

Juniper NETWORKS QFX5200-48Y Data Center Switches User Guide

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Juniper NETWORKS QFX5200-48Y Data Center Switches User Guide



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Mounting the QFX5200-48Y

The QFX5200-48Y is available in AC and DC power models. Only mount QFX5200-48Y models in a four-post rack. This procedure describes the installation into a four-post rack and connecting AC power. For DC connection procedures, see the complete QFX5200-48Y hardware documentation at https:// www.juniper.net/documentation/.

To install a Juniper Networks QFX5200-48Y, you need:

- Electrostatic discharge (ESD) grounding strap (not provided)
- One pair of front mounting brackets (provided)
- One pair of adjustable rear mounting blades (provided)
- One pair of rear mounting brackets to attach the mounting blades to the chassis (provided)

- Twenty black flat head screws to secure the mounting rails and mounting blades to the chassis (provided)
- Eight screws and cage nuts to secure the chassis and rack-mount kit to the rack (not provided)
- Two washer head Phillips screws to lock the mounting blades to the rear brackets (provided)
- Screwdriver appropriate for your rack-mounting screws (not provided)
- Two power cords with plugs appropriate for your geographical location (provided)
- RJ-45 cable and RJ-45 to DB-9 serial port adapter (not provided)

NOTE: We no longer include a DB-9 to RJ-45 cable or a DB-9 to RJ-45 adapter with a CAT5E copper cable as part of the device package. If you require a console cable, you can order it separately with the part number JNP-CBL-RJ45-DB9 (DB-9 to RJ-45 adapter with a CAT5E copper cable).

- Management host, such as a PC laptop, with a serial port (not provided)
- Grounding cable and lug (not provided)
- Two Phillips screws with star washers to ground the chassis (provided) (For instructions to attach the grounding cable and lug to earth ground, see the QFX5200 Hardware Guide.)

To mount the switch in a four-post 19-in, rack:

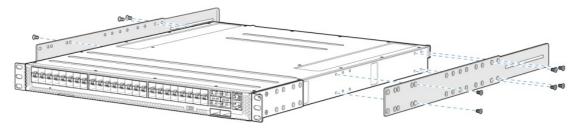
- 1. Attach the ESD grounding strap to your bare wrist and to a site ESD point.
 - **NOTE:** If you are mounting multiple units in the rack, mount the heaviest device at the bottom and mount the others from bottom to top in order of decreasing weight. The QFX5200-48Y weighs between 20.78 lb (9.43 kg) and 21.16 lb (9.6 kg) with power supplies and fans installed. Installing these devices in a rack or cabinet requires two people to lift the switch and secure it to the rack.
- 2. Place the rack in its permanent location, allowing adequate clearance for airflow and maintenance, and secure it to the building structure.
- 3. Determine whether the end with the field-replaceable units (FRUs) or the ports is to be placed at the front of the rack.
- 4. Align the holes in the front mounting bracket with the holes on the side of the chassis so that the bracket is flush with the port panel. **See Figure 1 on page 2.**

Figure 1: Align the Front Mounting Bracket and Secure with Screws



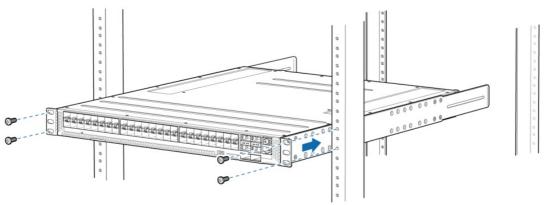
- 5. Using a Phillips screwdriver, attach the front mounting bracket to the switch using four of the flat head screws in the holes closest to the port panel. Tighten the screws.
- 6. Repeat Steps 4 and 5 on the opposite side of the switch.
- 7. Align the holes in the adjustable mounting rail with the remaining holes in the chassis. The alignment should permit two screws at mid-chassis and four screws nearest the power supplies. The adjustable blades fit standard racks between 22.05 in. (56 cm) to 29.5 in. (75 cm).
- 8. Attach the adjustable mounting rail to the chassis using the Phillips screwdriver and six of the flat head screws. Tighten the screws. **See Figure 2 on page 3.**

