

Summit X430 Series Switches Installation Note

Pre-installation Requirements

Before you install the Summit X430 series switch, read the information in "Safety Information" on page 2.

The following items are provide with the Summit X430 series switch:

- Mounting brackets
- Eight M3 screws to secure the mounting brackets to the switch

To install the switch in a rack, you need the following additional tools and equipment:

- Four rack mounting screws to match your equipment rack
- Screwdriver to fit the rack mounting screws
- AC power cord that is suitable for the current rating of this product (See "Selecting AC Power Supply Cords" on page 4.

Required Tools

The following items are provided with the Summit X430 series switch:

- Two rack mounting brackets adaptable for either a front-mount or mid-mount installation
- Twelve screws for attaching the brackets to the switch enclosure
- For DC models, spade terminal and M4 screw with captive washer for grounding the switch

You need the following additional tools and materials to install the switch in a rack:

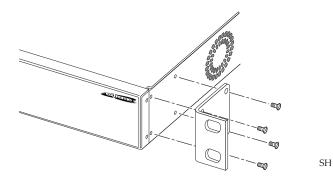
- #1 Phillips screwdriver
- Four rack mounting screws to match your equipment rack
- Screwdriver to fit the rack mounting screws
- #14 AWG stranded copper cable for grounding the switch (DC powered models)
- ESD-preventive wrist strap for installing optional ports at the back of the switch

Part Number: 120882-00 Rev. 02

Installing the Switch

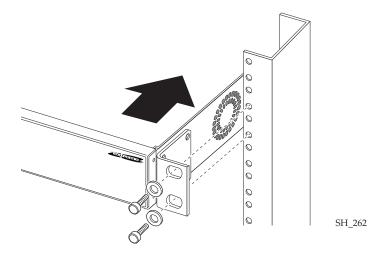
- 1 On each side of the switch, place a mounting bracket over the mounting holes.
- 2 Insert the provided screws and tighten them securely (Figure 1).

Figure 1: Attaching a Mounting Bracket



3 Slide the switch into the rack (Figure 2).

Figure 2: Installing the Switch in the Rack



- 4 Insert and tighten rack-mounting screws to secure the switch to the rack.
- 5 Connect the power cable to the AC input power connector on the back of the switch.
- 6 Connect the other end of the power cable to an AC power socket.

Safety Information



Read the safety information in this section before you install Extreme Networks products. Failure to follow this safety information can lead to personal injury or damage to the equipment.

Only trained service personnel should perform service to Extreme Networks switches and components. Trained service personnel have read all related installation manuals, have the technical training and experience necessary to be aware of the hazards to which they are exposed in performing a task, and are aware of measures to minimize the danger to themselves or other persons.

WARNING!

This is a Class A product. In a residential environment this product may cause radio interference, in which case the user may be required to take adequate measures.

Considerations Before Installing

- The system is designed to operate in a typical Telco environment that is environmentally controlled. Choose an indoor area that has the following characteristics:
 - Temperature-controlled and humidity-controlled, to ensure that the maximum ambient room temperature shall not exceed the temperature specified in the product data sheet
 - Clean and free from airborne materials that can conduct electricity
 - Well ventilated and away from sources of heat, including direct sunlight
 - Away from sources of vibration or physical shock
 - Isolated from strong electromagnetic fields produced by electrical devices
 - Secured, enclosed, and restricted-access, ensuring that only trained and qualified service personnel have access to the equipment
- Establish at least 3 inches clearance on all sides for effective ventilation. Do not obstruct air intake vents or ventilation grills on the front, side, or rear panel. Locate the system away from heat sources.
- Make sure that your equipment is placed in an area that accommodates the product specifications for power consumption and component heat dissipation.
- Make sure that your power supplies meet the site power or AC power requirements of all network equipment.

Maintenance Safety

- Use only original accessories or components that are approved for use with this system. Failure to follow these instructions may damage the equipment or violate required safety and EMC regulations.
- The chassis cover should be removed only by Extreme Networks personnel. This system contains no customer-serviceable components. Repairs to the system must be performed by an Extreme Networks factory service technician.
- Disconnect all power cords before working near power supplies, unless a maintenance procedure instructs you to do otherwise.
- Replace a power cord immediately if it shows any signs of damage.
- When you work with optical devices or other modular accessories, wear an ESD-preventive wrist strap to reduce the risk of electronic damage to the equipment. Connect the other end of the strap to an appropriate grounding point on the equipment rack. Leave the ESD-preventive wrist strap

permanently attached to the equipment rack so that it is always available when you need to handle ESD-sensitive components.

