HXSP-1002

2 ports RS-232 or RS-485/422 serial device server

user manual

【Summary】

HXSP-1002 is a serial device server which can contact with network fast. It provides one line RS-232/485/422 (RS-232: DB9M: RS-484/422 / 4 bits terminal block) and 1line 10Base-T, it can manage the disperse serial device or host computer by network, easily and convenience. Setting or software upgrade by serial program group in applying. Support TCP, UDP, ARP, ICM and DHCP protocol, support Windows Native COM and auto-contact function once the network intermit.

In addition, HXSP-1002 provide the managed collocate tools that based Windows flat roof. it can lead the user manage and configure facility step by step, all of the setting can be done by network or serial .Support pass gateway and router, easily for user to set IP address, Server and Client mode , size of data and so on, Can realize the serial device contact with network by simply setting.

【Package checklist】

HXSP-1002 is packed with the following items. If any of these items is missing or damaged, please contact your customer service representative for support.

- HXSP-1002
- User manual
- Power adapter 5VDC
- Straight network cable
- Software CD-ROM
- Product Warranty booklet

Optional accessories:

- DIN-Rail Mounting Kit (35mm)

【Feature】

- Support RS-232/RS-485/RS-422
- Support Socket application.
- Support Sever and Client mode.
- Support Windows/Linux COM serial driver mode.
- Support TCP, UDP, ARP, ICMP and DHCP protocol
- Support all of Windows Native COM and auto-contact function once the network blackout.
- Support passing gateway and router.
- All of the setting can be done by network and serial
- Proper Serial auto-connection (On-the-fly)

【Capability】

Ethernet port

Standard: 10Base-T, 100Base-TX

Protocol: support TCP, UDP, APR, ICMP and DHCP protocol

Signal: Rx+, Rx-, Tx+, Tx-

Speed: 10/100Mbps

Working format: full or half of duplex

Work mode: support Server and Client mode

Port memory: 512byte

Transmit distance: 100m

Interface protection: 1.5KV ESD

Interface type: RJ-45

Serial interface

EIA RS-232, RS-485, RS-422 standard

NO.of ports: 2 RS-232 or RS-485/RS-422 (RJ45) port optional

RS-232 signal: TxD, RXD, RTS, CTS, DTR, DSR, DCD, GND

RS-422 signal: Tx+, Tx-, Rx+, Rx-, GND

RS-485 signal: Data+, Data-, GND

Parity: None, Even, Odd, Space, Mark

Data bit: 7bit, 8bit

Stop bit: 1, 1.5, 2

Baud rate 150bps～230400bps

Flow control: RTS/CTS or non-flow control

RS485 data direction: ADDC (Auto data direction Control)

Loading: RS-485/422 side support 32 nodes (optional 128 nodes)

Transfer distance: RS-485/422 side: 1200m, RS-232 side: less than 15m

Serial line protect: 1500W surge protect, 15KV magnetic isolation

Power supply

Power supply input: 5VDC

Consumption: 300mA

Environment

Operating temperature: -20℃～60℃,　5～95% RH

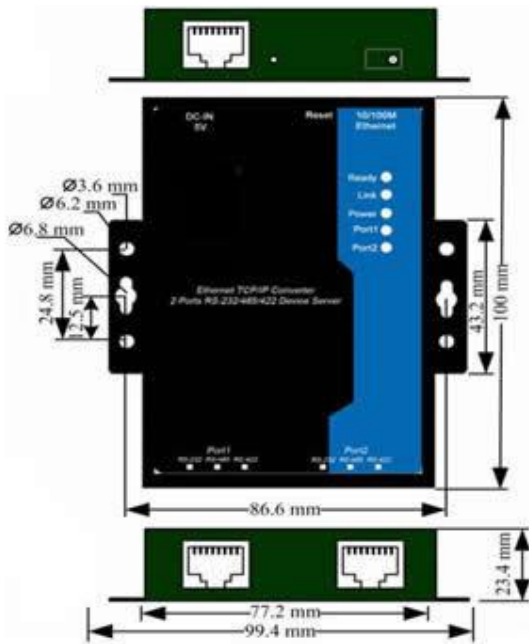Storage temperature: -25℃～85℃,　5～95% RH

Appearance

Color: black

L×W×H: 100mm×69mm×22mm

Material: Iron (shell)