Figure 2: Align Holes for Mounting Rail and Attach with Screws



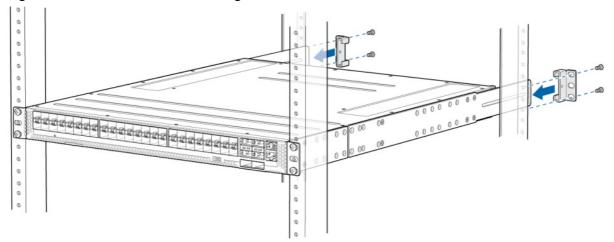
- 9. Repeat Steps 7 and 8 on the opposite side of the switch.
- 10. Have one person grasp both sides of the unit, lift it, and position it in the rack so that the front mounting bracket is aligned with the rack holes.
- 11. Have a second person secure the front of the device to the rack using four mounting screws (and cage nuts and washers if your rack requires them). Tighten the screws. **See Figure 3 on page 3.**

Figure 3: Attach the Front Mounting Bracket to the Rack



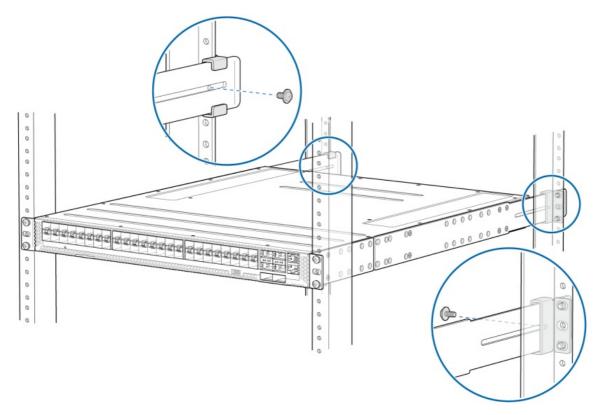
12. Continue to support the switch while sliding the rear mounting brackets into the channel of the adjustable mounting blades and securing the blades and the brackets to the rack. Use four mounting screws (and cage nuts and washers if your rack requires them) to attach the blades and rear mounting brackets to the rack. Tighten the screws. See Figure 4 on page 4.

Figure 4: Slide Blades into Mounting Rails and Attach to the Rack



- 13. Ensure that the chassis is level by verifying that all the screws on the front of the rack are aligned with the screws at the back of the rack.
- 14. Secure the mounting rails to the rear mounting brackets using the two washer head screws. Tighten the screws. See Figure 5 on page 4.

Figure 5: Lock the Mounting Rails to the Rack



15. Attach a grounding cable to earth ground and then attach it to the chassis grounding points. For full instructions, see Connecting Earth Ground to a QFX5200 in the QFX5200 Hardware Guide.

Connecting Power to the Device

The device is supplied with two factory-installed power supplies. To connect power to an AC-powered switch:

- 1. If the AC power source outlet has a power switch, set it to the OFF (O) position.
- 2. Insert the coupler end of the power cord into the AC power cord inlet on the AC power supply faceplate.
- 3. Insert the power cord plug into the power source outlet.
- 4. If the AC power source outlet has a power switch, set it to the ON (1) position.
- 5. Verify that the AC and the DC LEDs are lit green and on steadily.

Performing the Initial Software Configuration for QFX5200 Switches

Before you begin connecting and configuring a QFX5200, set the following parameter values on the console server or PC:

- Baud Rate-9600
- Flow Control-None
- Data-8
- · Parity-None
- Stop Bits-1
- · DCD State-Disregard

You must perform the initial configuration of the QFX5200 through the console port using the CLI or through Zero Touch Provisioning (ZTP). In order to use ZTP to provision the device, you must have access to a Dynamic Host Control Protocol (DHCP) server, and a File Transfer Protocol (anonymous FTP), Hypertext Transfer Protocol (HTTP), or Trivial File Transfer Protocol (TFTP) server on which the software image and configuration files are

stored. For more information about using ZTP for provisioning the device, see **Understanding Zero Touch Provisioning** in the Installation and Upgrade Guide.

