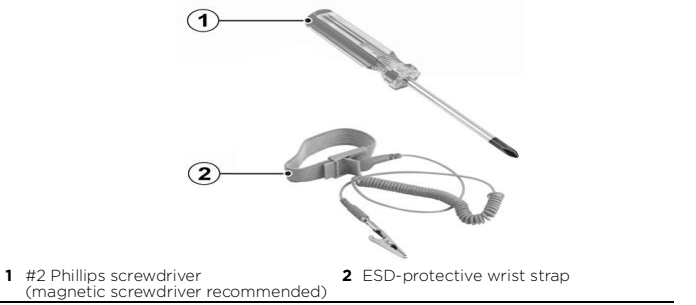


# 8820 Switches Quick Reference

Follow these steps to get the switch router ready for use.

For complete installation instructions *Extreme 8820 Series Hardware Installation Guide* at [www.extremenetworks.com/documentation](http://www.extremenetworks.com/documentation)

## Necessary Tools



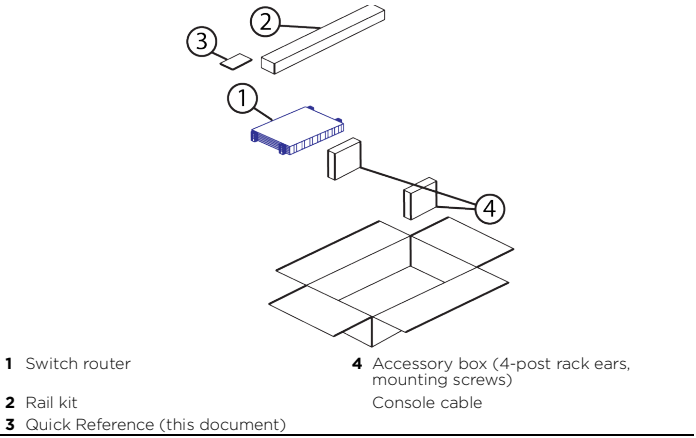
## 1 Prepare the Site

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
- Clearance of at least of 7.6 cm (3.0 in.) on all sides, for proper ventilation
- Temperature between 0°C (32°F) and 40°C (104°F) -- or as noted in “[Operating Temperature](#).” -- with fluctuations of less than 10°C (18°F) per hour

## 2 Unpack the Box

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



If the switch router 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/](http://www.extremenetworks.com/product/powercords/).

## 3 Install the Switch Router

You can install any 8820 Series in a standard 19-inch equipment rack.

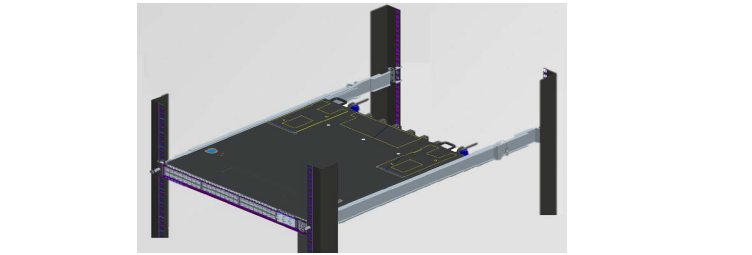
Mount the 8820 Series in a standard equipment rack, in either of the following ways:

- Four-post mount, using the mounting kit provided.
- Two-post mount, using mounting brackets (not provided) to attach the middle of the switch router to the posts.

### Four-Post Mount

This procedure uses the four-post mounting kit (XN-4P-RKMT302), which is included with the 8820-40C switch router or the (XN-4P-RKMT301), which is included with the 8820-80C switch router.

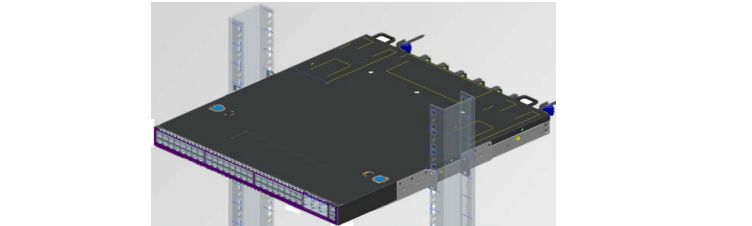
- 1 Separate the inner sliding rails from the outer rails by extending the rails and pulling on the disconnect latch. Note which direction the sliding rails slide from the outer rails for correct installation.
- 2 Attach the outer rail to the rack, securing it with the M5 screws.
- 3 Attach an inner rail to the side of the unit, using the M4 screws. .
  - If using the 1U long rack ears (already attached to the inner rail): Ensure that the rack ear is flush with either the front or the rear panel of the unit and continue to step 4.
  - If using the 1U or 2U short rack ears, attach one to the side of the unit using the #6-32 screws, so that the rack ear is flush with either the front or the rear panel of the unit.
- 4 Repeat steps 2 and 3 for the other side of the chassis.
- 5 Insert the chassis into the rail kit and secure it to the rack using the thumb screws on the mounting ears