Weight: 230g

【Panel】

【**LED indicator**】

Power supply input**:** ATC bright all along

Serial 1 connected: Port1 on bright all along

Serial 2 connected: Port2 on bright all along

Connected network: LINK and TX/RX indicator bright all along

10/100Base-T Ethernet port

The 10/100BaseT(X) ports located on facility front panel. The PIN define of RJ45 port display as follows, Connect by UTP or STP. The connect distance is no more than 100m. 100Mbps is used 100 of UTP 5, 10Mbps is used 100 of UTP 3, 4, 5.
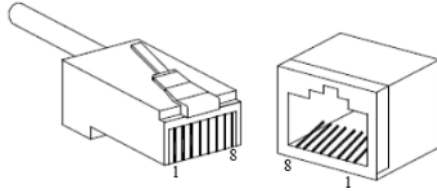

RJ 45 port support automatic MDI/MDI-X operation. Can connect the PC, Server, Converter and HUB by straight–though cable. Pin 1,2,3,6 Communication connect in MDI. 1 3, 2 6, 3 1, 6 2 are used as cross-over cable in the MDI-X port of Converter and HUB.

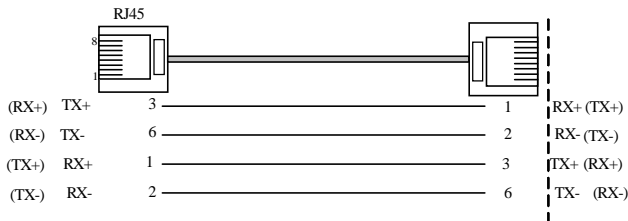10Base-T/100Base-TX are used in MDI/MDI-X, the PIN define in the table as below.

pin	MDI signal	MDI-X signal
1	TX+	RX+
2	TX-	RX-
3	RX+	TX+
6	RX-	TX-
4, 5, 7, 8	—	—

Note: "TX±" transmit data±, "RX±" receive data±, "—"not use.

MDI (Straight-through cable):
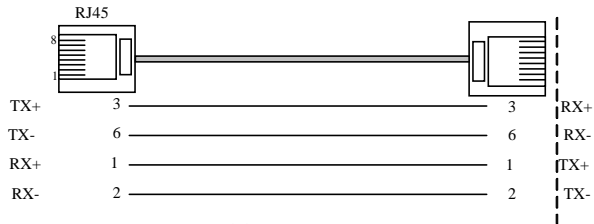
MDI-X (Cross-over cable):

RS-232/485/422 serial port
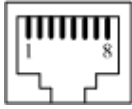
|	RS-232	RS-485	RS-422
1	TXD	D+	RX+
2	RXD	D-	TX+
3	RTS		RX-
4	CTS		TX-
5	DSR		FULL
6	GND	GND	GND
7	DTR		
8	DCD		

【Software installation and setting】

1 Set the IP address of the device

The IP address of the device and the PC must in the same subnet network (the default IP address of the device is 192.168.1.233). First, must make the IP address of the device in the same subnet network of PC.

