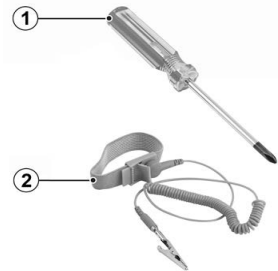# 5420 Series Quick Reference

Follow these steps to get the switch ready for use.

For complete installation instructions see *5420 Hardware Installation Guide* at www.extremenetworks.com/documentation
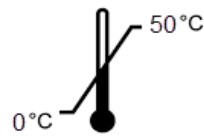
Necessary Tools

1 #2 Phillips screwdriver (magnetic screwdriver recommended)
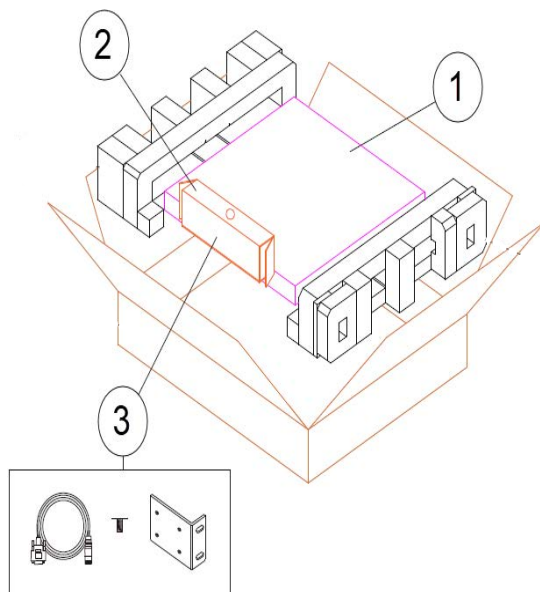2 ESD-protective wrist strap

1 Prepare the Site

The installation site must meet the following requirements:

- Appropriately grounded power receptacles located within 1.8 m (6 ft.).
- A readily accessible device for disconnecting power, such as a breaker or master switch.
- Network cabling within reach.
- Up to at least 7.6 cm (3.0 in.) on all sides, for proper ventilation.
- Temperature between 0°C (32°F) and 50°C (122°F) -- or as noted in "Operating Temperature:" -- with fluctuations of less than 10°C (18°F) per hour.

50°C
0°C

2 Unpack the Box

Remove the packing material, and verify that all of the following components are included:

1 Switch
2 Accessory box
3 Rack mount ears (2), cable (1), screws (8)

If the switch appears to be damaged, contact Extreme Networks. See "Getting Help" for more information.

Extreme Networks does not include power input cords with this product. To purchase the correct power cord for your country, refer to www.extremenetworks.com/product/powercords/.
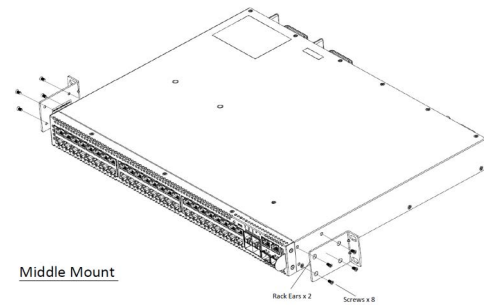
3 Install the 5420 Series

You can install any 5420 Series in a standard 19-inch equipment rack.

Two-Post, Mid Mount

This procedure uses a two-post mounting kit, which accommodates rack posts 3 inches or 6 inches wide. Rack ears can support both flush and mid-mount.

1 Attach a mounting bracket each side of the switch, screwing it into the holes so that the flange (ear) is near the middle of the switch.
2 Secure the brackets to the rack posts.

Middle Mount

Rack Ears x 2   Screws x 8

4 Install Transceivers

(**Optional**) Transceivers send and receive data over optical fiber rather than through electrical wires. You can insert transceivers or DAC cables into any of the switch's data ports.

Note: Transceivers can be Class 1 or Class 1M laser devices.

To install a transceiver:
1 Attach the ESD wrist strap to your wrist and connect the metal end to an appropriate ground point on the rack.
2 Remove the transceiver from its packaging.
3 If applicable, remove the protective dust cover from the connector.
4 Hold the transceiver so that the connector will seat properly.
5 Carefully align the transceiver with the port slot.
6 Push the transceiver into the port slot until it clicks into place.

5 Connect Power

5420 Series switches run on AC power.

Connect the switch to a primary power source.