• Install all cables in a manner that avoids strain. Use tie wraps or other strain relief devices.

General Safety Precautions

- Do not try to lift objects that you think are too heavy for you.
- When you install equipment in a rack, load heavier devices in the lower half of the rack first to avoid making the rack top-heavy.
- For Summit desktop equipment installations, do not place a monitor or other heavy objects on top of the equipment. The chassis cover is not designed to support weight.
- Use only tools and equipment that are in perfect condition. Do not use equipment with visible damage.
- Route cables in a manner that prevents possible damage to the cables and avoids causing accidents, such as tripping.

Selecting AC Power Supply Cords

Extreme Networks does not include AC power input cords in the product box. To purchase a power cord for your product and for your specific country, contact your local Extreme Networks Channel Account Manager or Sales Manager, or purchase a cord from your local supplier.

To locate a Sales Manager or Partner in your region visit:

http://www.extremenetworks.com/how-to-buy/how-to-buy.aspx

Power cords that are used with AC-powered Summit X430 series switches must meet the following requirements:

- The power cord must be agency-certified for the country of use.
- The power cord must have an IEC320-C13 connector for connection to the switch or external power supply.
- The power cord must have an appropriately rated and approved wall plug applicable to the country of installation.
- For cords up to 6 feet (2 m) long, the wire size must be 18 AWG (.75 mm²) minimum; over 6 feet, the minimum wire size is 16 AWG (1.0 mm²).

Connecting Power

For the specific ratings and input power requirements of each switch model, see the data sheet for the Summit X430 series switches at http://www.extremenetworks.com.



Be sure to satisfy the requirements listed in this section when you connect all Extreme Networks equipment to power.

AC powered Summit X430 switches

When you connect equipment to power:

- Plug power cords only into properly grounded electrical outlets to help prevent electrical shock and to comply with international safety standards.
- Use only power cords that are certified for use within the country of use. Do not attempt to modify AC power cords.
- Make sure the voltage and frequency of your power outlet match the system electrical ratings for the equipment. The building and/or power source must provide overload protection.
- Use a surge suppressor, line conditioner, or uninterruptible power supply to protect the system from momentary increases or decreases in electrical power.
- Summit X430 series switches do not have switches for turning the unit on and off. Remove the wall plug from the electrical outlet to disconnect the power from a Summit X430 series switch. Make sure that this connection is near the equipment and is easily accessible for quick disconnect.



Make sure that the source outlet is properly grounded according to the country's local electrical requirements before plugging the AC supply power cord into a power supply.

Cable Routing for LAN Systems

The Summit X430 series switches meet the requirements for LAN system equipment. LAN systems are designed only for intra-building installations; that is, cable runs between devices must be in the same building as the connected units.

Fiber Optic Ports—Optical Safety

The following safety warnings apply to all optical devices used in Extreme Networks equipment that are removable or directly installed in an I/O module or chassis system. Such devices include but are not limited to gigabit interface converters (GBICs), small form factor pluggable (SFP) modules (or mini-GBICs), XENPAK transceivers, and XFP laser optic modules.

WARNING!

Laser optic modules become very hot after prolonged use. Be careful when you remove a laser optic module from the chassis or option card. If the laser optic module is too hot to touch, disengage the laser optic module and allow it to cool before removing it completely.

WARNING!

When you work with laser optic modules, always take the precautions listed below to avoid exposure to hazardous radiation.

- Never look at the transmit LED/laser through a magnifying device while the laser is powered on.
- Never look directly at a fiber port on the switch or at the ends of a fiber cable when they are powered on.
- Invisible laser radiation can occur when the connectors are open. Avoid direct eye exposure to the beam when optical connections are unplugged.
- Never alter, modify, or change an optical device in any way other than suggested in this
 document.

Battery Replacement and Disposal

Batteries included with Extreme products are encapsulated and must be replaced only by qualified Extreme Service personnel. Contact your Extreme Networks Service personnel for product replacement. Do not attempt to replace the battery. If these instructions are disregarded and replacement of these batteries is attempted, the following guidelines must be followed to avoid danger of explosion:

- Replace with the same or equivalent battery type as recommended by the battery manufacturer.
- Dispose of the battery in accordance with the battery manufacturer's recommendation.

