS485

CH3-RS232

Basic Settings

Operating mode :

UDP Client Mode

Command protocol compatibility :

none

Data protocol conversion :

Transparent transmission

Target IP address

192.168.1.100

Target port

5001

本地端口 (若为0则由系统自动分配)

6001

目标IP地址1 :

192.168.1.100

目标IP地址2 :

192.168.1.100

目标IP地址3 :

192.168.1.100

目标IP地址4 :

192.168.1.100

目标IP地址5 :

192.168.1.100

目标IP地址6 :

192.168.1.100

目标IP地址7 :

192.168.1.100

目标IP地址8 :

192.168.1.100

5002

(0-65534)

5003

(0-65534)

5004

(0-65534)

5005

(0-65534)

5006

(0-65534)

5007

(0-65534)

5008

(0-65534)

6002

(0-65534)

6003

(0-65534)

6004

(0-65534)

6005

(0-65534)

6006

(0-65534)

6007

(0-65534)

6008

(0-65534)

应用选项

设置应用到所有串口 : ☐

提交

取消

4.6.4 Remote Pair Master Mode

In this mode, the device creates a TCP client service and only supports connecting a TCP server service for communication.

Working mode	Working mode options
Command protocol compatibility	No other compatible protocols
Data protocol conversion	Only transparent transmission is supported
TCP preservation time	Set the retention time for TCP connections
Target IP address	Set the IP address of the connected target host
Target port	Set the target port for the connection
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), Cancel (no changes)
Apply to all serial ports	Apply all serial ports (if the settings are the same for each serial port, you can check the sub-item)

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System Home

System setting

Serial port setting

Operation mode

Status Search

Device Management

Operation mode

CH1-RS485/RS422

CH2-RS485

CH3-RS232

Basic Settings

Operating mode :

Remote Pair Master Mode

Command protocol compatibility :

none

Data protocol conversion :

Transparent transmission

目标IP地址 :

0.0.0.0

目标端口 :

0

TCP保留时间 :

10

0

(0-65534)

10

(0-120分钟)

应用选项

设置应用到所有串口 : ☐

提交

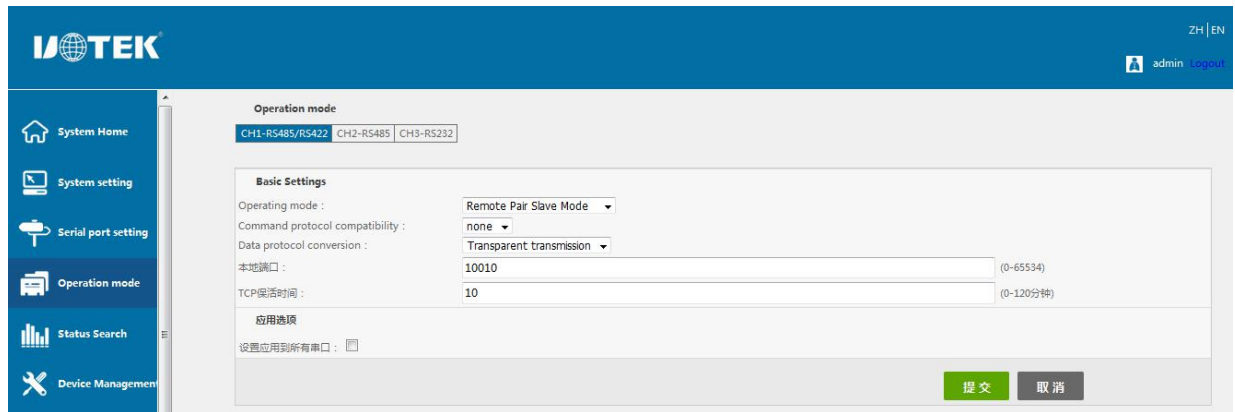
取消

4.6.5 Remote Pair Slave Mode

In this mode, the device creates a TCP server service and supports only one TCP client service for connection communication.

Working mode	Working mode options
Command protocol	No other compatible protocols

compatibility	
Data protocol conversion	Only transparent transmission is supported
TCP preservation time	Set the retention time for TCP connections
Local port	Set the port number for the device to create a TCP server
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), cancel (no changes)
Apply to all serial ports	Apply all serial ports (if the settings are the same for each serial port, you can check the sub-item)



4.6.6 MCP&VCOM Mode (TCP/IP Virtual Serial Port Mode)

TCP/IP virtual serial port mode works in the windows system environment, through the driver to map the port on the serial server into a virtual COM port of the local host, so that the original COM port-based operation of the upper software does not need to do any modification as if the application of the local real COM port, the driver can support up to COM1024, making the monitoring of serial devices more flexible and convenient, multiple connection resources can also do connection backup.

Working mode	Working mode options
Command protocol compatibility	No other compatible protocols
Data protocol conversion	Only transparent transmission is supported
TCP preservation time	Set the retention time for TCP connections
Mode confirmation	Since the MCP and VCOM modes correspond to different virtual serial software, you need to confirm one of them when selecting this mode
Data port	This is the port corresponding to the virtual serial port software driver for data communication (not configurable)
Command port	This is the port that corresponds to the virtual serial port software driver for monitoring the connection status (not configurable)
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), cancel (no changes)
Apply to all serial ports	Apply all serial ports (if the settings are the same for each serial port, you can check the sub-item)

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admin | Logout

- [System Home](#)
- [System setting](#)
- [Serial port setting](#)
- Operation mode
- [Status Search](#)
- [Device Management](#)

Operation mode
CH1-RS485/RS422 CH2-RS485 CH3-RS232

Basic Settings

Operating mode :
Command protocol compatibility :
Data protocol conversion :
模式确认 :
数据端口 :
命令端口 :
TCP保持时间 :

MCP&VCOM

none

Transparent transmission

MCP Mode

950

966

10 (0-120分钟)

注：为防止网络端口冲突，设备多个串口间不可同时配置 MCP 模式和 VCOM 模式

应用选项
设置应用到所有串口： ☐

提交

取消

4.6.7 Modbus Server Mode

In this mode, the device creates a TCP server mode with a standard Modbus-RTU frame format for communication, with the Ethernet network as the Modbus master and the serial port side as the Modbus slave.

Working mode	Working mode options
Command protocol compatibility	No other compatible protocols
Data protocol conversion	Only transparent transmission is supported
TCP preservation time	Set the retention time for TCP connections
Local port	Set the local port number when creating a TCP server service
Maximum connections	Set the maximum number of connections
Resting time	Set the standstill time, when there is no data communication within the set time then the Server side will actively disconnect the Client side
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), cancel (no changes)
Apply to all serial ports	Apply all serial ports (if the settings are the same for each serial port, you can check the sub-item)

ZH | EN
admin | Logout

- [System Home](#)
- [System setting](#)
- [Serial port setting](#)
- Operation mode
- [Status Search](#)
- [Device Management](#)

Operation mode
CH1-RS485/RS422 CH2-RS485 CH3-RS232

Basic Settings

Operating mode :
Command protocol compatibility :
Data protocol conversion :
本地端口 :
最大连接数 :
TCP保持时间 :
静止时间 :

Modbus Server Mode

none

Transparent transmission

10010 (0-65534)

8 (0-8)

10 (0-120分钟)

0 (0-120分钟, 0为关闭此功能)

应用选项
设置应用到所有串口： ☐

提交

取消

4.6.8 Modbus Client Mode

In this mode the device creates a TCP client mode, the data protocol is standard Modbus-RTU frame format for communication, the Ethernet network is used as Modbus slave and the serial port side as Modbus master.