If they are not in the same subnet network or the IP address have been used by another device, Use Telnet change the IP address of the device
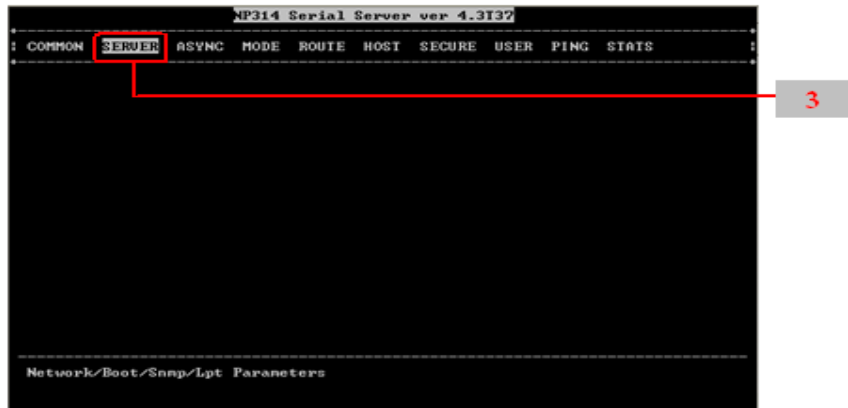
1 "**Start**"------"**all programs**"------"**Running**"
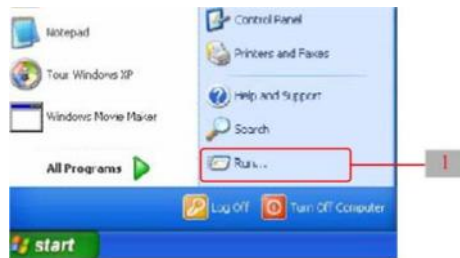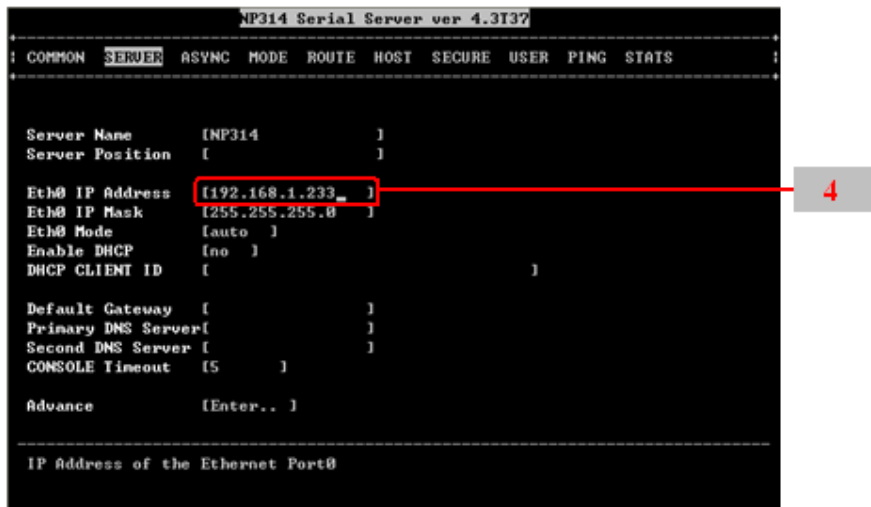

Input default IP address of the device "**Telnet: 192.168.1.233**"

2. Click "**OK**", setting the IP of device by telnet. Choose the menu by   of the
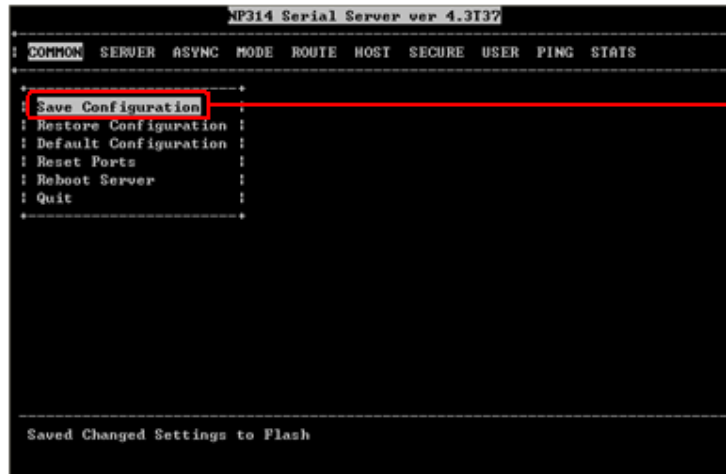
keyboard and quit by "**ESC**" key.

