# NP30XT series serial device server User manual

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## Statement

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### **Revision History:**

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#### Notes

In reading this manual, please pay attention to the following symbols,



Information necessary to explain.



: Special attention.



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#### **CHAPTER 1 Summarize**

#### 1.1 Product introduce

NP30XT series included the products as follows, the user manual is suitable for the products as follows: (X is a number, represent serial port number)

Option Model	Port		Isolation	*** 1:		
Standard model 100M	100M	Serial port		1.5KVAC	Working temperature	Power supply range
Standard model	Ethernet	RS-232	RS-485/422	1.3KVAC		
NP302T-2D (RS-485)	1	_	2	_	-40~75°C	9~48VDC
NP302T-2D(RS-232)	1	2	_	_	-40~75°C	9~48VDC
NP304T-4DI(RS-485)	1	_	4	Support	-40~75°C	9~48VDC
NP304T-4D(RS-232)	1	4	_	_	-40~75℃	9~48VDC
NP308T-8DI(RS-485)	1	_	8	Support	-40~75°C	9~48VDC
NP308T-8D(RS-232)	1	8	_	_	-40~75°C	9~48VDC
NP3016T-16DI(RS-485)	1	_	16	Support	-25~55℃	85~265VAC
NP3016T-16D(RS-232)	1	16	_	_	-25~55℃	85~265VAC

NP30XT series is a high performance, industrial grade serial to Ethernet server. It can satisfy some kinds of customer requirements in consumption, temperature, volume and handle ability. It provides 2/4/6/8/16 port RS232 (RS-232 connector: RJ45) or RS485 (RS-485 connector: terminal block) and 1 port 10/100Base-Tx Ethernet, can focus manage disperse serial device, master through network, easy, convenience. In application, can configure, upgrade through WEB.

Moreover, NP30XT series provide strong function configuration tools based in Windows platform, it can guide user configure the device step by step, all configurations are coming true by WEB or Telnet, support cross-gateway and cross-router, user can flexible configure IP address, server and client mode, data bag size etc.

NP30XT series adopt EMC protection design, can work in rugged environment.

NP302T-2D series, NP304T-4D series and NP308T-8D series support 2 kinds of wall mounting installation, NP3016T-16D series support 1U 19" RACK installation, easy to use for your projects.

: Model name with I means have isolation function, without I, means did not have isolation function, for example, NP304T-4DI(RS-485), RS485 side have isolation, NP302T-2D (RS-485) did not have isolation.



## 1.2 Performance and parameter

#### **Ethernet port**

Standard: 10Base-T, 100Base-TX

Protocol: Support TCP, UDP, APR, CMP and DHCP

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

Speed: 10/100Mbps

Working: half or full duplex

Working mode: support Server and Client

Transfer distance: 100m

Connector: RJ45

#### RS232/485/422 port

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

RS-422 signal: T+(A), T-(B), R+(A), R-(B), GND

RS-485 signal: D+(A), D-(B), GND

Parity: None, Even, Odd, Space, Mark

Data bit: 5bit, 6bit, bit, 8bit

Stop bit: 1bit, 2bit

Baud rate: 300bps~115200bps

Loading: RS232: point to point, RS485: 32 nodes loop back

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

Protection: RS-485/422: 1.5KVAC isolation, class 3 static protection

RS-232: class 3 static protection

RS-232 connector: RJ45

RS-485/422 connector: terminal block

#### LED indicator

Working statues indicator: RUN

Power supply indicator: PWR

Ethernet port connection statues: LINK

Serial COM port transmit data indicator: TX

Serial COM port receive data indicator: RX

#### **Power requirements**

Input voltage: 9~48VDC (2/4/6/8 port serial device server)

220VAC (16port serial device server)



#### Working environments

➤ NP302T-2D(RS-232)

Working temperature:  $-40\sim75^{\circ}$ C Storage temperature:  $-40\sim85^{\circ}$ C

Relative humidity: 5%~95% (non-condensing)

➤ NP302T-2D(RS-485)

Working temperature:  $-40\sim75^{\circ}$ C Storage temperature:  $-40\sim85^{\circ}$ C

Relative humidity: 5%~95% (non-condensing)

➤ NP304T-4D(RS-232)

Working temperature:  $-40\sim75^{\circ}$ C Storage temperature:  $-40\sim85^{\circ}$ C

Relative humidity: 5%~95% (non-condensing)

➤ NP304T-4DI(RS-485)

Working temperature:  $-40\sim75^{\circ}$ C Storage temperature:  $-40\sim85^{\circ}$ C

Relative humidity: 5%~95% (non-condensing)

➤ NP308T-8D(RS-232)