Working mode	Working mode options
Command protocol	No other compatible protocols

compatibility	
Data protocol conversion	Only transparent transmission is supported
TCP preservation time	Set the retention time for TCP connections
Target IP address	Set the IP address of the server
Target port	Set the server port number
Local port	Set the port number to which the device is bound when creating a client locally
Reset	Cancel the current line of configuration information to re-enter
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), cancel (no changes)
Apply to all serial ports	Apply all serial ports (if the settings are the same for each serial port, you can check the sub-item)



ZH | EN
admin Logout

System Home
System setting
Serial port setting
Operation mode
Status Search
Device Management

Operation mode

CH1-RS485/RS422 CH2-RS485 CH3-RS232

Basic Settings

Operating mode :

Modbus Client Mode

Command protocol compatibility :

none

Data protocol conversion :

Transparent transmission

TCP保留时间 :

10 (0-120分钟)

目标IP地址

目标端口

本地端口

目标IP地址1 :	0.0.0.0	0 (0-65534)	0 (0-65534)	☐
目标IP地址2 :	0.0.0.0	0 (0-65534)	0 (0-65534)	☐
目标IP地址3 :	0.0.0.0	0 (0-65534)	0 (0-65534)	☐
目标IP地址4 :	0.0.0.0	0 (0-65534)	0 (0-65534)	☐
目标IP地址5 :	0.0.0.0	0 (0-65534)	0 (0-65534)	☐
目标IP地址6 :	0.0.0.0	0 (0-65534)	0 (0-65534)	☐
目标IP地址7 :	0.0.0.0	0 (0-65534)	0 (0-65534)	☐
目标IP地址8 :	0.0.0.0	0 (0-65534)	0 (0-65534)	☐

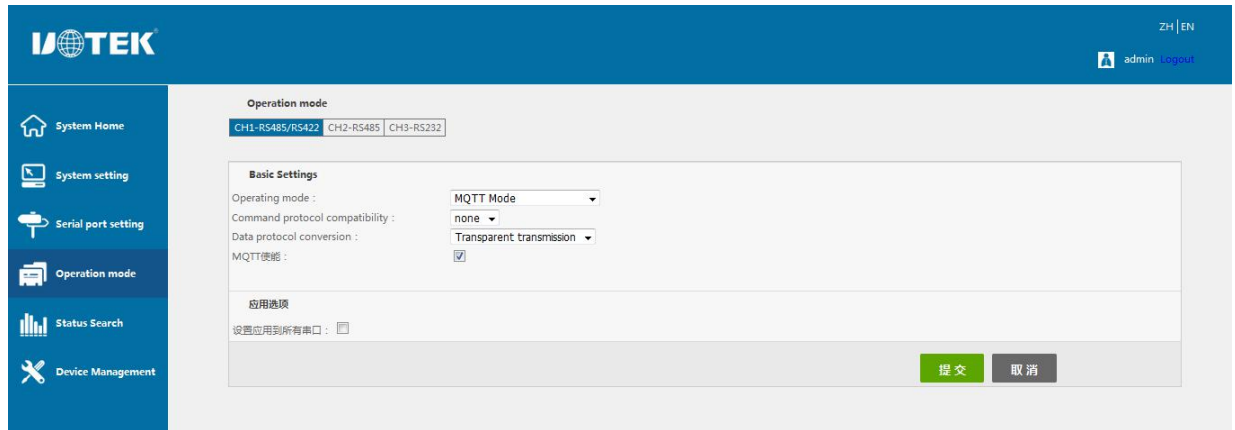
应用选项

设置应用到所有串口 : ☐

提交 取消

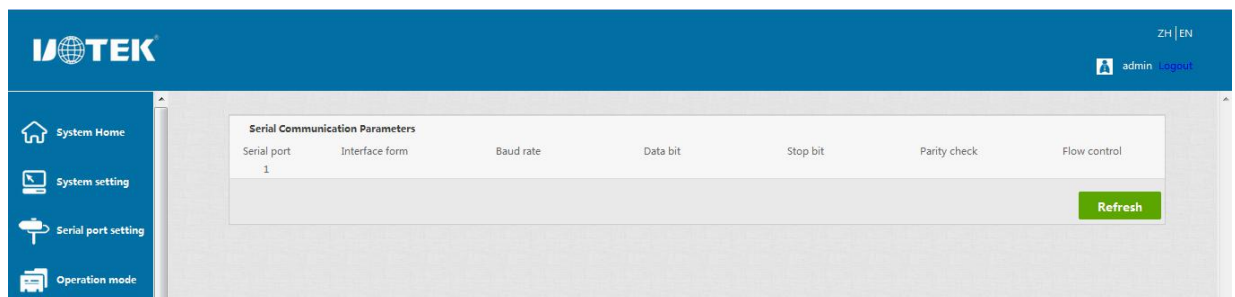
4.6.9 MQTT Mode

Working mode	Working mode options
Command protocol compatibility	No other compatible protocols
Data protocol conversion	Only transparent transmission is supported
MQTT enable	Set the current serial port to work on MQTT service enable
Submit, Cancel	Submit (after setting the above options, you need to click "Submit" to check whether the parameters are compliant and save the page, if the parameters fit the rules set to the device), cancel (no changes)
Apply to all serial ports	Apply all serial ports (if the settings are the same for each serial port, you can check the sub-item)

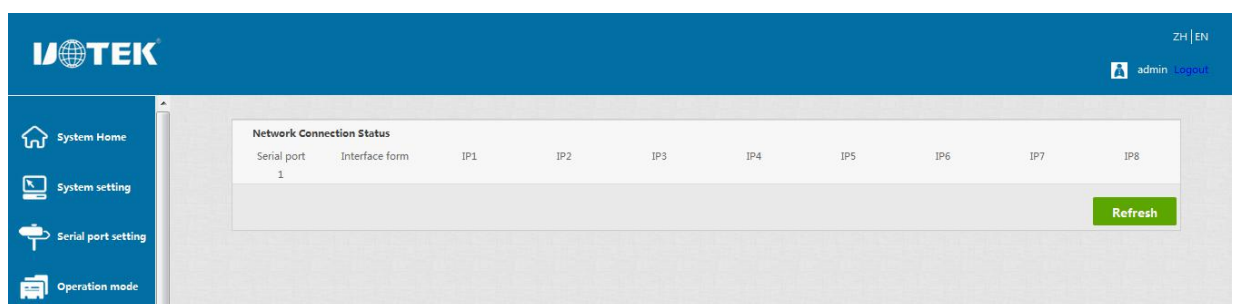


4.7 Status Search

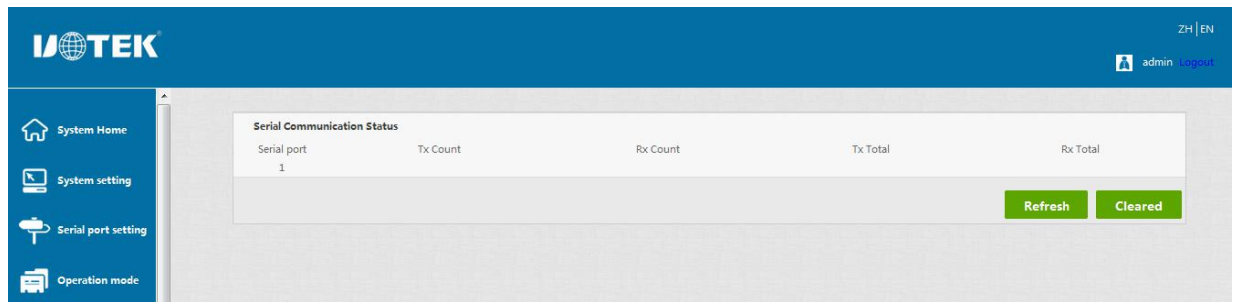
Serial communication parameter	View the serial interface form, baud rate, data bits, stop bits, parity, flow control related parameters, click "Refresh" to update to the latest status
Network connection status	Check the network connection status of the serial port, click "Refresh" to update to the latest status
Serial communication status	Check the communication status of the serial port, click "Refresh" to update to the latest status