To connect and configure the switch from the console:

- 1. Connect the console port to a laptop or PC using an RJ-45 cable and RJ-45 to DB-9 adapter. The console (CON) port is located on the management panel of the switch.
- 2. Log in as root. There is no password. If the software booted before you connected to the console port, you might need to press the Enter key for the prompt to appear.

login: root

3. Start the CLI.

root@% cli

4. Enter configuration mode.

root> configure

5. Add a password to the root administration user account.

[edit] root@# set system root-authentication plain-text-password

New password: password

Retype new password: password

6. (Optional) Configure the name of the switch. If the name includes spaces, enclose the name in quotation marks (" ")

[edit] roote set system host-name host-name

- 7. Configure the default gateway.
 - For standard Junos OS systems:
 [edit] roote# set routing-options static route default next-hop address
 - For Junos OS Evolved systems
 [edit] roote# set system management-instance root@# set routing-instances mgmt_junos routing-options
 static route prefix/prefixlength next-hop default-gateway-ip-address
- 8. Configure the IP address and prefix length for the switch management interface.
 - For standard Junos OS systems:
 [edit] roote# set interfaces eme unit 0 family inet address ip-address/prefix-length
 - For Junos OS Evolved systems:
 [edit] roote# set interfaces red:mgmt-0 unit 0 family inet address ip-address/prefix-length

CAUTION: Although the CLI permits you to configure two management Ethernet interfaces within the same subnet, only one interface is usable and supported.

NOTE: On the QFX5200-48Y, the management port enë is the top right-hand RJ-45 port on the port panel.

9. (Optional) Configure the static routes to remote prefixes with access to the management port. [edit] root@# set routing-options static route remote-prefix next-hop destination-ip retain no-advertise

10. Enable services such as SSH and Telnet.

NOTE: You will not be able to log in to the switch as the root user through Telnet. Root login is allowed only through SSH.

- The default option for SSH is yes. Select this to enable SSH.
- The default option for Telnet is no. Change this to yes to enable Telnet

11. Commit the configuration to activate it on the switch.

[edit] root@# commit

RELATED DOCUMENTATION

No Link Title

Safety Warnings Summary

IN THIS SECTION

- Power Cable Warning (Japanese) | 9
- Contacting Juniper Networks | 9

This is a summary of safety warnings. For a complete list of warnings, including translations, see the hardware documentation at https://www.juniper.net/documentation/.



WARNING: Failure to observe these safety warnings can result in personal injury or death.

- Permit only trained and qualified personnel to install or replace device components.
- Perform only the procedures described in this quick start and the hardware guide. Other services must be performed only by authorized service personnel.
- Before installing the device, read the planning instructions in the hardware guide to make sure that the site meets power, environmental, and clearance requirements for the device.
- Before connecting the device to a power source, read the installation instructions in the hardware guide.
- Manually installing the device in a rack or cabinet at a height above 60 in. (152.4 cm) requires two people to lift the unit and install mounting screws. To prevent injury, keep your back straight and lift with your legs, not your back.
- If the rack or cabinet has stabilizing devices, install them in the rack before mounting or servicing the switch in the rack or cabinet.
- · Before installing or after removing an electrical component, always place it component-side up on a flat antistatic mat or in an antistatic bag.
- Do not work on the device or connect or disconnect cables during electrical storms.
- · Before working on equipment that is connected to power lines, remove jewelry, including rings, necklaces, and watches. Metal objects heat up when connected to power and ground and can cause serious burns or become welded to the terminals.

Power Cable Warning (Japanese)

The attached power cable is only for this product. Do not use this cable for another product.

Contacting Juniper Networks

For technical support, see https://www.juniper.net/support/requesting-support.html.

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Documents / Resources



<u>Juniper NETWORKS QFX5200-48Y Data Center Switches</u> [pdf] User Guide QFX5200-48Y, QFX5200-48Y Data Center Switches, Data Center Switches, Center Switches, Switches

References

- **J** <u>Documentation | Juniper Networks</u>
- **J** <u>Documentation | Juniper Networks</u>
- J Zero Touch Provisioning | Junos OS | Juniper Networks
- UQFX5200 Switch Hardware Guide | Juniper Networks
- UConnecting the QFX5200 to External Devices | Juniper Networks
- **U** Contact Support Juniper Networks
- User Manual

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