Battery Warning — Taiwan



警生

如果更換不正確之電池型式會有爆炸的風險 請依製造商說明書處理用過之電池

Fiber Optic Ports and Optical Safety

The following safety warnings apply to all optical devices used in Extreme Networks equipment that are removable or directly installed in an I/O module or chassis system. Such devices include but are not limited to gigabit interface converters (GBICs), small form factor pluggable (SFP) modules (or mini-GBICs), QSFP+ modules, XENPAK transceivers, and XFP laser optic modules.

WARNING!

Laser optic modules become very hot after prolonged use. Take care when removing a laser optic module from the module or option card. If the laser optic module is too hot to touch, disengage the laser optic module and allow it to cool before removing it completely.

WARNING!

When working with laser optic modules, always take the precautions listed below to avoid exposure to hazardous radiation.

- Never look at the transmit LED/laser through a magnifying device while the transmit LED is powered on.
- Never look directly at a fiber port on the switch or at the ends of a fiber cable when they are powered on.
- Invisible laser radiation can occur when the connectors are open. Avoid direct eye exposure to the beam when optical connections are unplugged.
- Never alter, modify, or change an optical device in any way other than suggested in this
 document.

GBIC, SFP (Mini-GBIC), QSFP+, XENPAK, and XFP Regulatory Compliance

Extreme Networks pluggable optical modules and direct-attach cables meet the following regulatory requirements:

- Class 1 or Class 1M Laser Product
- EN60825-1:2007 2nd Ed. or later, European standard
- FCC 21 CFR Chapter 1, Subchapter J in accordance with FDA & CDRH requirements
- Application of CE Mark in accordance with 2004/108/EEC EMC Directive and the 2006/95/EC Low Voltage Directives
- UL and/or CSA registered component for North America
- 47 CFR Part 15, Class A when installed into Extreme products

Summit X430-8p Switch I/O Ports

The front panel of the Summit X430-8p switch includes:

- Eight fixed autosensing 10/100/1000BASE-T ports (ports 1–8) that provide 8 Gbps of high-density copper connectivity. In addition, all of these ports (ports 1-8) also support the POE protocol IEEE802.af and POE+ protocol IEEE 802.at standard and can provide 15.4 Watts of power on a single port up to a total power budget of 60 Watts.
- Two unpopulated 1000BASE-X unpopulated SFP ports (ports 9–10) that provide 2 Gbps of fiber connectivity.
- Ethernet management port.
- Serial console port implemented as an RJ-45 connector, used to connect a terminal and perform local management.

Summit X430-24t Switch I/O Ports

The front panel of the Summit X430-24t switch includes:

- Twenty-four fixed autosensing 10/100/1000BASE-T ports (ports 1–24) that provide 24 Gbps of high-density copper connectivity
- Four unpopulated 1000BASE-X unpopulated SFP ports (ports 25–28) that provide 4 Gbps of fiber connectivity.
 - Ports 21 through 24 are implemented as shared ports that pair a copper port with a fiber port. For information about SFPs, see the *Extreme Networks Pluggable Interface Modules Installation Guide*.
- Ethernet management port.
- Serial console port implemented as an RJ-45 connector, used to connect a terminal and perform local management.

Summit X430-24p Switch I/O Ports

The front panel of the Summit X430-24p switch includes:

- Twenty-four fixed autosensing 10/100/1000BASE-T ports (ports 1–24) that provide 24 Gbps of high-density copper connectivity. In addition, all of these ports (ports 1-24) also support the POE protocol IEEE802.af and POE+ protocol IEEE 802.at standard and can provide 15.4 Watts of power on a single port up to a total power budget of 370 Watts.
- Four unpopulated 1000BASE-X unpopulated SFP ports (ports 25–28) that provide 4 Gbps of fiber connectivity.
- Ethernet management port.
- Serial console port implemented as an RJ-45 connector, used to connect a terminal and perform local management.