**Note:** See the *Extreme 8820 Series Hardware Installation Guide* for grounding information.

### Two-Post Mount

- 1 Attach a mounting bracket to each side of the device. You can attach the brackets at the middle of the device, as shown, or at the front.



- 2 Secure the brackets to the rack posts, using rack-mounting screws that are appropriate for the rack (not provided).
- 3 Attach a mounting bracket to one side of the device, so that its flange (ear) aligns with the rack post. Then secure it to the rack post.
- 4 Attach a mounting bracket to the other side of the device and then to the rack post.

**Note:** See the *Extreme 8820 Series Hardware Installation Guide* for grounding information.

## 4 Install Transceivers

(Optional) Transceivers can send and receive data over optical fiber rather than through electrical wires. This installation procedure applies to all transceivers.

**Note:** Transceivers are Class 1 or Class 1M laser devices.

- 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

8820 Series can run on AC or DC power. Connect the device to a primary power source.

### Connecting to the 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 60950-1/62368-1 and IEC 60950-1/62368-1 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.

- To attach the 8820 Series to a 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 For DC powered supplies, verify that the DC circuit is de-energized and then do the following:
  - a Identify the grounding stud on the DC power supply. The grounding stud is next to the DC input connector, identified by the international symbol for earth ground.
  - b Using the nut and washer provided, connect the ring terminal end of the ground wire to the grounding stud on the DC power supply. Use green and yellow stranded copper wire, sized 6 AWG.
  - c Connect the other end of the ground wire to a reliable earth ground.
  - d Plug the connector end of the DC power input cable that is provided to the DC input connection on the power supply.
  - e Connect the other end of the DC power input cable to the DC source voltage.
  - f Energize the circuit.
- 3 When power is connected, verify that the device's PWR LED turns green. If the PWR LED does not turn green, refer to *ExtremeRouting 8820 Hardware Installation Guide* for troubleshooting information.

## 6 Configure the Switch Router

To connect the device to the network and configure it for use, follow the steps in *Extreme 8820 Series Hardware Installation Guide*, found at [www.extremenetworks.com/documentation/product-type/hardware/](http://www.extremenetworks.com/documentation/product-type/hardware/).

## Safety Notices

- 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:** Les alimentations d'Extreme Networks 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:** This equipment is designed for installation in restricted access locations and suitable for installation in Information Technology Rooms in accordance with Article 645 of the National Electrical Code and NFPA 75, not suitable for use in locations where children are likely to be present.
- Avertissement:** Cet équipement est conçu pour être installé dans des endroits à accès restreint et peut être installé dans des salles informatiques conformément à l'article 645 du Code national de l'électricité et à la norme NFPA 75, et ne peut être installé dans des endroits où des enfants sont susceptibles d'être présents.
- Warning:** A dedicated Listed circuit breaker rated at 20A 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 device. These include unpacking the device in an ESD-safe environment and wearing appropriate ESD protective gear, such as ESD-safe footwear and ESD wrist straps where appropriate.
- Caution:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Caution:** Ensure to connect the power cord to a socket-outlet with earthing connection.
- Attention:** Veuillez connecter le cordon d'alimentation à un socle de prises de courant avec connexion à la terre.
- 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 mesurer la puissance laser. L'utilisation d'instruments optiques pour mesurer la puissance laser peut augmenter les risques de dommages oculaires. Utilisez uniquement des modules certifiés UL/CSA, IEC/EN60825-1/-2.
- Warning:** This equipment has a connection between the earthed conductor of the d.c. supply circuit and the earthing conductor. All of the following installation conditions must be met: - This equipment shall be connected directly to the d.c. supply system earthing electrode conductor or to a bonding jumper from an earthing terminal bar or bus to which the d.c. supply system earthing electrode conductor is connected. - This equipment shall be located in the same immediate area (such as adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same d.c. supply circuit and the earthing conductor, and also the point of earthing of the d.c. system. The d.c. system shall not be earthed elsewhere. - The d.c. supply source shall be located within the same premises as this equipment. - Switching or disconnecting devices shall not be in the earthed circuit conductor between the d.c. source and the point of the connection of the earthing electrode conductor.
- Avertissement:** Ce matériel doit être raccordé directement au conducteur de la prise de terre du circuit d'alimentation c.c. ou à une tresse de mise à la masse reliée à une barre omnibus de terre laquelle est raccordée à l'électrode de terre du circuit d'alimentation c.c. Les appareils dont les conducteurs de terre respectifs sont raccordés au conducteur de terre du même circuit d'alimentation c.c. doivent être installés à proximité les uns des autres (p.ex., dans des armoires adjacentes) et à proximité de la prise de terre du circuit d'alimentation c.c. Le circuit d'alimentation c.c. ne doit comporter aucune autre prise de terre. La source d'alimentation du circuit c.c. doit être située dans la même pièce que le matériel. Il ne doit y avoir aucun dispositif de commutation ou de sectionnement entre le point de raccordement au conducteur de la source d'alimentation c.c. et le point de raccordement à la prise de terre.