Note: Installing the system as described in this guide meets the protective earth grounding requirements of the National Electrical Code (NEC), UL/CSA/IEC/EN 60950-1 standards. However, in some cases, it may be necessary to use an alternative grounding method. In these cases, a 14 AWG wire can be connected between the grounding lug on the chassis and a nearby building ground point.

Connecting to the Primary Power Source

To attach your 5420 Series to an AC power source, do the following:
1 Connect the AC power cord to the AC power input socket on the power supply and an AC power outlet.
2 When power is connected, verify that the switch's power LEDs turn green. If the LEDs do not turn green, refer to *5420 Hardware Installation Guide* for troubleshooting information.
Note: Power over Ethernet (PoE) is also supported on specific models.

6 Update and Configure the Switch

Upgrade to a generally available (GA) version of the software before you use this unit. See *5420 Hardware Installation Guide* for all OS selection procedures.

Safety Notices

Caution! Shock hazard! Disconnect all power inputs before servicing.

Electrical Hazard: Only qualified instructed or skilled personnel should perform installation, repair, or disassembly procedures.
Risques d'électrocution: Seul un personnel qualifié ou expérimenté peut effectuer les procédures d'installation, de réparation ou de démontage.
Warning: Extreme Networks power supplies do not have switches for turning the unit on and off. Before servicing, disconnect all power cords to remove power from the device. Make sure that these connections are easily accessible.
Avertissement: Extreme Networks alimentations n'ont pas d'interrupteurs pour allumer ou éteindre l'appareil. Avant l'entretien, débranchez tous les cordons d'alimentation pour couper l'alimentation de l'appareil. Assurez-vous que ces connexions sont facilement accessibles.

Warning: A dedicated Listed circuit breaker rated at 15A is to be used for each power supply connection.
Avertissement: Un disjoncteur certifié 15A et dédié à l'installation doit être utilisé pour chaque connexion d'alimentation.
Caution: Before mounting the device, ensure that the rack can support it without compromising stability. Otherwise, personal injury or equipment damage may result.
Caution: Follow appropriate ESD procedures when unpacking and handling the switch. These include unpacking the switch in an ESD-safe environment and wearing appropriate ESD protective gear, such as ESD-safe footwear and ESD wrist straps where appropriate.
Warning: This unit must be installed indoors. The unit, AC power adapter, and its cables are not designed for outdoor use. **The PoE cables must not be distributed outside the building.**
Caution: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
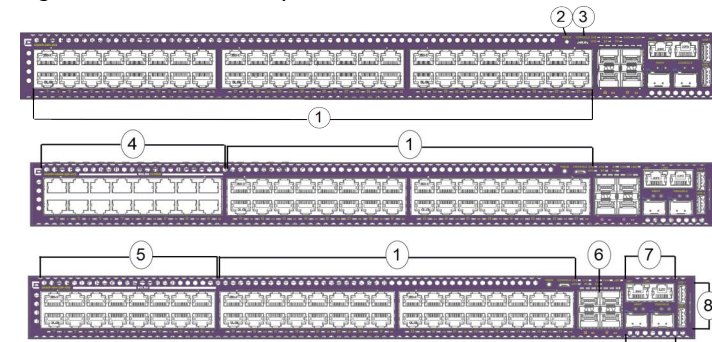**Warning:** Do not use optical instruments to view the laser output. The use of optical instruments to view laser output increases eye hazard. Use only UL/CSA, IEC/EN60825-1/-2 recognized pluggable modules.
Avertissement: Ne pas utiliser d'instruments optiques pour regarder l'extrémité du laser. L'utilisation d'instruments optiques pour regarder l'extrémité du laser représente un danger pour les yeux. Utilisez uniquement des modules certifiés UL/CSA, IEC/EN60825-1 /-2.
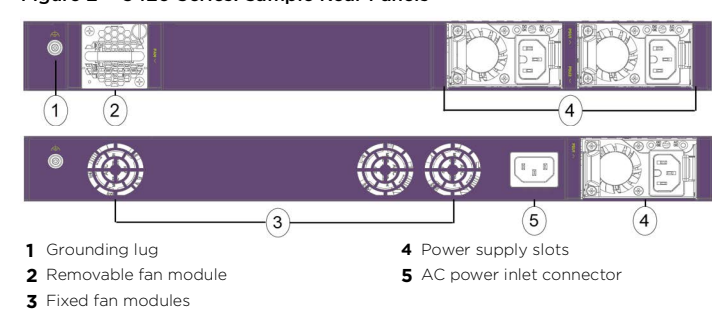
Hardware Components