Working temperature:  $-40\sim75^{\circ}$ C Storage temperature:  $-40\sim85^{\circ}$ C

Relative humidity: 5%~95% (non-condensing)

➤ NP308T-8DI(RS-485)

Working temperature:  $-40\sim75\,^{\circ}\text{C}$ Storage temperature:  $-40\sim85\,^{\circ}\text{C}$ 

Relative humidity: 5%~95% (non-condensing)

NP3016T-16D(RS-232)

Working temperature:  $-25\sim55^{\circ}\mathbb{C}$ Storage temperature:  $-30\sim85^{\circ}\mathbb{C}$ 

Relative humidity: 5%~95% (non-condensing)

➤ NP3016T-16DI(RS-485)

Working temperature:  $-25\sim5$  °C Storage temperature:  $-30\sim85$  °C

Relative humidity: 5%~95% (non-condensing)

Warranty:

Warranty time: 5 years

**Certifications:** 

CE, FCC, RoHS, UL508(pending)



## **CHAPTER 2 Hardware Description**

## 2.1 Interface description

#### 2.1.1 Power input





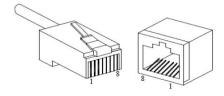
NP30XT series (NP3016T-16D(RS-232) and NP3016T-16DI(RS-485) are 85-265VAC input, power supply is AC jack with switch. The NP302/304/308 series input power is 9~48V, the power supply for the 2 core spacing of 5.08mm terminals ) back panel provide DC power input jack.

#### 2.1.2 Communication Interface

NP30XT series support 1 Ethernet port and 2, 4, 8, 16 port RS-485/422/232 port.

#### 10/100Base-T(X) Ethernet port:

The 10/100BaseT(X) ports located on NP30X series front panel. The pin of RJ45 port display as below. Connect by UTP or STP. The connect distance is not more than 100m. 100Mbps is used  $120\Omega$  of UTP, 10Mbps is used  $120\Omega$  of UTP 3, 4, 5.



RJ45 port support automatic MDI/MDI-X operation. It connects the PC, Server, Converter and HUB by straight—though cable wiring. Pin 1, 2, 3, 6 Corresponding connection in MDI.  $1\rightarrow3$ ,  $2\rightarrow6$ ,  $3\rightarrow1$ ,  $6\rightarrow2$  are used as cross wiring in the MDI-X port of Converter and HUB. 10Base-T is used in MDI/MDI-X, the definition of Pin in the table as below.

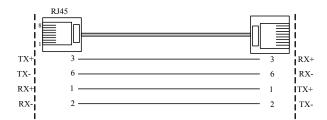


pin	MDI signal	MDI-X signal
1	TX+	RX+
2	TX-	RX-
3	RX+	TX+
6	RX-	TX-
4, 5, 7, 8		

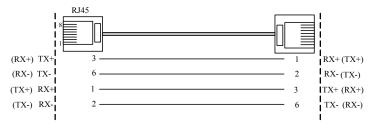
Note: "TX±" transmit data±, "RX±" receive data±, "—"not use



#### MDI (straight-through cable)



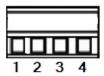
#### MDI-X (Cross over cable)



MDI/MDI-X auto-adapt function can let user did not think about the type of Ethernet cable when use NP30XT series 10/100M Ethernet interface, NP30XT series can connect device through straight-through cable or cross over cable directly.

#### **Serial port connection**

RS-485/422 provides separation distance 3.81mm, 4 bit industrial terminal block. (10bit terminal block's separation distance is 5.08mm.) The PIN define is as follows:



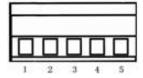
RS-485:

PIN	PIN define
1	D+(A)
2	D-(B)

RS-422:

PIN	PIN define
1	T+(A)
2	T-(B)
3	R+(A)
4	R-(B)

In NP30XT series, NP3016T-16DI(RS-485) back panel provides 5 bit industrial terminal block with separation distance 5.08mm (NP302T-2D (RS-485)), the PIN define is as follows:





#### **RS-485:**

PIN	RS-485
1	D+
2	D-
3	/
4	/
5	/

#### **RS-422:**

PIN	RS-422
1	T+
2	T-
3	GND
4	R+
5	R-

RS232 adopts RJ45 connector, the PIN define is as follows:



RS-232:

PIN	PIN define
1	TXD
2	RXD
3	RTS
4	CTS
5	DSR
6	GND
7	DTR
8	DCD

#### 2.1.3 LED indicator

The LED indicator on the front panel of NP30XT series can indicate the running system and the operation status, which makes it easy to find and solve problems, the specific meaning of indicator are shown in the table.