Serial communication parameter



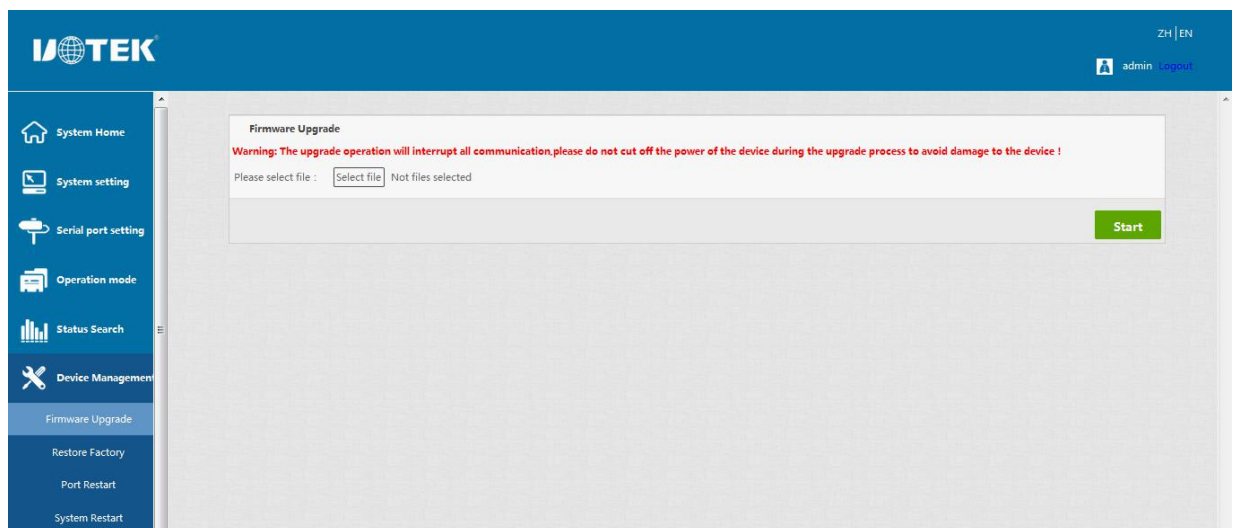
Network connection status



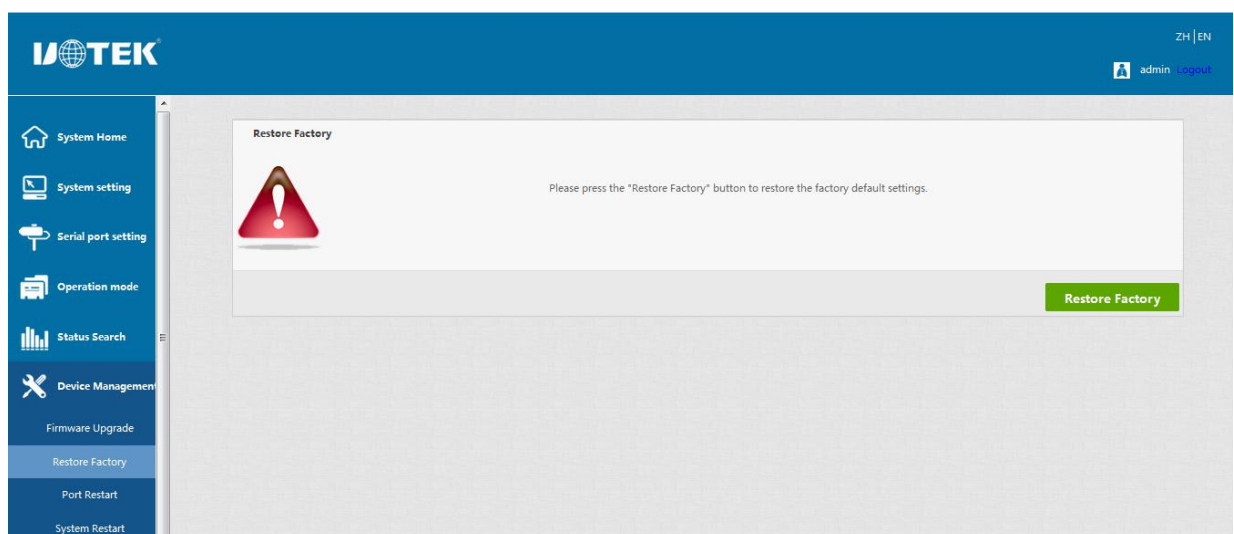
Serial communication status

4.8 Equipment Management

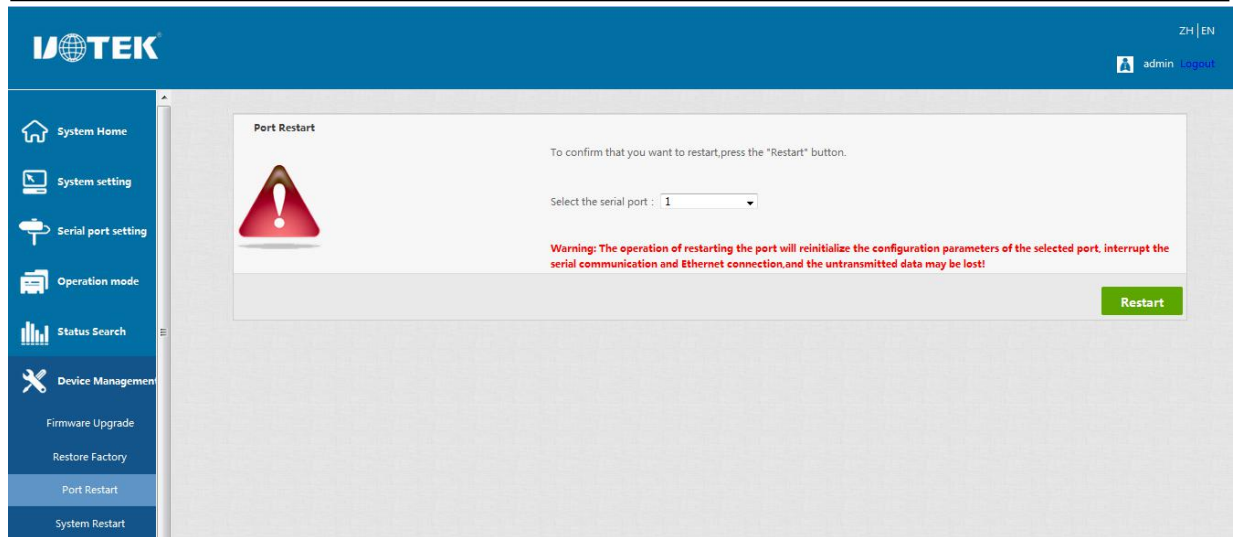
Firmware upgrade	Select the new version of the local package and click Start to upload the file information to upgrade the device
Restore factory	Click "Restore factory settings", the serial server will be restored to factory default settings
Port restart	Select the port that needs to be restarted, submit it and restart the port
System restart	Click "Restart" to restart the serial device server.



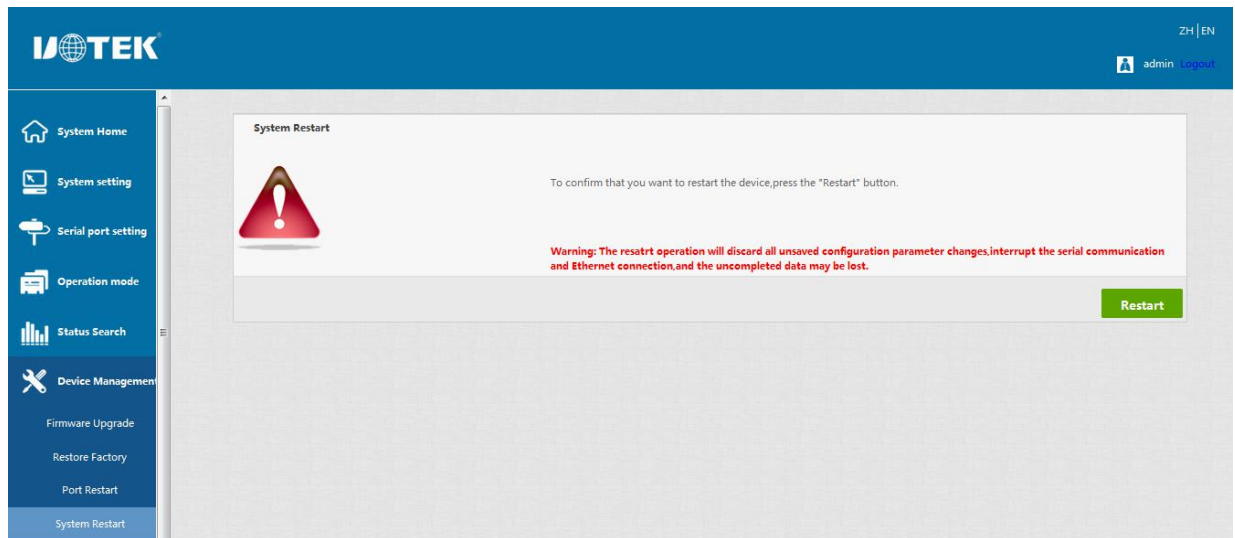
Firmware upgrade



Restore factory



Port restart



Port restart

5. UT-6102 Serial Device Server Troubleshooting Instruction

5.1 Run serial_ethernet_connector_CH.exe to search for the IP address of the serial port server

1. First check whether the physical connection is normal, the network cable (distinguish between cross wires and direct lines) and power supply is connected, observe the power indicator, LAN light, ACT (connected to the 10M network, this light does not light, 100M light)
2. Host network card is or available, can not communicate with other local other hosts.
3. Close all the tools and software that can block broadcast packets (do not open the firewall that comes with the system)
4. In the browser into the configuration, set the IP when suddenly abnormal disconnection, such as: power failure, after the device can not be searched, through the console port into the configuration to reset the IP.