Figure 1   5420 Series: Sample Front Panels

1 10/100/1000BASE-T ports
2 Mode button
3 Micro-B USB console port
4 100MB/1Gb/2.5Gb ports with 802.3bt Type 4 PoE (90W)
5 10/100/1000BASE-T full/half duplex MACsec capable ports with 802.3bt Type 4 PoE (90W)
6 10G SFP+ or 10/25G SFP28 uplink ports
7 RJ-45 Management and Console ports
8 Type A USB ports
9 SFP-DD stacking ports

Note: 5420 Series switches have either PoE or non-PoE ports, not a mix of both. For component details, see *5420 Hardware Installation Guide*.

Figure 2   5420 Series: Sample Rear Panels

1 Grounding lug
2 Removable fan module
3 Fixed fan modules
4 Power supply slots
5 AC power inlet connector

Operating Conditions

Operating Temperature:
0°C (32°F) to 50°C (122°F)
Temperature restrictions apply for some models at high altitudes. See *5420 Hardware Installation Guide* for details.
Storage Temperature:
-40°C to 70°C (-40°F to 158°F)
Operating Relative Humidity:
5% to 95% (non-condensing)

Interfaces

Each 5420 Series includes a Micro-B USB console port, 2 SFP-DD stacking ports, an RJ-45 management port, an RJ-45 serial console port, and 2 USB A ports for connecting to memory. 5420 factory switches are pre-loaded with both Switch Engine and Fabric Engine OSs.

The following table lists the specific interfaces for each switch:

5420F-8W-16P-4XE	8 10/100/1000BASE-T full/half duplex MACsec capable ports with 802.3bt Type 4 PoE (90W), 16 10/100/1000BASE-T full/half duplex ports with Type 2 PoE+ (30W) ports, and 4 10G SFP+ ports, 2 fixed fan modules, 1 unpopulated PSU slot
5420F-24P-4XE	24 10/100/1000BASE-T full/half duplex MACsec capable ports with 802.3bt Type 2 PoE+ (30W) and 4 10G SFP+ ports, 2 fixed fan modules, 1 unpopulated PSU slot
5420F-24S-4XE	24 1000BASE-X SFP MACsec capable ports and 4 10G SFP+ ports, 2 fixed fan modules, 1 unpopulated PSU slots
5420F-24T-4XE	24 10/100/1000BASE-T full/half duplex MACsec capable ports with 802.3bt Type 2 PoE+ (30W) and 4 10G SFP+ ports, 2 fixed fan modules, 1 unpopulated PSU slot (PoE on RJ-45 ports is not supported)
5420F-16MW-32P-4XE	16 100Mb/1Gb/2.5Gb ports with 802.3bt Type 4 PoE (90W), 32 10/100/1000BASE-T full/half duplex MACsec capable ports with Type 2 PoE+ (30W), and 4 10G SFP+ ports, 3 fixed fan modules, 1 unpopulated PSU slot
5420F-16W-32P-4XE	16 10/100/1000BASE-T full/half duplex MACsec capable ports with 802.3bt Type 4 PoE (90W), 32 10/100/1000BASE-T full/half duplex MACsec capable ports with Type 2 PoE+ (30W), and 4 10G SFP+ ports, 3 fan modules, 1 unpopulated PSU slot
5420F-48P-4XE	48 10/100/1000BASE-T full/half duplex MACsec capable ports with Type 2 PoE+ (30W) and 4 10G SFP+ ports, 3 fixed fan modules, 1 unpopulated PSU slot
5420F-48P-4XL	48 10/100/1000BASE-T full/half duplex MACsec capable ports with Type 2 PoE+ (30W) and 4 10G SFP+ LRM and MACsec capable ports, 3 fixed fan modules, 1 unpopulated PSU slot
5420F-48T-4XE	48 10/100/1000BASE-T full/half duplex MACsec capable ports with Type 2 PoE+ (30W) and 4 10G SFP+ ports, 2 fixed fan modules, 1 unpopulated PSU slot
5420M-24T-4YE	24 10/100/1000BASE-T full/half duplex MACsec capable ports and 4 10/25G SFP28 ports, 1 removable fan module, 2 unpopulated PSU slots
5420M-24W-4YE	24 10/100/1000BASE-T full/half duplex MACsec capable ports with 802.3bt Type 4 PoE (90W) and 4 10/25G SFP28 ports, 1 removable fan module, 2 unpopulated PSU slots
5420M-16MW-32P-4YE	16 100Mb/1Gb/2.5Gb ports with 802.3bt Type 4 PoE (90W), 32 10/100/1000BASE-T full/half duplex MACsec capable ports with Type 2 PoE+ (30W), and 4 10/25G SFP28 ports, 1 removable fan module, 2 unpopulated PSU slots
5420M-48T-4YE	48 10/100/1000BASE-T full/half duplex MACsec capable ports and 4 10/25G SFP28 ports, 1 removable fan module, 2 unpopulated PSU slots
5420M-48W-4YE	48 10/100/1000BASE-T full/half duplex MACsec capable ports with 802.3bt Type 4 PoE (90W) and 4 10/25G SFP28 ports, 1 removable fan module, 2 unpopulated PSU slots