System LED statues		
LED	Indicator	Description
DIVD	ON	Power is connected/Function natural
PWR	OFF	Power is disconnected or function nu-natural
	Flashing	System Running steadily
RUN	OFF	System did not run or running un-steadily
	ON	System Running un-steadily
	ON	Ethernet port connect successfully
LINK	Flashing	Ethernet port has data transmission
	OFF	Ethernet port connect unsuccessfully



RX	OFF	None data receive
KA	ON/Flashing	In receiving data
TV	OFF	None data transmit
TX	ON/Flashing	In transmitting data

#### 2.1.4 Device installation

Before installation, confirm that the work environment meet the installation require, including the power needs and abundant space. Whether it is close to the connection equipment and other equipments are prepared or not.

- 1. Avoid in the sunshine, keep away from the heat fountainhead or the area where in intense EMI.
- 2. Examine the cables and plugs that installation requirements.
- 3. Examine whether the cables be seemly or not (less than 100m) according to reasonable scheme.
- 4. Screw, nut, tool provide by yourself.
- 5. Power requirements: 9~48VDC or 220V AC
- 6. Environments: NP302T/304T/308T Series Working temperature: -40~75°C

NP3016T Series Working temperature: -25~55℃

#### Wiring Requirements

- 1. Cable laying need to meet the following requirements,
- 2. It is needed to check whether the type, quantity and specification of cable match the requirement before cable laying;
- 3. It is needed to check the cable is damaged or not, factory records and quality assurance booklet before cable laying;
- 4. The required cable specification, quantity, direction and laying position need to match construction requirements, and cable length depends on actual position;
- 5. All the cable cannot have break-down and terminal in the middle;
- 6. Cables should be straight in the hallways and turning:
- 7. Cable should be straight in the groove, and cannot beyond the groove in case of holding back the inlet and outlet holes. Cables should be banded and fixed when they are out of the groove;
- 8. User cable should be separated from the power lines. Cables, power lines and grounding lines cannot be overlapped and mixed when they are in the same groove road. When cable is too long, it cannot hold down other cable, but structure in the middle of alignment rack;
- 9. Pigtail cannot be tied and swerved as less as possible. Swerving radius cannot be too small (small swerving causes terrible loss of link). Its banding should be moderate, not too tight, and should be separated from other cables:
- 10. It should have corresponding simple signal at both sides of the cable for maintaining.



## 2.2 Appearance and dimension

NP302T-2D (RS-232)-P(9/48VDC)



NP304T-4D (RS-232)-P(9/48VDC)



NP308T-8D(RS-232)-P(9/48VDC)



NP3016T-16D(RS-232)-P(220VAC)



NP302T-2D(RS-485) -P(9/48VDC)



NP304T-4DI(RS-485)-P(9/48VDC)



NP308T-8DI(RS-485)-P(9/48VDC)

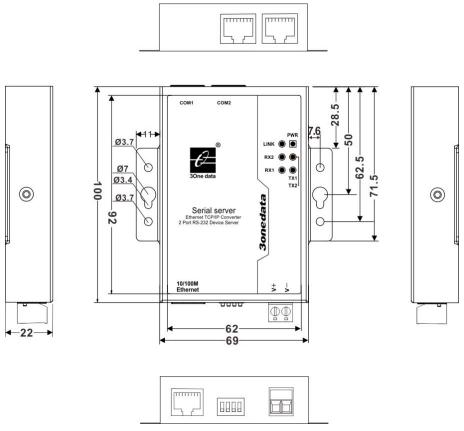


NP3016T-16DI(RS-485)-P(220VAC)

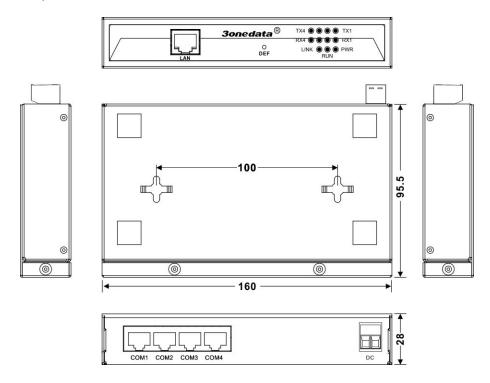




NP302T-2D (RS-232)