5.2 Cannot open serial port

1. Ensure that the network working state is normal, can ping through the server
2. Check whether the virtual serial port has been established successfully
3. Check the working status to see if the port is occupied
4. Delete the corresponding COM port in the registry and remap it.

5.3 Cannot transmit or receive data

1. Ensure that the serial port can be opened normally
2. Observe whether the IP and port number under [connected to 0 from 1] of [serial to Ethernet tool] indicate "connected", if not, check the connection between the serial port and the upper network.
3. Observe whether the values of "Sent" and "Received" under [connected to 0 from 1] of [Serial to Ethernet tool] have increased, if not, check the connection between the serial port and the upper network, if If "Sent" has grown and "Received" has not grown, check the connection between the serial port

5.4 Forget the password you set before

1. By pressing and holding the "reset" button for 5 seconds and then release, the device enters the restore factory settings, when the RUN light is restored 1s interval slow flashing, the device restore factory settings is complete, at this time the factory initial account password admin: admin login system, the factory IP address is static: 192.168. 1.125.

5.5 Transmission and receipt of data is garbled

1. Check whether the wiring is correct
2. Check whether the line distance has exceeded the standard distance and the quality of the line (also by lengthening the line transceiver or optical partition)
3. Check whether the set serial port parameters (baud rate, data bits, stop bits, parity bits, etc.) match with the bottom device
4. If you can receive normal data, the problem may be related to the packaging mechanism, you can set the packaging length and packaging waiting time in the "serial port settings".

5.6 Cannot be connected when acting as a TCP server

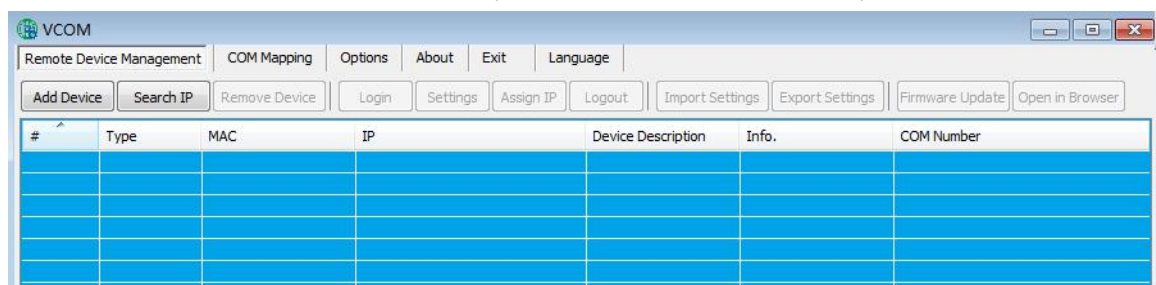
Confirm that no other PC has a connection to the corresponding port of the serial communication server: Go to [Statistics] of the serial communication server to check [Active TCP information].

Whether [authentication] in [detailed parameters] is [none] or not

If none of the above methods can solve your problem, please contact the manufacturer

6 Virtual Serial Application

First, install our VCOM server on Windows platform. The installation is completed and runs as follows:



6.1 Remote devices management

1. Device search

The device serial port works in MCP&VCOM->VCOM Mode and connect the device, start the attached software "VCOM" (Figure 1 below), select remote devices Management->Add Device to pop up the search interface of all UT-6102 in the

network. IP search interface; as shown in Figure 2, select the "Search" button to find all the UT-6102 IP addresses and basic information of the network, as shown in Figure 3; then select "cancel" in Figure 3, to get Figure 4 device information list, click OK to display the search device information in the VCOM interface, as shown in Figure 5, the device has been added.