PoE Budgets

SKU	Single PSU	Dual PSUs
5420F-48P-4XE 5420F-48P-4XL	740W	1480W
540F-24P-4XE	380W	720W
5420F-8W-16P-4XE	480W	960W
5420F-16W-32P-4XE 5420F-16MW-32P-4XE	960W	1920W
5420M-24W-4YE	720W	1440W
5420M-48W-4YE 5420M-16MW-32P-4YE	1440W	2880W 2400W

Power Supply and Fan Options

150W AC power supply (XN-ACPWR-150W)	Compatible with 5420F-24T-4XE, 5420F-24S-4XE, 5420F-48T-4XE, 5420M-24T-4YE, and 5420M-48T-4YE models Front-to-back airflow
600W AC PoE power supply (XN-ACPWR-600W)	Compatible with 5420F-24P-4XE and 5420F-8W-16P-4XE models, front-to-back airflow
920W AC PoE power supply (XN-ACPWR-920W)	Compatible with 5420F-48P-4XE, 5420F-48P-4XL, 5420M-24W-4YE, 5420M-48W-4YE, 5420M-16MW-32P-4YE models Front-to-back airflow
1200W AC PoE power supply (XN-ACPWR-1200W)	Compatible with 5420F-16W-32P-4XE and 5420F-16MW-32P-4XE models Front-to-back airflow
2000W AC PoE power supply (XN-ACPWR-2000W)	Compatible with 5420M-48W-4YE and 5420M-16MW-32P-4YE models Front-to-back airflow
Spare fan module (XN-FAN-000)	Spare fan module, front-to-back airflow

Available Rack-Mount Kit

Two-post rack-mount kit (XN-2P-RMKIT-008)	Two-post fixed rack-mount kit for 5420

Getting Help

For additional support related to 5420 Series switches or this document, contact Extreme Networks using one of the following methods:

Product Documentation	https://www.extremenetworks.com/documentation/
Global Technical Assistance Center (GTAC)	Phone: 1-800-998-2408 (toll-free in U.S. and Canada) or +1-408-579-2826. For the support phone number in your country, visit: http://www.extremenetworks.com/support/contact/
GTAC Knowledge	Get on-demand and tested resolutions from the GTAC Knowledgebase, or create a help case if you need more guidance. Visit: https://gtacknowledge.extremenetworks.com/
The Hub	A forum for Extreme customers to connect with one another, get questions answered, share ideas and feedback, and get problems solved. The community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC. Visit: https://community.extremenetworks.com
Support Portal	Manage cases, downloads, service contracts, product licensing, and training and certifications. Visit: http://support.extremenetworks.com/

Notice

Legal Notices

Trademarks

Warranty

Regulatory and Compliance Information

Federal Communications Commission (FCC) Notice

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.

NOTE: 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 when the equipment is operated in a commercial environment. This equipment uses, generates, and can radiate radio frequency energy and if not installed in accordance with the operator's manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference in which case the user will be required to correct the interference at his own expense.

WARNING: Changes or modifications made to this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Industry Canada Notice
CAN ICES-3 (A)/NMB-3(A)

This digital apparatus does not exceed the class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le Règlement sur le brouillage radioélectrique dicté par le Ministère des Communications du Canada.