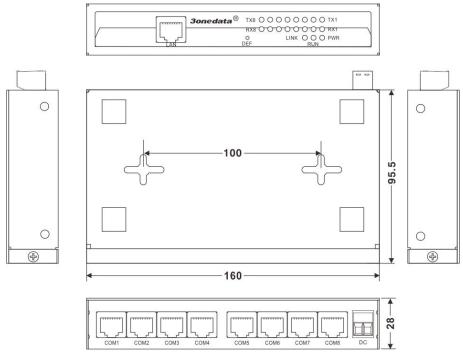


## NP304T-4D(RS-232)

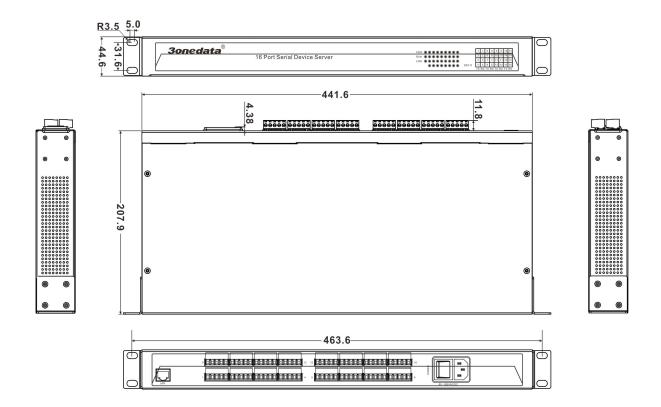




#### NP308T-8D (RS-232)



## NP3016T-16DI(RS-485)





## **CHAPTER 3 Packing List**

The first time use this product, please check the packaging is intact or not and the attachment is complete or not at first.

Item	Quality
NP30XT series	1pcs
Straight-through cable	1pcs
Power adapter or AC power cable	1pcs
Hangers (optional)	1pair
Mat	2pair
CD	1pcs
User manual	1pcs
Warranty card	1pcs
Certificate of quality	1pcs



## **CHAPTER 4 Telnet Management function**

NP30XT series can access, configuration and management through Telnet, next, will introduce this function simply. For more information, please check "NP30XT series CLI user manual" .

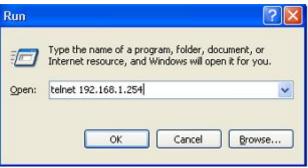
#### 4.1 Configuration through Telnet

Terminal device use telnet connect to NP30XT series through PC, the requirements are as follows:

- 1. The IP address of NP30XT series, can get it by search or modify (Use IP command under the system management view);
- 2. If PC and NP30XT in the same local area network, the IP address must in a same network segment, otherwise, PC and NP30XT must cross-router.

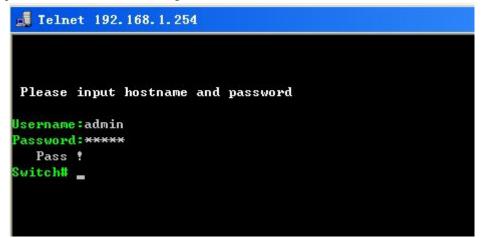
If satisfied these two requirements, can use telnet access to NP30X T series, then configure the NP30XT.

- 1) Establish configuration environment, just connect PC's Ethernet port connect to NP30XT's Ethernet port through Local area network
- 2) Before access NP30XT series through Telnet, need to input "Telnet+Space+ NP30XT's IP address" for checking, Figure 4.1.1 as follows:



(Figure 4.1.1)

3) Hit "Enter", checkout successful and till PC show "Please input hostname and password", ask user to input user name and password, default is admin, figure 4.1.2 as follows:



(Figure 4.1.2)

4) Use command to configure NP30XT series and check the running statues, if need help, please input "?" at any time. Specific configuration command, please reference "NP30XT series CLI user manual".



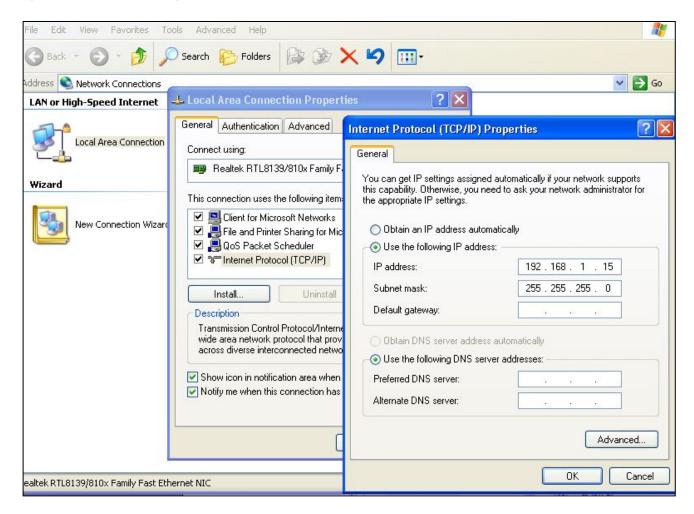
## 4.2 How to modify the PC's IP address

When access NP30XT series through WEB, If PC and NP30XT in the same local area network, the IP address must in a same network segment, otherwise, PC and NP30XT must cross-router. When modify PC's address, please make sure PC and NP30XT series in a same local area network, please reference the operation step as follows:

## Control panel->Network connection->Local area connection->Properties->Internet protocol (TCP/IP)

NP30XT series default IP address is: 192.168.1.254, configure PC's IP address to:192.168.1.X (X is a number except 254), after modify the PC's IP address, then we can use the default IP address: 192.168.1.254, then we can access and configure NP30XT series through WEB.