3 Choose the "**Server**" menu and push "**Enter**" key, Change the IP of the device.

4 Change the IP (the changed IP must be in the same subnet of the PC). Push "**Esc**" key,
quit the network setting.

5 Push "**Enter**" key

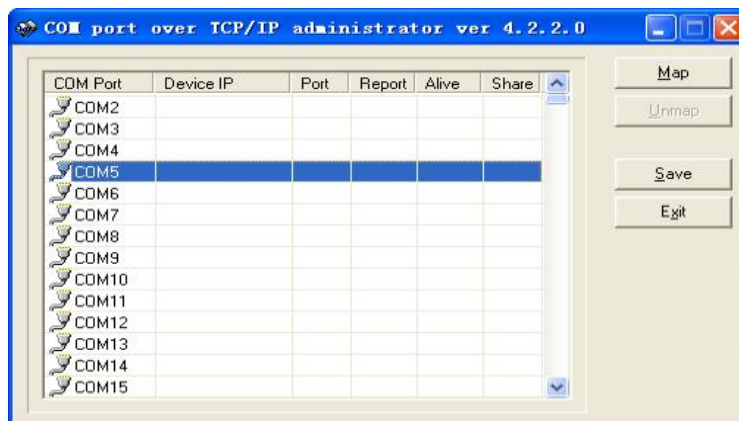6 Push "**Enter**" Key, save the setting.

2. Create the Virtual COM port on the PC

Setup the "**setup_nt_2K.exe**" software, then you will find the "**COM port over tcp/ip.exe**"

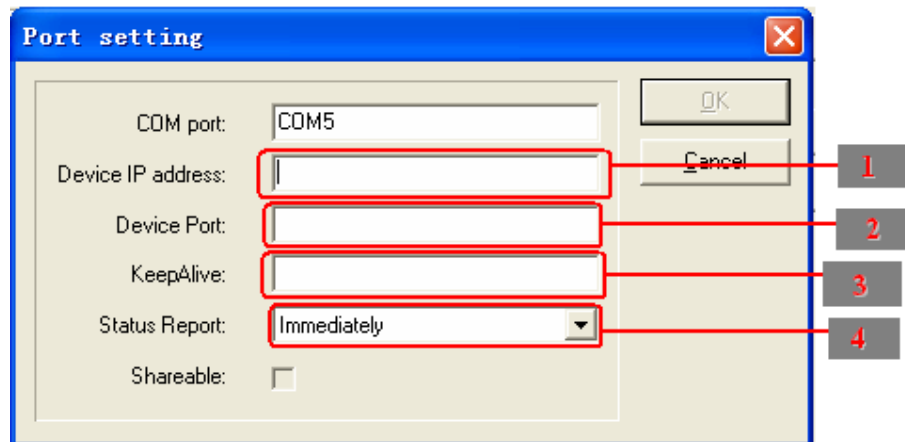application in the control panel of windows OS.

Running the "**COM port over tcp/ip.exe**" application and create virtual COM port communicate with the device on the PC.
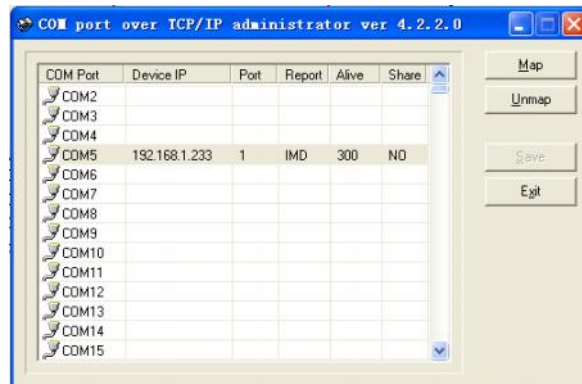