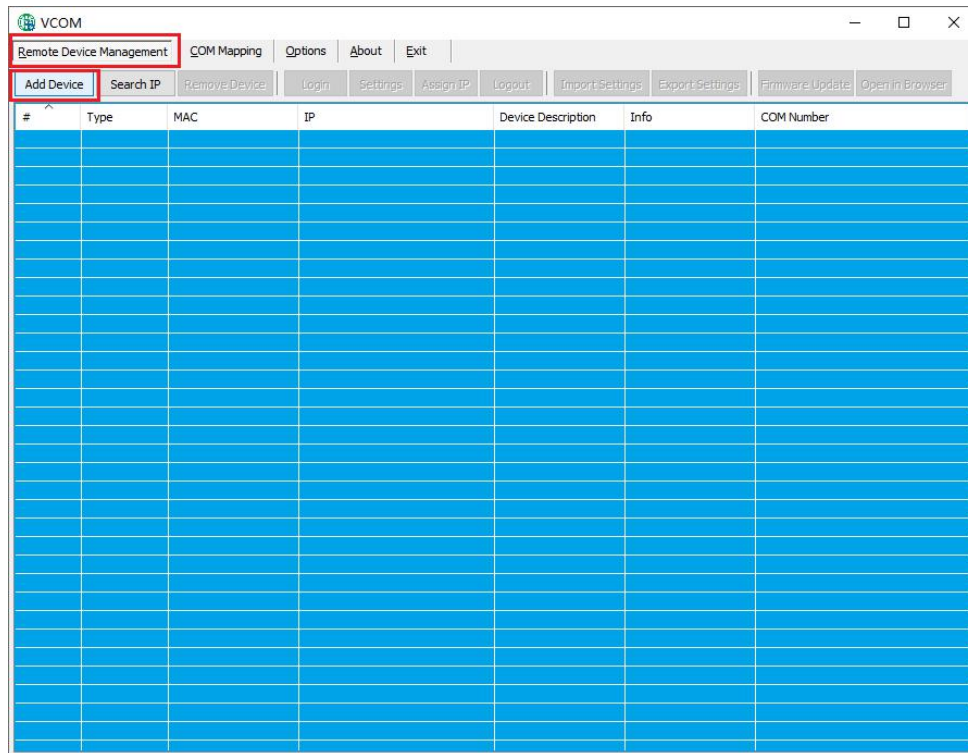


Figure 1

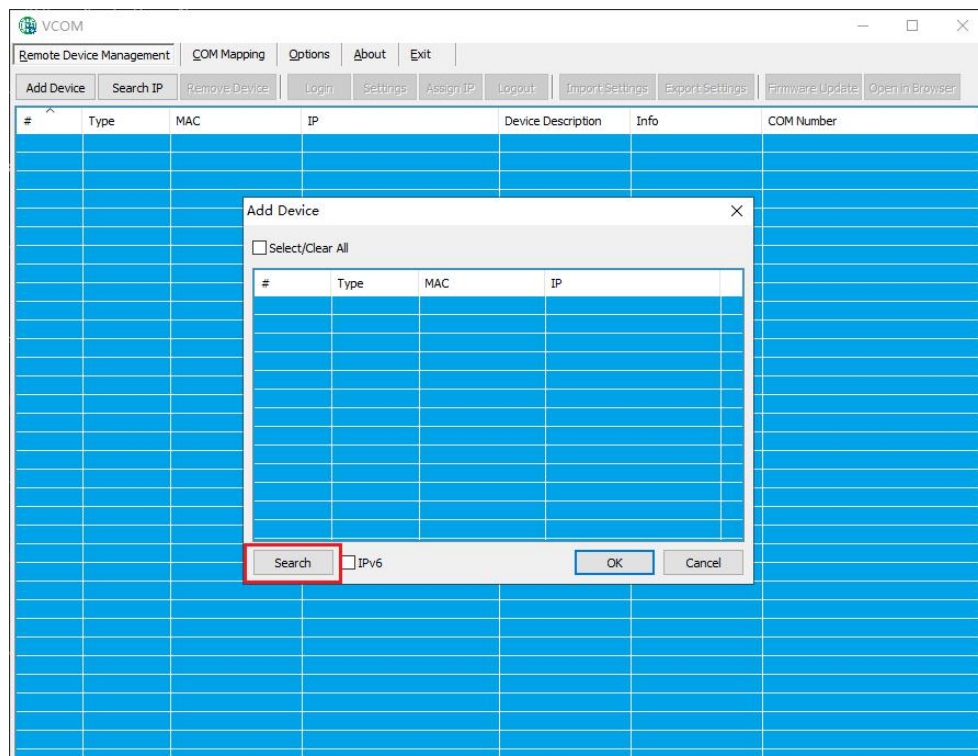


Figure 2

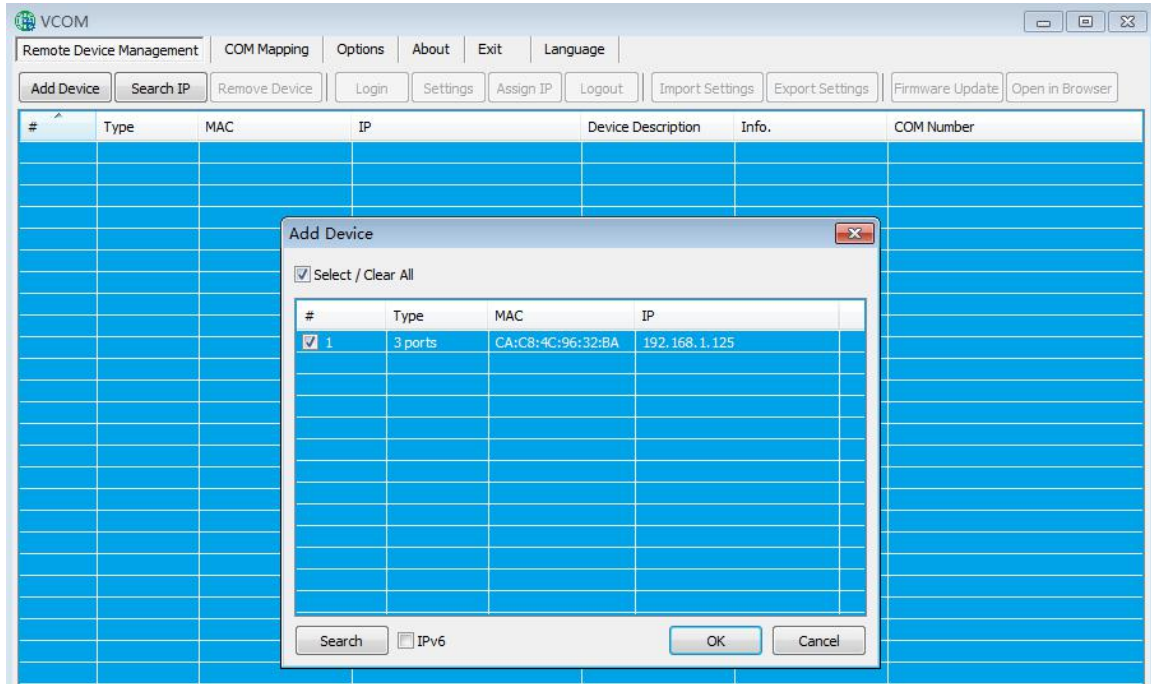


Figure 3

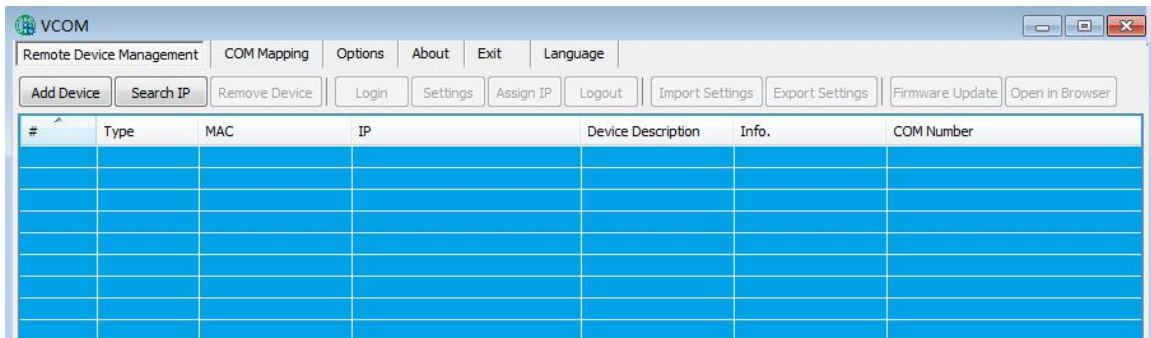


Figure 4

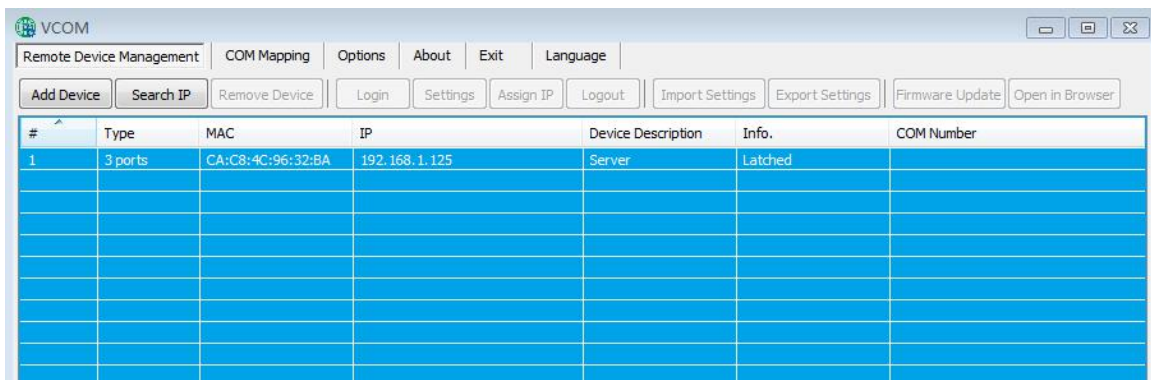


Figure 5

2. Jump to the web page to login

In the software "VCOM", first select the added devices, then select remote devices Management interface, click "Open in Browser", you can enter the web page through IE browser. You can enter the web login interface through IE browser.