Specify Windows system operates as follows:





This configuration example did not use "Advanced" button. If use this advanced configuration function, can let a same network card have some false IP address, then we can access NP30XT series and did not modify the original IP address, but windows cannot deal with correctly in IGMP and IEEE 802.1X. Unix system did not have this problem, please note it when you use advanced function



## **CHANPTER 5 Web Management function**

NP30XTseries have WEB server inside, you can manage and maintenance NP30XT series directly perceived through the senses.

## 5.1 Preparing configuration

- 1. Requirements of PC
  - 1). Install operate system (Like as Windows XP/2000)
  - 2). Install network card
  - 3). Install Web browser (Microsoft IE6.0 or higher version)
  - 4). Install and start TCP/IP protocol
- 2. Establish correct network configuration

NP30XT series' default IP address: 192.168.1.254, subnet mask: 255.255.255.0, if configure in local area, please make sure IP's address configuration in a same subnet network before access the configuration view (Please reference "5.5.1 division" to check IP address configuration method). If configure remote, PC and NP30XT series must reach by cross-router.

#### How to access Web Server

Open the Browser, input NP30XT's default IP address in URL, after hit "Enter", you will see the figure 5.1.1 as follows, point put user input user name and password, default user name and password are "admin", if input incorrect, Web server has 3 time to input, if all incorrect, Browser will show "Access denied". User must refresh the page and input correct user name and password. Please change the user name and password when you log in at first time. Please contact our service center if you have any other problems.



(Figure 5.1.1)

The default user name and password is [admin], it is case sensitive. The default password has administrator permission.



#### **Function menu:**

Item	Tabs	Function description		
System	Device information	Display, device name, description, IP address, subnet mask, gateway and DNS etc		
statues	Network information	Display IP add, subnet mask, gateway address, DNS etc		
Serial device servers		Serial parameter configuration	Configure serial working mode, data bit, stop bit, parity, baud rate, Max frame space, character delay	
	Serial configuration	Working mode configuration	Choice sessions, work mode, local port, target port, target address, connect mode, AT, time out and Real Com function.	
	Serial information	Display incorrect data statistics and connection information that send by serial port.		
	Password	Modify user name and password		
System management	Device address	Configure device's IP address, network mask, gateway, DNS server address. Restart device remotely.		
	System information	Display and configure device model name, serial number, description and contact information		
	Files management	Upload and download configuration files, system upgrade and factory default		
	System log out	Log out and come back log in statue		

#### Web overtime handle

If user did not operate WEB management for a long time, systems will logout (But all the configuration will be saved)



If user did not operate WEB management for a long time, system wills logout (But all the configuration will be saved). After overtime, if user want to do any configuration, system will note and come back login dialog box, if user want to operate, need to re-login. The overtime time is 300 seconds.



## **5.2 System statues** Device information

Current Location>>Main Menu>>System Status>>Overview

Basic Settings

Module: SerialServer Hardware Ver: 1

Name: Firmware Ver: 1.0.0 Build201311281R

Description: 1LAN Contact Information:

Serial No.: 201311280001

Network Information

Gets the IP mode: Static IP Address: 192.168.17.66

Subnet Mask: 255,255,255.0 Gateway: 192,168,17,1

Gets the DNS mode: Use the following DNS server address DNS Server: 202.96.134.133

MAC Address: 00-22-6F-44-55-66

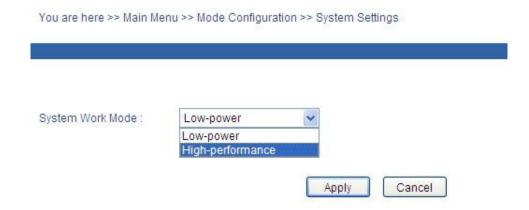
(Figure 5.2.1)

Item	Meaning
Module	Network identification
Name	Serial number
Description	The description of device's features, like as used key place.
Contact information	The contact information of person when maintenance the device, it can be configured in system information.
MAC address	Hardware address, 48bits(6 bytes,), 16 hexadecimal, it is unique
Hardware version	The current hardware version information, please note the limit of software version to hardware version
Firmware version	The current software's version information, upgrade software version will have more function

## **5.3 System Configuration**

NP302T series support low and high consumption working mode, included NP302T (RS-485) and NP302T (RS-232).





