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1 Port RS232 Serial over IP Ethernet Device Server

NETRS2321P

*actual product may vary from photos

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FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

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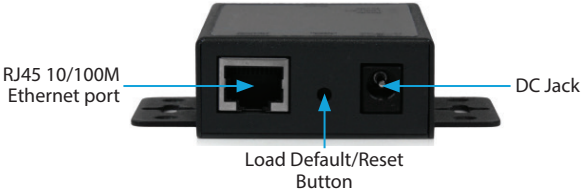
Product Overview

Top View

Front View

Rear View



DIN Rail Mounting

Attach the included DIN Rail brackets (one per side) using the provided screws to the top DIN Rail screw hole (marked in the above diagram), and clip to your DIN Rail

Load Default Settings / System Reset Button

Load Default Settings

Press and hold this button for more than 3 seconds, then release to load the factory default settings.
IP address: **10.1.1.1**
Subnet Mask: **255.0.0.0**
Login ID / Password: **admin**

System Reset

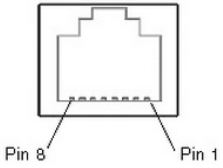
Press and hold this button for more than 10 seconds, then release to reboot the device (maintains configuration settings)

LED Indicators

LED Name	Status	Description
Ready	On	Power is on and the device is ready.
	Off	Power is off or the device is not ready.
Link/Act	On	UTP is link.
	Blinking	UTP Tx/Rx is activity.
	Off	UTP is not link.
Tx/Rx	Blinking	RS-232 port is transmitting or receiving data.
	Off	No data is transmitting or receiving in RS-232 port.

RJ45 Ethernet Pin Assignments

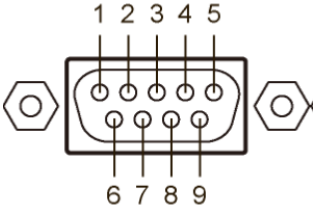
Pin	
1	TX+
2	TX-
3	RX+
6	RX-



RS-232 DB9 Male Pin Assignment

NOTE: This serial device server performs as a **DTE** device.

Pin	Name	I/O
1	DCD	Input
2	RD	Input
3	TD	Output
4	DTR	Output
5	GND	
6	DSR	Input
7	RTS	Output
8	CTS	Input



Introduction

Packaging Contents

- 1 x Serial over IP Device Server
- 1 x Universal Power Adapter (NA/UK/EU/AU)
- 1 x Software CD
- 1 x Instruction Manual
- 1 x DIN Rail Kit

Installation

Web Browser Method

1. Plug in the power adapter and connect the RJ45 interface to your LAN.

   NOTE: Alternatively, you can also use a crossover cable to connect the NETRS2321P directly to your system for the initial configuration.

2. Press and hold the load default button for more than 3 seconds and less than 10 seconds, then release it. This will return the serial device server to factory default and it will respond to the IP address 10.1.1.1.
3. Configure the PC to the same IP domain.
4. Open a web browser and connect to **http://10.1.1.1** to open the configuration interface. The default login ID will be "**admin**" and the password will be "**admin**".
5. To change your settings (for example, IP addresses) update the "**System IP**" section under "**Administrator**" on the left-hand navigation tree.

Virtual COM Port Application

1. Plug in the power adapter and connect the RJ45 interface to your LAN.
2. Insert the included CD and launch the VirtualCom software.
3. Follow the on-screen instructions to install VirtualCom and WinPcap.
4. Once installed, double-click the VCOM shortcut to launch the application.
5. Click the Search button in the VCOM software window to locate the device.

   NOTE: You may receive a firewall notification at this point of the install, please allow access to this application

Broadcast Search

The Broadcast Search function is used to locate all NETRS2321P devices that are connected to the same LAN as your computer. Since the Broadcast Search function searches by MAC address and not IP address, all NETRS2321P connected to the LAN will be located, regardless of whether or not they are part of the same subnet as the host.

NOTE: Broadcast packet packets are not passed through a router. The VCom utility can only be used to monitor devices in the same segment of the LAN.

Web Console Operation

Enter the IP address you have set for the NETRS2321P device into your web browser address bar (default IP: 10.1.1.1) and you will prompted to login with your user ID and password (Default: admin/admin).

After a successful login, you will see Administrator, TCP Mode, UDP Mode, UART, and Reset Device selections in left frame of the web console.

See the full manual at www.StarTech.com/NETRS2321P for a detailed explanation of web console functions.

Virtual COM Software Operation

The Virtual Com application lets you install and configure your NETRS2321P easily over the network. Five function groups are provided to ease the installation process, allow COM mapping, and provide monitoring and IP location server functions.

Configuration

Once the software is installed and you have searched the device on your network (outlined in Installation section), all NETRS2321P devices on the LAN should appear in the list of available devices.

Select the one you would like to adjust and click the Configure button. You will be prompted to enter your User ID and Password (Default: **admin** / **admin**)

Configure the device and press the **OK** button

COM Mapping

To map a virtual COM port, select **COM Mapping** from the left pane of the VCOM application, then click Add

Click OK to create the COM Mapping

TCP/UDP

Depending on the protocol you are using, the options below will enable/disable automatically as applicable.

Server/Client (TCP Mode only)

Set the device to be a **Telnet Server.** In server mode, the Telnet port listens and waits for a host or other client to make a connection. In this case the Ethernet connected device is the client.

Set the device to be a **Telnet Client**. In the case the Ethernet connected device is the Telnet server or other NETRS2321P in server mode.

IP Address

Depending on your selections above, there are one of three scenarios:
TCP Server - Disabled
TCP Client - Remote Server Address
UDP - Remote Target Address

Local Port

Assigns the local port for the device to listen on
TCP Server – Assigns the TCP server port number that the server will listen on
TCP Client – Disabled
UDP – Assign the UDP port that this unit listens on

COM

Assign the desired virtual COM port number

Remote Port

TCP Server – Disabled
TCP Client – Assign the remote TCP port you wish to communicate on
UDP – Assign the remote UDP port you wish to communicate on

Enable Control Connection (TCP Server or Client Only)

Enables/Disables control of the serial device on a remote network. Using the IP address and port number allows the user to gain control of the receiver from a remote location when this is enabled.

Second(s) for reconnection interval

Dictates the duration that the software will automatically attempt to reconnect the COM port to the serial port on the serial device server, for the purpose of keeping the connection alive.

See the full manual at www.StarTech.com/NETRS2321P for a detailed explanation of web console functions.

Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit **www.startech.com/support** and access our comprehensive selection of online tools, documentation, and downloads.

For the latest drivers/software, please visit **www.startech.com/downloads**

Warranty Information

This product is backed by a two year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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