## Hardware Components

Figure 1 8820-40C Switch Router: Front Panel

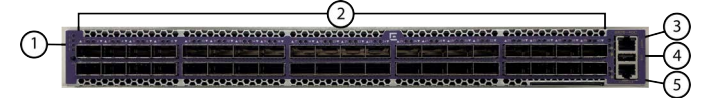
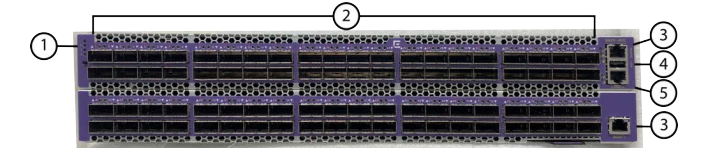


Figure 2 8820-80C Switch Router: Front Panel



- 1 LEDs
- 2 100Gb/40Gb QSFP28 ports
- 3 Management port
- 4 USB port
- 5 Console port

Figure 3 8820-40C Switch Router: Rear Panel

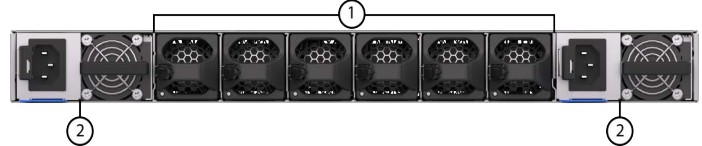
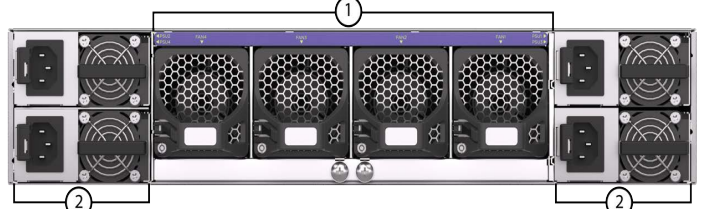


Figure 4 8820-80C Switch Router: Rear Panel



- 1 Fan modules
- 2 Power supplies

## Operating Conditions

**Operating Temperature:**  
Front-to-back:  
0°C (32°F) to 40°C (104°F) up to 1800 m (6000 ft)  
Back-to-front:  
0°C (32°F) to 25°C (77°F) up to 1800 m (6000 ft)

**Storage Temperature:**  
-40°C to 70°C (-40°F to 158°F)

**Operating Relative Humidity:**  
5% to 95% (non-condensing)

## Interfaces

Each 8820 Series has a management port, a console port, a USB port, an octal core CPU, 16GB RAM, 128GB SSD, and an 8820 Series Advanced Feature License. A four-post mounting kit (XN-4P-RKMT301 for 8820-80C or XN-4P-RKMT302 for 8820-40C) is provided with each switch router