#### 5.4 Serial device server

## 5.4.1Serial port setting

Serial port configuration menu:

Serial port configuration menu	Optional data	Description	
Serial port working mode	RS-232 full duplex/RS-422 full duplex/RS-485 half duplex	Serial work mode	
Baud rate (bps)	300-115200 (10pcs band rate optional)	Baud rate choice	
Parity	None, Even, Odd, Mark, Space	Checkout choice	
Data bits (bits)	5,6,7,8	The parameter of serial	
Stop bits (bits)	1,2	The last of the data package	
Max frame space(bytes)	1-1460	The length of frame from serial data to Ethernet data.	
Character delay (ms)	1-500	The time space from serial data to Ethernet data	

Enter into NP301XT series WEB interface, knock[Serial Server/COM settings], Please choice necessary configuration in drop down list, the serial configuration interface is as follows:

Durrent Location>>Main Menu>>Serial Server>>COM Settings



(Figure 5.4.1)

Configuration option: [Baud rate], [Parity], [Data Bits], [Stop Bits], [Max Frame Space], [Character Delay] and [COM mode], the explaining is as follows:



#### [Baud rate]

It is a parameter to check the communication speed. It shows to transfer how many bits in 1 second. For example, 300 baud rate means have 300 bits transferred in 1 second.

#### [Parity]

Parity bits: It is a simple method to checkout fault in serial communication, have 4 types: Even, Odd, Mark, Space

#### [Data Bits]

It is a parameter to check the actual data bits in communication.

When PC send a Packet, actual data is not 8 bits, the standard is 5, 6, 7, 8.

#### [Stop Bits]

The last bit of the single Packet. Typical value is 1 and 2 bit.

When data bits is 5, stop bit 1.5 and 1 option. When data bits is 6, 7, 8, stop bit 1 and 2 option.

#### [Max frame space]

The frame length that serial interface data convert into Ethernet data, within the range of setting time, it forward when data is equal to or longer than the setting frames.

Available setting value ranged from 1 to 1024.

#### [Character Delay]

The wait time when serial interface send data do not 1 data frames. If up to this time and do not have data, then send automatic. Can configure 1-500.

#### [COM mode]

Web interface default work mode if up to the model name, if the product is RS-485, it is RS-485 or RS422, If the product is RS-232, it is RS-232

#### 5.4.2 Working mode configuration

Working mode configuration menu:

Configuration menu	Data option		Description	
Sessions	1-4			
Working mode	Based mode	TCP Client TCP Server UDP TcpAuto	Choice serial port working mode, default is not open	
	Advanced mode	Tcp Server UDP		
Local port	1-65535		COM1 default is 30000, COM4 default is 30003, between them, add step by step	
Target address	Default is192.168.0.254			
Target port	1-65535		COM1 default is 31000, COM4 default is 31003, between them, add step by step	
Connect mode	Connect mode Connect immediately/data trigger		Default is connect immediately	
AT	0-65535 s		Default is 0	
Disconnect Timeout 0-65535 s		Default is 300		
RealCom	Open/Close		Default is Close	



#### [Sessions]

Each serial port of serial device servers can support 1-4 sessions. It means serial port of serial device server send the received data to Ethernet through socket. More than one of the sessions means serial port of serial device server sends the received data to Ethernet through more than one socket. Sessions enable to use by checking the corresponding box.

#### **Based mode**

#### 1. TCP client

As TCP Client side, serial device server will connect forwardly to TCP/IP network equipment, such as PC. It need to setup to tell serial device server to connect which network address and TCP port number when conditions is matched. After creating socket, serial device server will sent the data received from each serial port through socket On the contrary, the data received from socket will be sent to the corresponding serial port.

TCP Client setting option: [Target address], [Target port], [Connect mode] and [AT]

The explanation of these setting is as follows

#### [Local port]

The configuration is the same TCP server, default is 0~65535.

#### [Target address]

The IP address or domain name address that device will connect, both of them can correspond the host computer address on the Internet

#### [Target port]

The port that device will be connected, default is 1~65535.

#### [Connect mode]

Connection mode has 2 types: Immediately and Data trigger

Immediately: When NP30XT series have power supply, it will connect immediately, if connection cut off, it will connect immediately.

Data trigger: Once NP30XT series receive the data, it will connect immediately.

#### [AT]

NP30XT send the AT package accord the setting time, if no response continue 3 times, will be cut off.

If set "0", meaning this function closed, the range is 0-65535 second, default is 0 second.

#### [Disconnect Timeout]

Setting the vacancy time for connection cut off automatic, if there do not have data transfer, the connection will cut off. If set "0", means do not care how much time vacancy, NP30XT do not cut off voluntary.

