Dual rack mount net5501

Quick Start Guide

Thank you for purchasing a dual rack mount net5501 server.

Your package should contain:

- ❏ 1RU server case
- ❏ Cover plate and hex screws for empty board slots

Optional Extras

- ❏ 1 or 2 x mounting kits to suit the net5501 board
  - ➢ punched cover plate, 2 x hex screws, hex key, board mounting plate, 7 x M3 x 5 screws, 1 x M3 x 12 screw, 1 metal spacer, 2 x serial port screws
- ❏ 1 or 2 x net5501 boards

Please read the following instructions to begin using your dual rack mount net5501.

Things you will need

Tools

- Anti-static wrist strap
- 2mm hex key (supplied)
- Phillips head screwdriver
- Compact Flash card reader (optional)
- Null modem cable (optional)

Materials

If you don't have them already, you'll need:

- 1 or 2 x net5501 boards
- Compact Flash Card (1 per board)
- miniPCI card (optional) e.g. wireless adapter, VPN accelerator
- PCI card (optional) e.g. network adapter
- Power supply (1 per board)
- Operating system image

Instructions

Safety Note

The net5501 boards, like all electronic equipment, are sensitive to damage from static discharge. To avoid damage caused by static discharge, we strongly recommend that you use an anti-static wrist strap when handling the boards.

Step 1   Install the boards into the server case (optional)

If your boards are not installed in the rack mount net5501, you may need to do the following:

1. Remove the five (5) screws from the top of the case and remove the top of the case.
2. Attach the board to the mounting plate using the M3 x 5 screws.
3. Attach the mounting plate to the four standoffs in the base of the case, using 3 M3 x 5 screws and 1 M3 x 12 screw. The M3 x 12 screw and metal spacer are used on the rear right hand side standoff to act as a Compact Flash card retaining screw.
4. Attach the cover plate to the front of the board, using the serial port screws, making sure that it is the right way around (brushed surface goes outwards).
5. Attach the cover plate to the case using the black M3 x6 hex screws.
6. [internal PSU only] Connect power plug to header on front right corner of board.
7. Replace the top of the case and tighten the screws.

Step 2   Configure and install a Compact Flash card

To use your rack mount net5501, you will need to have a CF card with a suitable operating system installed in the CF socket on the board.

If your CF card does not already have an operating system installed, you can either mount the CF card in another machine (e.g. via a flash card reader or a CF to IDE adapter) and copy a boot image onto it, or pxe boot the board. The net5501 boards support many operating systems including BSD, Linux and a number of proprietary operating systems.

Using a Phillips head screwdriver, remove the CF card retaining screw at the rear right hand side of the board, adjacent to the CF socket.

Installation

Insert the CF card into the socket, label up. Ensure the CF card is fully engaged in the socket. The card should not extend past the edge of the board.

Removal

To remove the CF card from the board, grasp the CF card firmly between thumb and index finger and pull straight out, taking care not to lift or twist the card as this may damage the connector pins.

Replace the CF card retaining screw, and tighten.

Step 3   Install the miniPCI card(s) (optional)

Insert your miniPCI card into the miniPCI slot at an angle of about 45° to the board. If you are installing a radio card, attach the u.fl end of the pigtails to the connectors on the wireless card. Ensure that the card is firmly seated in the slot and then lay it onto the board, pressing down until the locking tabs on either side of the card click into place.

Step 4   Install the PCI card (optional)

1. Using your PCI card as a guide, determine which standoffs on the PCI mounting plate line up with the mounting holes on the PCI card. Ensure the standoffs are pointing upwards.
2. Place 4.8mm nylon spacers on the matching standoffs on the PCI mounting plate.
3. Attach the PCI card to the PCI mounting plate, using M3 x 5 screws. Ensure that the notched edge of the mounting plate faces the same direction as the ports on the PCI card.
4. Attach the PCI card and mounting plate assembly to the base of the rack mount case, using 4 M3 x 5 screws. Leave the screws loose for now.
5. Attach the cover plate to the case using black M3 x 6 hex screws, making sure that it is the right way around (brushed surface goes outwards).
6. Slide the PCI card and mounting plate assembly forward, so that the ports on the PCI card sit flush with the cover plate.
7. Tighten the 4 M3 x 5 screws that hold the assembly to the base of the rack mount case.
8. Connect the PCI card to the net5501 using the flexible PCI riser, with the ribbon cable extending upwards from the connectors at both ends.

Step 5   Install a 2.5″ hard drive (optional)

If you want to install a hard drive in your net5501, you will need to use a net5501 hard drive mounting kit. Please note that you will need to remove the hard drive to access the miniPCI slot on the net5501 board.

1. Remove the board screws and replace them with the standoffs from the hard drive kit.
2. Attach a 2.5" hard drive to the bracket with the hard drive mounting screws.
3. Attach the bracket to the standoffs with the board screws.
4. Plug in the hard drive cable between the board and the hard drive.

Step 6   Connect to the serial console (optional)

If you want to configure your operating system via the console, you will need to connect to the serial port via a null modem cable.

Terminal emulator settings
net5501 board: 19200 baud, 8 bits, no parity, 1 stop bit, no flow control.

Step 7   Apply power

External PSU
Plug the power supply into the DC jack on the rack mount net5501.

Internal PSU
Connect IEC cable to socket at rear of case and turn switch to on.

The board will go through its boot up cycle, which you can watch if you are connected to the serial console.

Your rack mount net5501 is ready to use!

> ## *Warning*
>
> This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Contact us

Please feel free to contact us if you have any queries regarding your rack mount net5501.

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