Class A ITE Notice

WARNING: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

Product Safety

This product complies with the following international safety standards:

- UL 62368-1 2nd Ed, 2014-12-01
- UL 60950-1 2nd edition, A2:2014
- CAN/CSA C22.2 No. 62368-1-14 2nd Ed.
- CAN/CSA C22.2 No. 60950-1-07
- IEC/EN 62368-1 2nd
- IEC/EN 60950-1 A2
- EN 62368-1:2014/A11:2017
- 2014/35/EU
- CNS 14336-1
- GB 4943.1-2011
- SANS IEC 60950

Optical Module Compliance

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

- UL and/or CSA registered component for North America
- Class 1 or Class 1M Laser Product
- FCC 21 CFR Chapter 1, Sub-chapter J in accordance with FDA & CDRH requirements
- IEC/EN 60825-1, IEC/EN 60825-2 or later, European Standard

Korea EMC Statement

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.
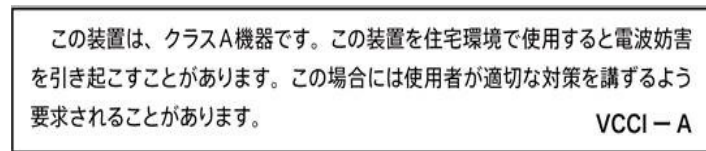
Australia (RCM)

WARNING: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

Electromagnetic Compatibility (EMC)

This product complies with the following: FCC 47 CFR Part 15 Subpart B Class A (US), ICES-003 (Canada), EN 55032 (ITE Emissions), EN 55024 (ITE Immunity), EN 61000-3-2 (Harmonics), EN 61000-3-3 (Flicker), 2014/30/EU (EMC Directive), EN 300 386 (Telecom), EN 55011 (ISM), EN 61000-6-2 (Ind. Immunity), EN 61000-6-4 (Ind. Emissions), RCM (Australia), VCCI (Japan), MSIP KCC (Korea), BSMI (Taiwan), ANATEL (Brazil), CCC (China).

VCCI Notice

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は、クラスA機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI－A

BSMI EMC Statement — Taiwan

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.

Taiwan BSMI 報關義務人

申請人: 香港商極進網路有限公司台灣分公司

地址: 臺北市松山區復勢里南京東路 4 段 126 號 5 樓

警告使用者：
此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某些適當的對策。

此为A级产品，在生活环境中，该产品可能会造成无线电干扰。

在这种情况下，可能需要用户对干扰采取切实可行的措施。

Battery Warning — Taiwan

警告

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。

Battery Notice

Warning: This product contains a battery used to maintain product information. If the battery should need replacement it must be replaced by Service Personnel. Please contact Technical Support for assistance.
Risk of explosion if battery is replaced by an incorrect type. Dispose of expended battery in accordance with local disposal regulations.
Avertissement: Ce produit renferme une pile servant à conserver les renseignements sur le produit. Le cas échéant, faites remplacer la pile par le personnel du service de réparation. Veuillez communiquer avec l'assistance technique pour du soutien.
Il y a risque d'explosion si la pile est remplacée par un type de pile incorrect. Éliminez les piles usées en conformité aux règlements locaux d'élimination des piles.

Hazardous Substances- China and Taiwan BSMI RoHS

Guidance concerning the China and Taiwan BSMI RoHS (Restriction of Hazardous Substances) directive for this Extreme Networks® product can be found on the following web page:

www.extremenetworks.com/support/documentation/restriction-hazardous-substances/

The page contains tables detailing the presence of 10 substances defined by the RoHS directive.

Hazardous Substances - EU

This product complies with the requirements of Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

European Waste Electrical and Electronic Equipment (WEEE) Notice

In accordance with Directive 2012/19/EU of the European Parliament on waste electrical and electronic equipment (WEEE):

1. The symbol above indicates that separate collection of electrical and electronic equipment is required.
2. When this product has reached the end of its serviceable life, it cannot be disposed of as unsorted municipal waste. It must be collected and treated separately.
3. It has been determined by the European Parliament that there are potential negative effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.
4. It is the users' responsibility to utilize the available collection system to ensure WEEE is properly treated.

For information about the available collection system, please contact Extreme Customer Support at +353 61 705500 (Ireland).

Extreme Networks

5420 Series

Quick Reference

5420F-8W-16P-4XE
5420F-24P-4XE
5420F-24S-4XE
5420F-24T-4XE
5420F-16MW-32P-4XE
5420F-16W-32P-4XE
5420F-48P-4XE
5420F-48P-4XL
5420F-48T-4XE
5420M-24T-4YE
5420M-24W-4YE
5420M-16MW-32P-4YE
5420M-48T-4YE
5420M-48W-4YE

Read Me First - Switch OS Selection

Extreme®