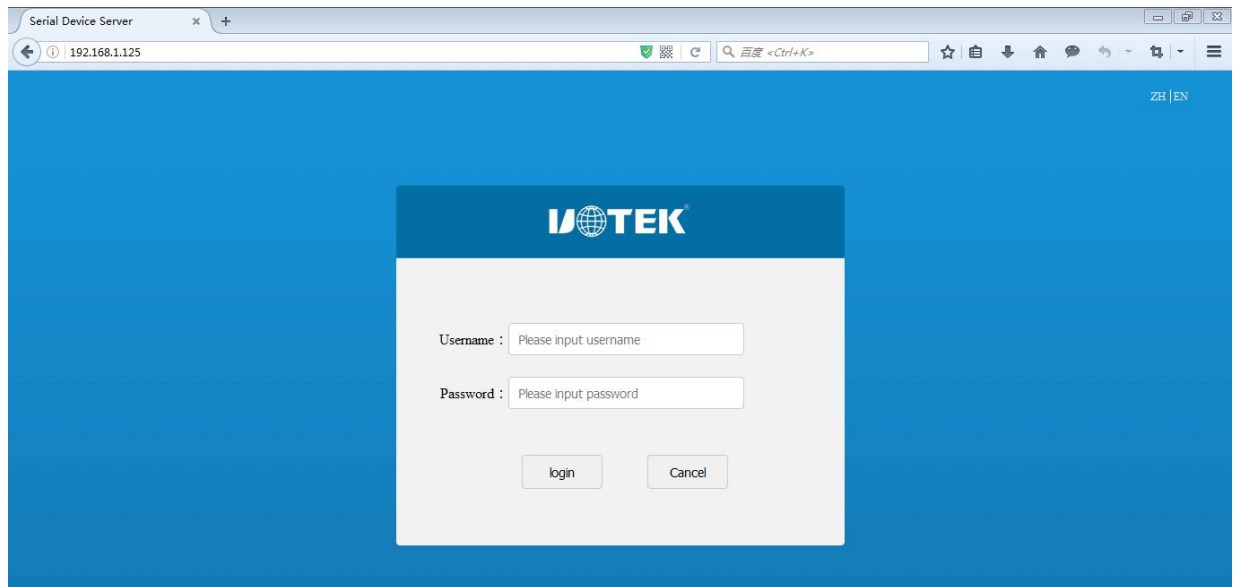


Figure 6

6.2 COM Mapping

6.2.1 Creating a virtual serial port

1. In the software "VCOM", select COM Mapping - Add COM, the "Add Device" window pops up, as shown below, and then click OK. that is to create the corresponding virtual serial port.

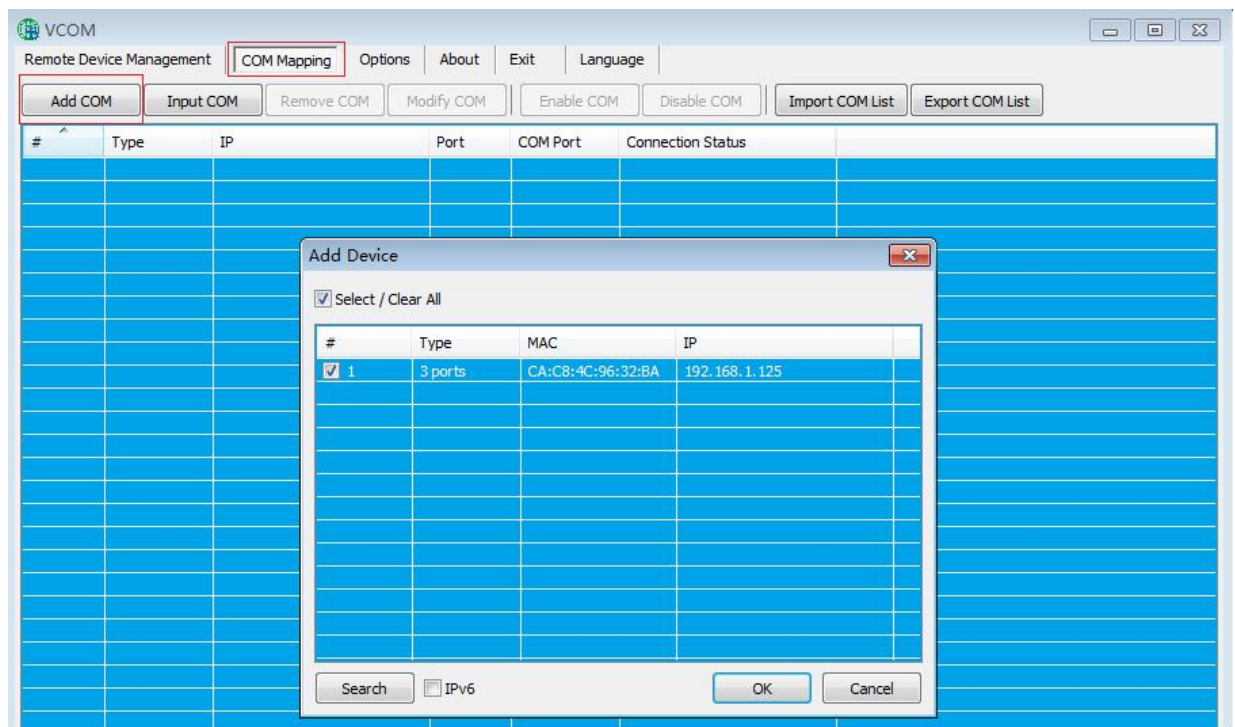


Figure 7

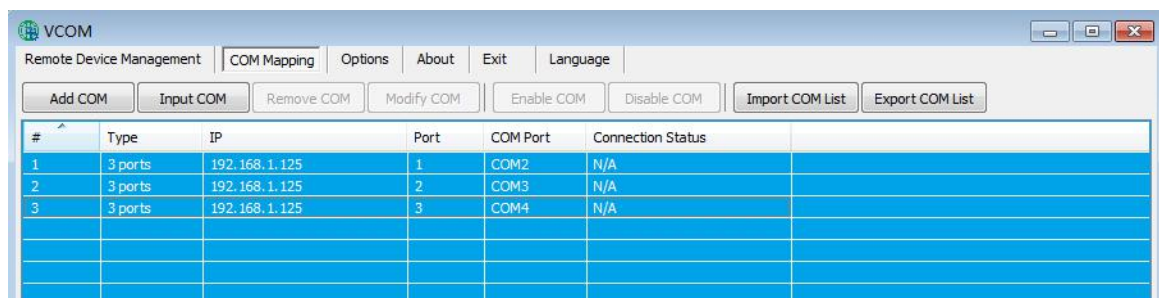


Figure 8

6.2.2 Delete the virtual serial port

In the software "VCOM", first select the virtual serial port to be deleted, and then select the COM Mapping interface, click "Remove COM" to delete the virtual serial port, as shown in the following figure



Figure 9

6.2.3 Modify the virtual serial port

In the software "VCOM", first select the virtual serial port to be deleted, and then select the COM Mapping interface, click "Modify COM" pop-up interface as shown in Figure 1 below, and then select "COM2" to modify Port1 corresponding to "COM2" to "COM5", as shown in Figure 2.