The range is 1-65535s. Default is 300s

The figure below is the configuration interface of TCP Client Mode. Session 1 is setting to local address available for router. "192.168.2.168", the "Destination Port" connected to serial port is host computer 192.168.2.168" 31000 port, Connection mode is Immediately, Disconnect Timeout time is 300 seconds, please pay attention to pure TCP Client, TCP Server, UDP or TCPAuto mode. Please close RealCom. Session 3 is setting to Internet address available for router "www.test.com" (the choice this time is DNS) the "Destination Port" connected to serial port is host computer "www.test.com" 31002 port, Connection mode is Immediately, Disconnect Timeou time is 300 seconds, click "Submit", setting successful.





(Figure 5.4.2)

#### 2. TCP server

TCP Server, Passive connect, one pivotal parameter is [Local port], have relationship with other setting, need combine setting

#### [Local port]

NP30XT series provided TCP port can be connect by other TCP/IP node, the TCP port have the relationship with the NP30XT series's relevant serial interface. The figure as follows is TCP Server setting interface, Session 1 set local port is 30000, external TCP port connect NP30XT series through this port. Connection keep-alive time is 300 second. Click "Submit", setting successful as figure 5.4.3.

#### 3. UDP

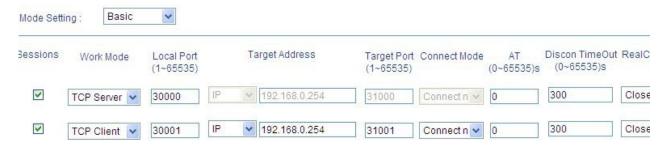
Under the UDP work mode. NP301 is server and also client, the relevant setting is "Local port", "Target address" and "Target port". It can support point to point and multicast UDP, setting method is the same as TCP.

#### 4. TCP Auto

In this Mode, serial device server can act as server or client. Before setting this Mode, please ensure related parameters are correct when you turn on the server mode, client mode is automatically disconnected.

#### 5. RealCom

RealCom support TCP Server and TcpAuto, can choice open and close function in RealCom, figure 5.4.3. When device open the RealCOM function, can cooperate with VSP Management Software create virtual COM port to communication, now, device's work mode is server, the virtual COM port is client, how to create the Virtual COM port, please the VSP Management Software user manual.



(Figure 5.4.3)



#### Advanced mode

#### 1. TCP server

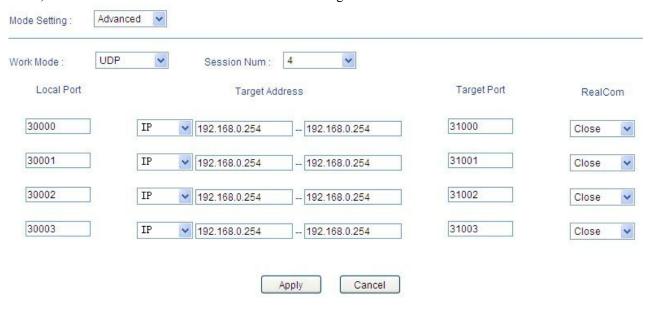
Under this mode, NP30XT series is server, can choice 0-4 channel connection at the same time, configuration mode is the same based mode. Figure 5.4.4 as follows:



(Figure 5.4.4)

#### 2. UDP

Under this mode, Target address is a address pool, all of the address in pool can connect with NP30XT series, can choice 0-4 channel connect at the same time. Figure 5.4.5 as follows:



(Figure 5.4.5)



- 1. Address pool just support Type A and type B address
- 2. Start address and end address must in the network segment.
- 3. Start address value must less than or equal to end address.

#### 5.4.3 Serial port information

The main function of serial port information: Display incorrect data statistics and connection information that send by serial port. Figure as 5.4.6.





(Figure 5.4.6)

## 5.5 System management

## 5.5.1 Device management

#### 1. Device's IP address

Configure IP address support 2 mode, DHCP and static IP address, When open DHCP function, can get the IP address from Hyper Terminal

Current Location>>Main Menu>>Basic Settings>>Network & Reboot



(Figure 5.5.1)



#### 2. Device restart

You can restart NP30XT series remotely. Knock [System management/Device management] menu, enter into Reboot interface, and figure as 5.5.2.



(Figure 5.5.2)

Knock<Reboot> button, "confirm", device reboot, after 20 seconds, knock "menu bar" and back to WEB management log in interface.



If use automatically IP address, must let NP30XT series can access DHCP server. Before reboot, please save the configuration, otherwise, all configurations will be lost

#### 5.5.2 User name and Password

Knock [System management/user name and password] menu, the figure as follows are NP30XT series' initial interface to modify user name and password. User can use this function to modify user name and password.