The following table lists the specific interfaces for each device.	
8820-40C (base unit)	40 100GE/40GE QSFP28 ports, 2 empty power supply slots, 6 empty fan slots.
8820-40C-AC-F	40 100GE/40GE QSFP28 ports, dual AC power supplies, 6 fan units, front-to-back airflow.
8820-40C-AC-R	40 100GE/40GE QSFP28 ports, dual AC power supplies, 6 fan units, back-to-front airflow
8820-40C-DC-F	40 100GE/40GE QSFP28 ports, dual DC power supplies, 6 fan units, front-to-back airflow.
8820-40C-DC-R	40 100GE/40GE QSFP28 ports, dual DC power supplies, 6 fan units, back-to-front airflow.
8820-80C (base unit)	80 100GE/40GE QSFP28 ports, 4 empty power supply slots, 4 empty fan slots.
8820-80C-AC-F	80 100GE/40GE QSFP28 ports, 4 AC power supplies, 4 fan units, front-to-back airflow.
8820-80C-AC-R	80 100GE/40GE QSFP28 ports, 4 AC power supplies, 4 fan units, back-to-front airflow
8820-80C-DC-F	80 100GE/40GE QSFP28 ports, 4 DC power supplies, 4 fan units, front-to-back airflow.
8820-80C-DC-R	80 100GE/40GE QSFP28 ports, 4 DC power supplies, 4 fan units, back-to-front airflow.

Power Supply and Fan Options	
XN-ACPWR-1600W-F	Fixed 1600W AC power supply, Front-to-Back airflow. Power cords not included.
XN-ACPWR-1600W-R	Fixed 1600W AC power supply, Back-to-Front airflow. Power cords not included.
XN-DCPWR-1600W-F	Fixed 1600W DC power supply, Front-to-Back airflow. Power cords not included.
XN-DCPWR-1600W-R	Fixed 1600W DC power supply, Back-to-Front airflow, Power cords not included.
XN-FAN-003-F	8820-40C fan unit, Front-to-Back airflow
XN-FAN-003-R	8820-40C fan unit, Back-to-Front airflow
XN-FAN-004-F	8820-80C fan unit, Front-to-Back airflow
XN-FAN-004-R	8820-80C fan unit, Back-to-Front airflow

## Additional Available Rack-Mount Kits

XN-2P-RKMT299	Two-post NEBS kit for 8820-40C
XN-2P-RKMT300	Two-post NEBS kit for 8820-80C

## Getting Help

For additional support related to 8820 Series or this document, contact Extreme Networks using one of the following methods:

Product Documentation	<a href="https://www.extremenetworks.com/documentation/">https://www.extremenetworks.com/documentation/</a>
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: <a href="http://www.extremenetworks.com/support/contact/">http://www.extremenetworks.com/support/contact/</a>
GTAC Knowledge	Get on-demand and tested resolutions from the GTAC Knowledgebase, or create a help case if you need more guidance. Visit: <a href="https://gtacknowledge.extremenetworks.com/">https://gtacknowledge.extremenetworks.com/</a>
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: <a href="https://community.extremenetworks.com">https://community.extremenetworks.com</a>
Support Portal	Manage cases, downloads, service contracts, product licensing, and training and certifications. Visit: <a href="http://support.extremenetworks.com/">http://support.extremenetworks.com/</a>

## Notice

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[www.extremenetworks.com/company/legal/trademarks/](http://www.extremenetworks.com/company/legal/trademarks/)

## Warranty

Warranty information for Extreme 8820 switch routers is located online at:[www.extremenetworks.com/support/policies/](http://www.extremenetworks.com/support/policies/)

## 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 édicté 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
- UL 60950-1
- CAN/CSA C22.2 No. 62368-1
- CAN/CSA C22.2 No. 60950-1
- IEC 62368-1
- IEC 60950-1
- EN 62368-1
- EN 60950-1
- 2014/35/EU
- CNS 14336-1
- GB 4943.1

### 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, European Standard

### Korea EMC Statement

이 기기는 업무용 환경에서 사용할 목적으로 적

합성평가를 받은 기기로서 가정용 환경에서 사

용하는 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 55035, 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), and 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
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### 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:愛爾蘭商極進網絡技術行動有限公司台灣分公司

地址: 臺北市松山區南京東路四段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/](http://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 RoHS

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 and amendment (EU) 2015/863.

### 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):

- The symbol above indicates that separate collection of electrical and electronic equipment is required.
- 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.
- 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.
- 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

## 8820 Switches

### Quick Reference

### 8820-40C

### 8820-40C-AC-F

### 8820-40C-AC-R

### 8820-40C-DC-F

### 8820-40C-DC-R

### 8820-80C

### 8820-80C-AC-F

### 8820-80C-AC-R

### 8820-80C-DC-F

### 8820-80C-DC-R



P/N 9037378-00 Rev. AD