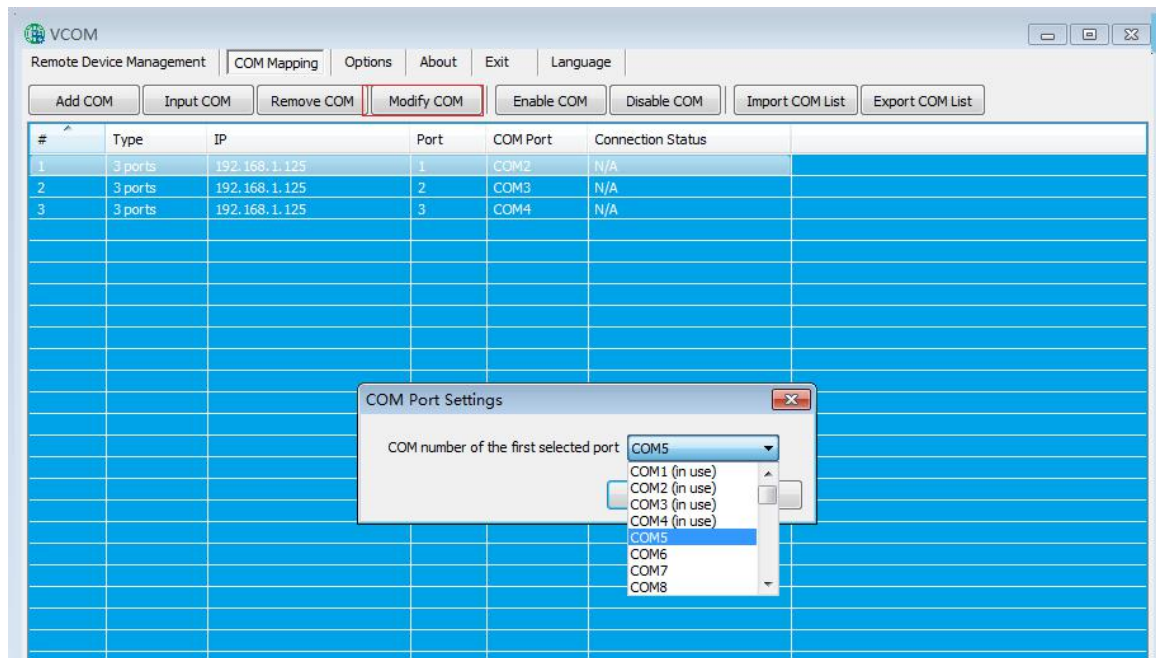


Figure 10

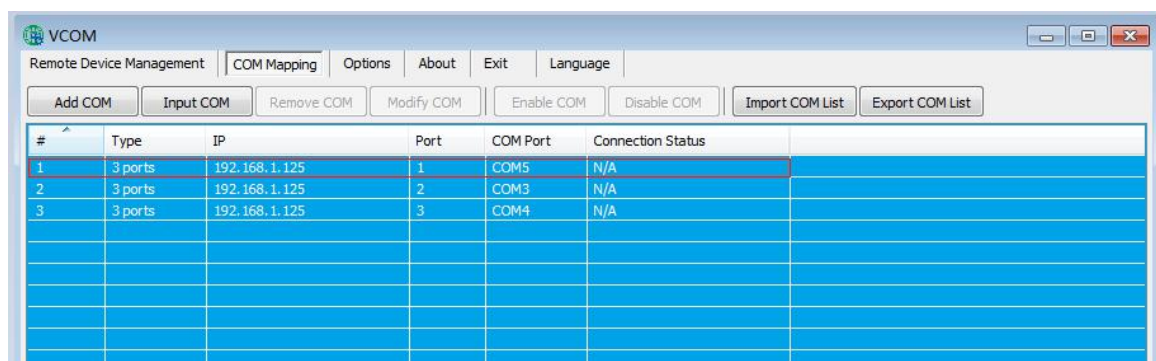


Figure 11

6.2.4 Enable virtual serial port

In the software "VCOM", first select the virtual serial port that needs to be disabled, and then select COM Mapping interface, click "Enable COM" to enable the corresponding virtual serial port, as shown in the following figure

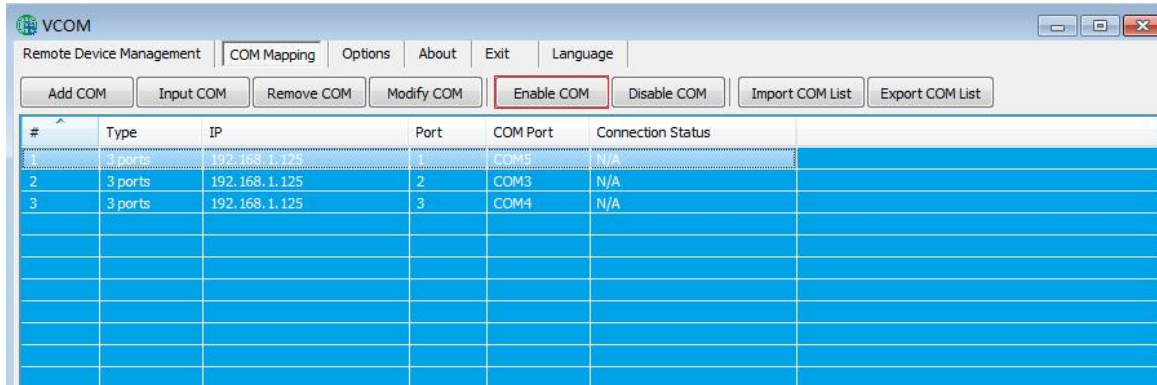


Figure 12

6.2.5 Disable virtual serial port

In the software "VCOM", first select the virtual serial port that needs to be disabled, and then select COM Mapping interface, click "Disable COM" to disable the corresponding virtual serial port, as shown in the following figure

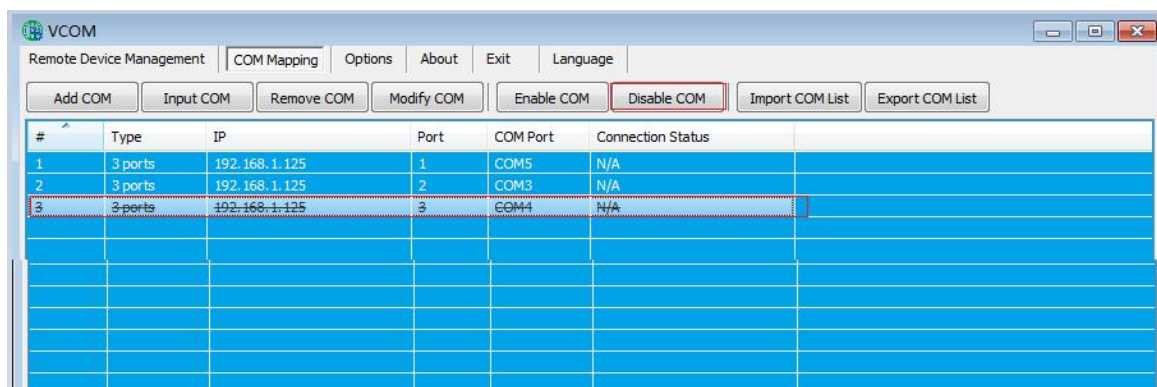


Figure 13

6.2.6 Importing virtual serial port list

In the software "VCOM", select COM Mapping interface, click "Import COM List" pop-up interface shown in Figure 1 below, click "Browse", select the saved virtual serial port configuration information as shown in Figure 14, click "OK" to import successfully as shown in Figure 15

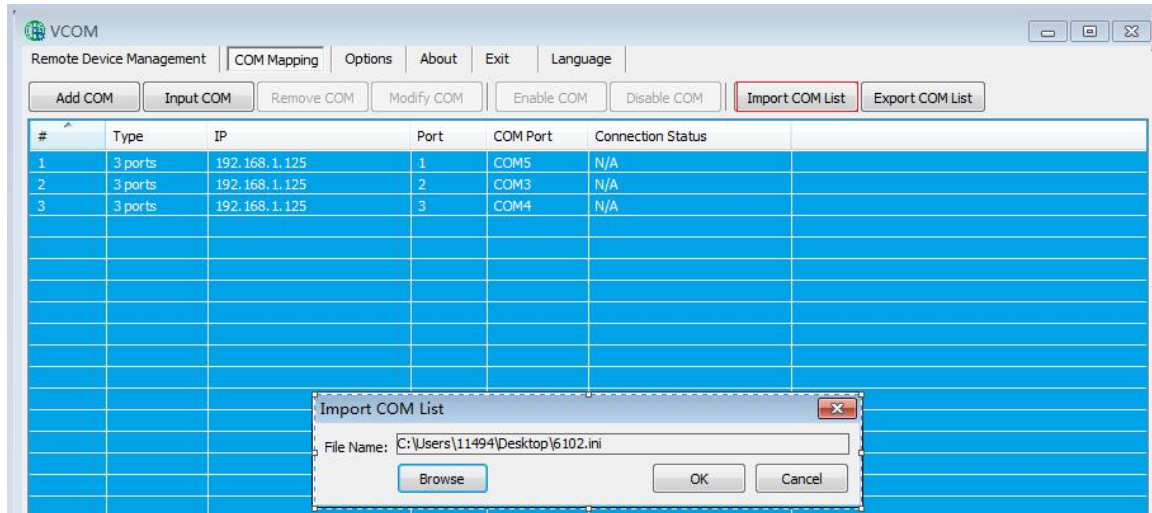


Figure 14

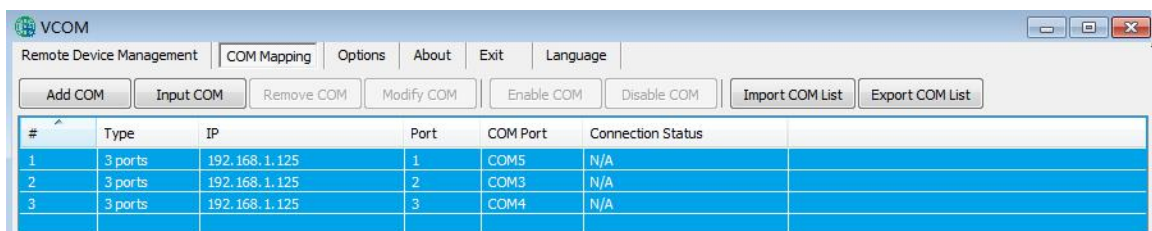


Figure 15

6.2.7 Exporting virtual serial port list

Software "VCOM", select COM Mapping interface, click "Export COM List" pop-up interface shown in Figure 16 below, click "Browse", select the virtual serial port configuration information path to be saved, click "OK" to export successfully as shown in Figure 17