Some enterprises require administrator who monitor the device and administrator who control system or network different person, the authority must be separated. One in charge of monitoring and another in charge of system or network management. Our NP30XT series provide administration by different levels: Observer authority and administrator authority. Observer just have authority to check the statues of our device and just administrator can configure our device.

#### **User Index**

User Index means which group user, there have 3pcs user index in drop down list

#### Access levels

Administrator: check and configure authority

Observer: check authority.

#### Login name

Allow English character, digit and "-" " combine and no more than 16 bytes

#### Password

Allow English character, digit combine and no more than 20 bytes

#### Confirm password

Input password once again.



## Current Location>>Main Menu>>Basic Settings>>Login Settings

Index:	1	V	
Access Level:	Administrator	V	
Login Name :	admin		
Password:	•••••		
Confirm Password:	•••••		
Current Location>>Main Me	anus sesio Settinge	Apply Settings	Cancel
Outrent Escalishing Walling	situ Basic dettings-	>>Login Sellings	
Index:	2	-> Login Settings	
		>>Login Settings	
Index :	2	>>Login Settings	
Index: Access Level:	2	v V	
Index : Access Level : Login Name :	2	V V	

(Figure 5.5.3)





Please remember user name and password after you modify them, if forget it, please use DIP switch to do factory default, after do that, user name and password will be: admin.

#### 5.5.3 System information

The figure as follows is the NP30XT series' device information interface, we can see module, name, description, serial No. and contact information. You can modify these items through this function, it will available after reboot.

Current Location>>Main Menu>>Basic Settings>>System Identification



(Figure 5.5.4)

Apply

Cancel

#### Module

No more than 18 bytes, allow Chinese character. English character, digit and "-" but do not allow space

#### Name

No more than 18 bytes, allow Chinese character. English character, digit and "-" " but do not allow space

#### **Description**

No more than 18 bytes, allow Chinese character. English character, digit and "-" "\_" but do not allow space

#### Serial No.

No more than 18 bytes, allow Chinese character. English character, digit and "-" " but do not allow space

#### **Contact information**

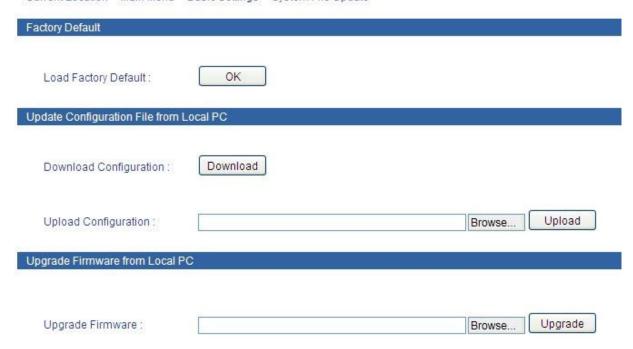
No more than 18 bytes, allow Chinese character. English character, digit and "-" "\_" "@" "! " "," "." but do not allow space



#### 5.5.4 File management

The figure as follows is the interface of NP30XT series' file management. It has 4pcs function: Factory default, download configuration, upload configuration and upgrade Firmware.

Current Location>>Main Menu>>Basic Settings>>System File Update



(Figure 5.5.5)

#### **1. Default factory** (Please be care of this operation)

Knock<Start> button, After default factory, IP address is 192.168.1.254 and all configurations are the same as default factory. Default configuration will be available after reboot automatic. After recover default configuration, user name and password will be: admin.

#### 2. Download configuration files

Knock<Download>Button, after confirm, system will appear a dialog box and point out to save the configuration file in .cfg. It is convenience to recover the configuration in future.

#### 3. Upload configuration files

Knock< Browse> button, choice the correct .cfg file and knock <upload>, after confirm, configuration information in .cfg file uploaded to device automatic and reboot automatic.

#### 4. Upgrade firmware

Knock <Browse> button, choice the position of the upgrade file. Knock < Upgrade> button. Point out "Forbid power off when upgrade", confirm it and then write flash. Reboot automatic, after upgrade, will refresh page automatic.



- 1. After default factory, must change the device's IP address, otherwise, if other devices make factory default, will have IP address conflict.
- 2. Please do not upgrade random. If you want to upgrade, must check the file is correct or not, otherwise, it is easy to damage the software.
- 3. Upgrade file must be bin type, please do not do any operations when upgrade, it may take upgrade failure. In upgrading, please do not operate the device and forbid know device's WEB page. If upgrade interrupt, please reboot the device and try again.



## 5.5.5 System logout

Knock<Start> button, Web will be back to login interface, do not change available configuration, and figure as 5.5.6.

Current Location>>Main Menu>>Basic Settings>>Logout





(Figure 5.5.6)