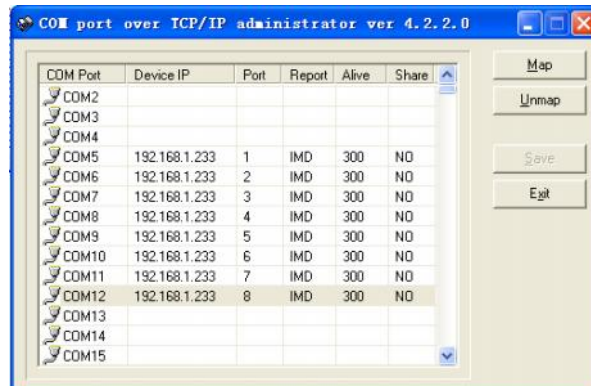Choose the name of the virtual COM port and click "**Map**" button, setting the parameter of the

virtual COM port as follows:

1 Input the IP of the device
2 Input the NO. of the port of the device(Inpu t 1~8)
3 Input 300
4 Default the parameter
　　Click the "**OK**", Click "**Save**". COM5 has been created.

　　Now, the COM5 can communicate with the terminal on the NO.1
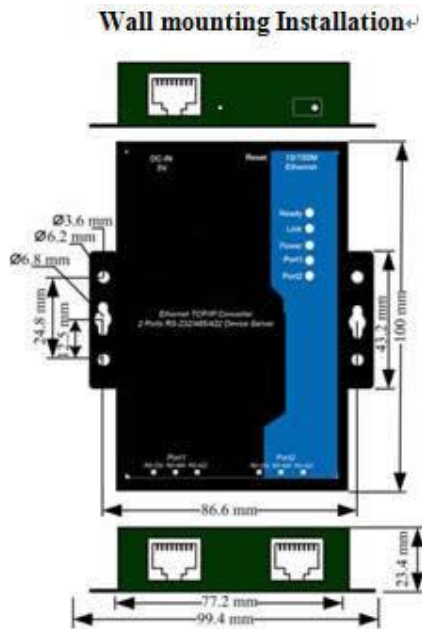port of the device.

Other Virtual COM port setting the same as COM5

    Note: Pay attention to the questions as below:

    (1) Please make sure that the power adapter is 5VDC

    (2) When connect to PC, use cross-over cable.

   (3) When connect to HUB or Switch, use straight-through cable

【**Installation**】

HXSP-1002 provides DIN-rail and wall mounting two types of installation

DIN-Rail Installation

In order to use in industrial environments expediently, adopt 35mm DIN-Rail installation, the installation steps as fellows:

- Examine the DIN-Rail attachment
- Examine DIN Rail whether be firm and the position be suitability or not .
- Insert the top of the DIN-Rail into the slot just below the stiff metal spring.
- The DIN-Rail attachment unit will snap into place as shown below.
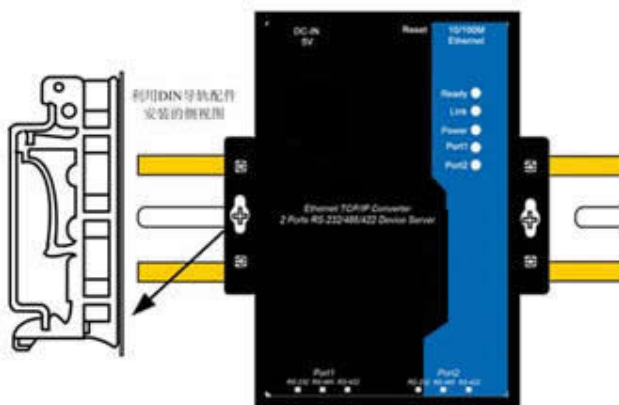
【Application】

NP322 application sketch map:

Working mode:

1. Based on Virtual COM port

2. Based on WinSock access

Please note that if PC in Client (Server), the HXSP-1002 must in Server (Client)