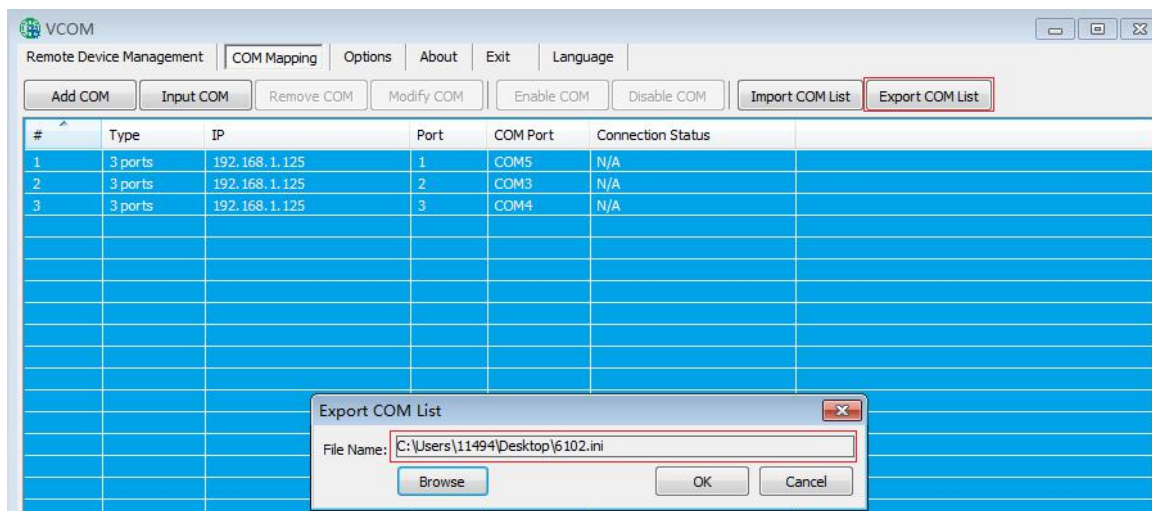


Figure 16

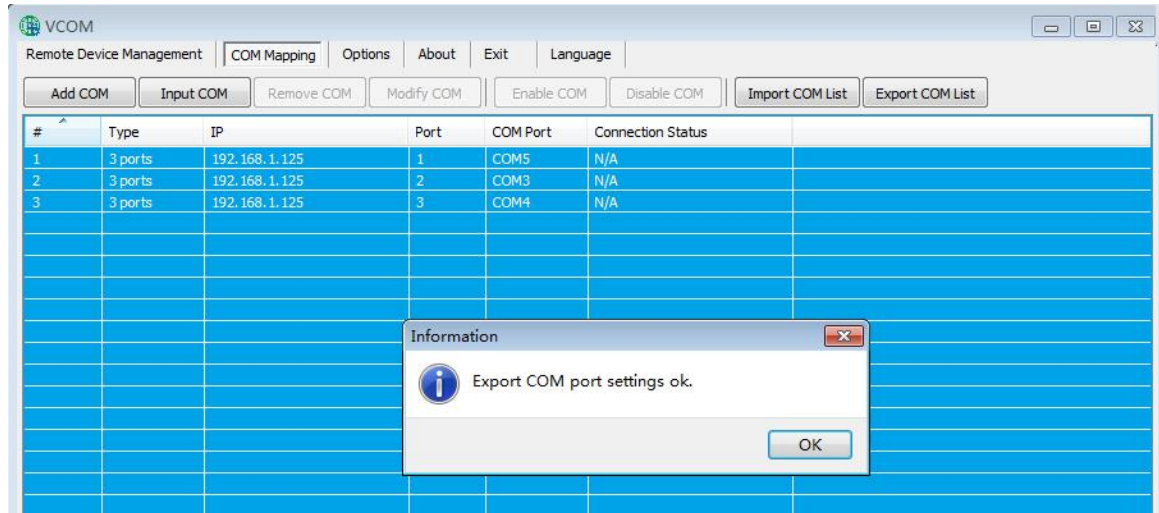
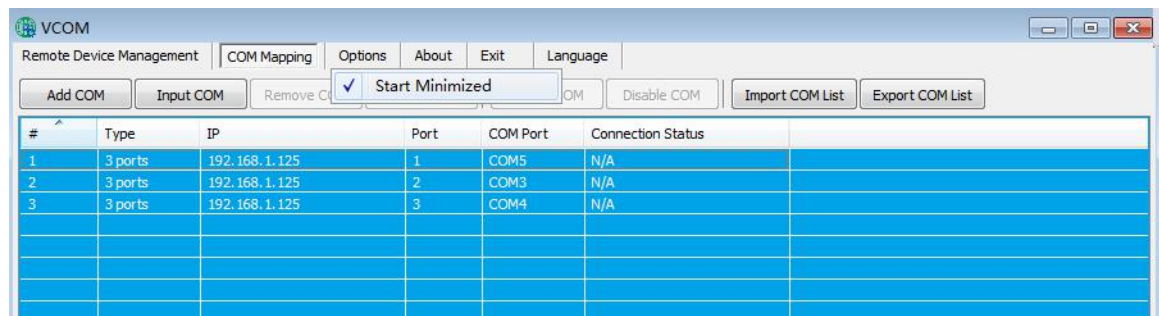


Figure 17

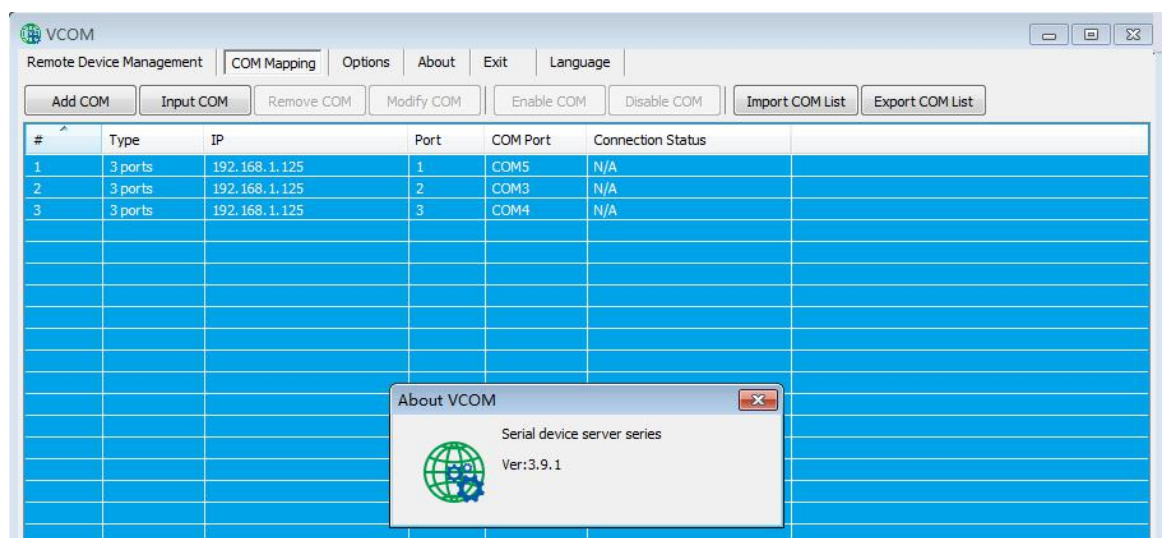
6.3 Options

Select whether to open the VCOM software directly or minimize it on the taskbar when opening it; by default, the software is minimized on the taskbar and configured as shown below



6.4 About

Click the "About" button to view the software version information as shown below



6.5 Exit

Click the "Exit" button to exit the software