Juniper Networks EX3300-24T

Juniper EX3300-24T EX Series Ethernet Switch User Manual

Model: EX3300-24T

1. PRODUCT OVERVIEW

The Juniper EX3300 Ethernet switches are designed as cost-effective enterprise access solutions, ideal for data center environments that require converged data, voice, and video services. This model, the EX3300-24T, features 24 10/100/1000BASE-T ports and four GbE/10GbE SFP/SFP+ uplink ports, providing robust connectivity and high-speed data transfer capabilities.

Figure 1: Front angled view of the Juniper EX3300-24T Ethernet Switch, showing the 24 Ethernet ports and four uplink ports.

2. KEY FEATURES

- **Fixed Platform Design:** A robust and stable hardware platform for reliable network operations.
- **Virtual Chassis Configuration:** Supports up to 10 switches in a Virtual Chassis, allowing for simplified management and increased scalability.
- **Compact Form Factor:** Occupies only 1 rack unit (1U) of space, optimizing rack density.
- **High-Density Ports:** Equipped with 24 10/100/1000BASE-T ports for standard Ethernet connectivity.
- **Flexible Uplink Options:** Includes four GbE/10GbE SFP/SFP+ uplink ports for high-speed connections to the core network or other switches.
- **Power over Ethernet (PoE/PoE+):** Supports IEEE 802.3af PoE and 802.3at PoE+ standards, enabling power delivery to connected devices like IP phones and wireless access points.

3. SETUP AND INSTALLATION

This section provides instructions for the physical installation and initial setup of your EX3300-24T switch.

3.1 Unpacking and Inspection

1. Carefully remove the switch from its packaging.
2. Inspect the switch for any signs of physical damage. If damage is found, contact your vendor immediately.
3. Verify that all components listed in the packing list are present.

3.2 Rack Mounting

The EX3300-24T is designed for standard 19-inch rack mounting.

1. Attach the provided rack-mount brackets to the sides of the switch using the screws supplied.
2. Secure the switch into the rack using appropriate rack screws. Ensure the switch is level and securely fastened.

Figure 2: Straight front view of the Juniper EX3300-24T Ethernet Switch, ideal for rack mounting reference.

3.3 Power Connection

1. Connect one end of the power cord to the AC power inlet on the rear of the switch.
2. Connect the other end of the power cord to a grounded AC power outlet.
3. Ensure the power source meets the voltage requirements specified in the product specifications.

Figure 3: Rear view of the Juniper EX3300-24T Ethernet Switch, showing the power inlet, console port, and management port.

3.4 Initial Configuration Access

To perform initial configuration, connect a console cable to the console port on the rear of the switch and use a terminal emulation program on a computer.

4. OPERATING INSTRUCTIONS

4.1 Powering On and Off

- **Power On:** Once the power cord is connected, the switch will automatically power on. Observe the system status LEDs for boot-up progress.
- **Power Off:** To power off, disconnect the power cord from the AC outlet. For controlled shutdown, it is recommended to gracefully shut down the operating system via the command-line interface (CLI) before disconnecting power.

4.2 Connecting Devices

- **Ethernet Ports:** Connect network devices (computers, servers, IP phones) to the 10/100/1000BASE-T ports using standard Ethernet cables.
- **Uplink Ports:** Use SFP/SFP+ transceivers and fiber optic cables to connect the GbE/10GbE uplink ports to other

switches or routers for high-speed backbone connectivity.

4.3 LED Indicators

The front panel of the EX3300-24T features various LED indicators to provide status information:

- **SYS LED:** Indicates system status (e.g., green for normal operation, amber for minor alarm, red for major alarm).
- **ALM LED:** Indicates alarm status.
- **MST LED:** Indicates master status in a Virtual Chassis configuration.
- **Port LEDs:** Each Ethernet port has LEDs indicating link status and activity.

5. MAINTENANCE

5.1 Cleaning

- Keep the switch and its ventilation openings free from dust and debris.
- Use a soft, dry cloth for cleaning the exterior. Do not use liquid or aerosol cleaners.

5.2 Firmware Updates

Regularly check the Juniper Networks support website for the latest Junos OS firmware updates. Keeping the firmware updated ensures optimal performance, security, and access to new features. Refer to the official Juniper documentation for detailed instructions on performing firmware upgrades.

5.3 Environmental Considerations

Ensure the operating environment maintains appropriate temperature and humidity levels as specified in the product's technical specifications to prevent overheating and ensure longevity.

6. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues.

6.1 No Power

- Verify the power cord is securely connected to both the switch and the power outlet.
- Check the power outlet with another device to ensure it is functional.
- Ensure the power source voltage matches the switch's requirements.

6.2 Port Link/Activity Issues

- Ensure the Ethernet cable is properly connected at both ends.
- Try a different Ethernet cable.
- Verify the connected device is powered on and functioning correctly.
- Check the port configuration on the switch (e.g., speed, duplex settings).

6.3 System Alarms (ALM LED)

If the ALM LED is lit, access the switch's CLI or web interface to view detailed alarm messages. Common alarms can relate to power supply issues, fan failures, or high temperature.

7. TECHNICAL SPECIFICATIONS

Attribute	Value
Brand	Juniper Networks
Model Number	EX3300-24T
Number of Ports	24 (10/100/1000BASE-T) + 4 (GbE/10GbE SFP/SFP+ uplink)
Interface Type	PoE, SFP
Data Transfer Rate	1000 Megabits Per Second
Switch Type	Managed
Operating System	Junos
Item Weight	13 pounds (5.9 kg)
Product Dimensions (LxWxH)	17 x 12 x 2 inches (43.2 x 30.5 x 5.1 cm)
Voltage	240 Volts (AC input range typically wider)
Case Material	Metal
First Available Date	September 30, 2011

8. WARRANTY AND SUPPORT

8.1 Product Warranty

For specific warranty information regarding your Juniper EX3300-24T switch, please refer to the warranty documentation provided with your purchase or visit the official Juniper Networks website. Warranty terms typically cover manufacturing defects for a specified period.
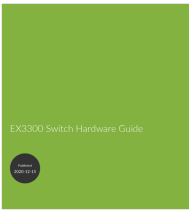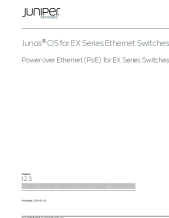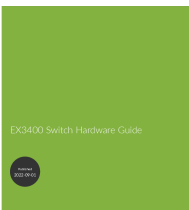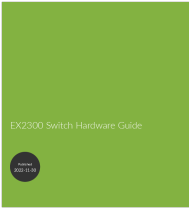
8.2 Technical Support

For technical assistance, troubleshooting beyond this manual, or advanced configuration guidance, please contact Juniper Networks technical support. Support resources, including knowledge bases, forums, and contact information, are available on the official Juniper Networks support portal.
Additionally, consider protection plans offered by resellers, such as the 3-Year or 4-Year Protection Plans, which may provide extended coverage and support services. Always verify the terms and conditions of any extended protection plan.

Related Documents - EX3300-24T

[Juniper EX3300 Switch Hardware Guide](#)
This guide provides comprehensive information on the Juniper Networks EX3300 Ethernet Switch hardware, covering installation, configuration, maintenance, and troubleshooting. Learn about system overview, chassis components, power, cooling, site planning, and safety guidelines for the EX3300 series.

[Juniper Networks Junos OS for EX Series Ethernet Switches: Power over Ethernet (PoE) Guide](#)
This document provides comprehensive information on configuring and managing Power over Ethernet (PoE) for Juniper Networks EX Series Ethernet Switches running Junos OS. It covers an overview of PoE, configuration tasks, administration, and troubleshooting.

[Junos OS for EX Series Ethernet Switches: Virtual Chassis Configuration Guide](#)
This document provides comprehensive configuration details and operational commands for Juniper Networks EX Series Ethernet Switches, focusing on the implementation and management of Virtual Chassis technology. It covers setup, troubleshooting, and advanced features for models EX2200, EX3300, EX4200, EX4500, and EX4550.

[Juniper EX3400 Switch Hardware Guide: Installation, Configuration, and Maintenance](#)
Comprehensive hardware guide for Juniper Networks EX3400 Series Ethernet Switches, covering installation, mounting, power, connectivity, maintenance, troubleshooting, and safety for enterprise network deployments.

[Juniper Networks EX2300 Switch Hardware Guide: Installation and Configuration](#)
Comprehensive hardware guide for Juniper Networks EX2300 Ethernet Switches. Learn about installation, configuration, maintenance, and troubleshooting for enterprise and data center networking solutions.

[Juniper EX4300 Ethernet Switches: Datasheet](#)
Comprehensive datasheet for Juniper EX4300 series Ethernet switches, detailing features, specifications, Virtual Chassis technology, and management options for enterprise campus and data center networks.