Summit X430-48t Switch I/O Ports

The front panel of the Summit X430-48t switch includes:

- Forty-eight fixed autosensing 10/100/1000BASE-T ports (ports 1–48) that provide 48 Gbps of high-density copper connectivity
- Four 1000BASE-X unpopulated SFP ports (ports 49–52) that provide 4 Gbps of fiber connectivity. Ports 49 through 52 are implemented as shared ports that pair a copper port with a fiber port.
- Ethernet management port
- Serial console port implemented as an RJ-45 connector, used to connect a terminal and perform local management

X430 Series Switches

The Summit X430 series includes the following switches:

- Summit X430-8p
- Summit X430-24t
- Summit X430-24p
- Summit X430-48t

Table 1: Summit X430 Series Switch Technical Specifications

Physical Dimensions	
Summit X430-8p switch	Height: 1.73 inches (4.4 cm) Width: 8.7 inches (22.1 cm) Depth: 10.0 inches (25.4 cm)
Summit X430-24t switch Summit X430-24p switch Summit X430-48t switch	Height: 1.73 inches (4.4 cm) Width: 17.4 inches (44.1 cm) Depth: 10.0 inches (25.4 cm)
Weight	
Summit X430-8p switch	5.0 lb (2.27 kg)
Summit X430-24t switch	8.4 lb (3.83 kg)
Summit X430-24p switch	10.0 lb (4.54 kg)
Summit X430-48t switch	9.1 lb (4.13 kg)
Packaged Dimensions	
Summit X430-8p switch Summit X430-24p switch Summit X430-24t switch Summit X430-48t switch	Height: 5.12 inches (13.2 cm) Width: 22.13 inches (56.2 cm) Depth: 15.16 inches (38.5 cm)
Packaged Weight	
Summit X430-8p switch	7.0 lb (3.18 kg)
Summit X430-24t switch	11.1 lb (5.05 kg)
Summit X430-24p switch	13.0 lb (5.90 kg)
Summit X430-48t switch	11.7 lb (5.31 kg)
Acoustic Sound	
Summit X430-8p switch	0 dB(A) (no fan)
Summit X430-24t switch Summit X430-48t switch	55 dB(A)
Summit X430-24p switch	46 dB(A)
Power: Summit X430-8p	
Nominal input ratings	100 to 240 V \sim , 50-60 Hz, 1.75 A
Input current	1.14 A @ 110 V \sim (low-line) 0.70 A @ 220 V \sim (high-line)
Heat dissipation	24 W, 82 BTU/hr
Power consumption	24 W, 82 BTU/hr

Table 1: Summit X430 Series Switch Technical Specifications (Continued)

Power: Summit X430-24t		
Nominal input ratings	100 to 240 V ∼ , 50/60 Hz, 0.75 A	
Input current	0.40 A @ 110 V \sim (low-line) 0.20 A @ 220 V \sim (high-line)	
Heat dissipation	44 W, 150 BTU/hr	
Power consumption	44 W, 150 BTU/hr	
Power: Summit X430-24p		
Nominal input ratings	100 to 240 V \sim , 50/60 Hz, 5.75 A	
Input current	4.16 A @ 110 V \sim (low-line) 2.07 A @ 220 V \sim (high-line)	
Heat dissipation	55 W, 188 BTU/hr	
Power consumption	55 W, 188 BTU/hr	
Power: Summit X430-48t		
Nominal input ratings	100 to 240 V \sim , 50/60 Hz, 1.0 A	
Input current	0.85 A @ 110 V \sim (low-line) 0.50 A @ 220 V \sim (high-line)	
Heat dissipation	95 W, 325 BTU/hr	
Power consumption	95 W, 325 BTU/hr	

AccessAdapt, Alpine, Altitude, BlackDiamond, Direct Attach, EPICenter, ExtremeWorks Essentials, Ethernet Everywhere, Extreme Enabled, Extreme Ethernet Everywhere, Extreme Networks, Extreme Standby Router Protocol, Extreme Turbodrive, Extreme Velocity, ExtremeWare, ExtremeWorks, ExtremeXOS, Go Purple Extreme Solution, ExtremeXOS ScreenPlay, ReachNXT, Ridgeline, Sentriant, ServiceWatch, Summit, SummitStack, Triumph, Unified Access Architecture, Unified Access RF Manager, UniStack, XNV, the Extreme Networks logo, the Alpine logo, the BlackDiamond logo, the Extreme Turbodrive logo, the Summit logos, and the Powered by ExtremeXOS logo are trademarks or registered trademarks of Extreme Networks, Inc. or its subsidiaries in the United States and/or other countries.

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