Redundant Power Supply Quick Reference

Follow these steps to get the RPS ready for use.

For complete installation instructions, specifications, and safety warnings, see the *Hardware Installation Guide* for your RPS model at www.extremenetworks.com/support/documentation/.

⚠️ **Electrical Hazard:** Only qualified personnel should perform installation procedures.
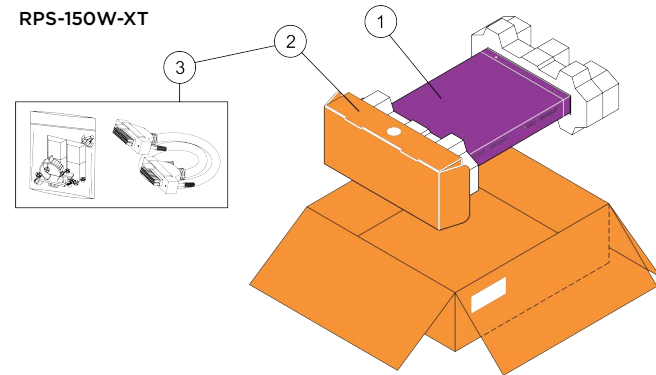**Risques d'électrocution:** Seul un personnel qualifié doit effectuer les procédures d'installation.
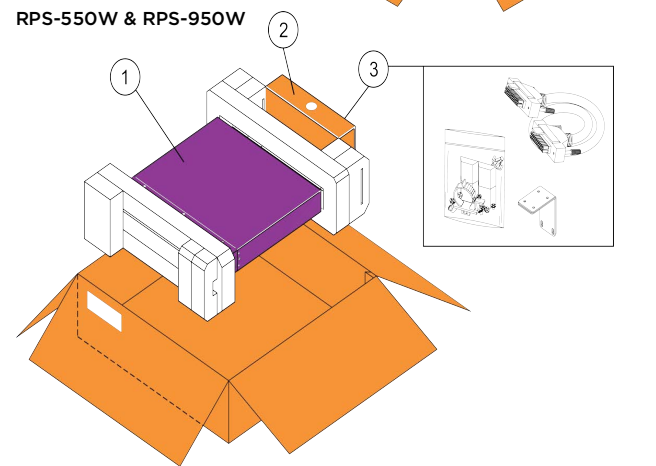
1 About the RPS

The RPS-150W-XT, RPS-550W, and the RPS-950W redundant power supplies (RPS) provide power backup to an Extreme stackable or standalone switch.

Unpack the RPS

RPS-150W-XT

RPS-550W & RPS-950W

|	
1	RPS
2	Accessory box
3	For RPS-150W-XT: Rubber feet (4), cable, cable holder, cable holder (slide tail)
	For RPS-550W/RPS-950W: Short rack mount ears, screws (8), rubber feet (4), cable, cable holder, cable holder (slide tail)

Perform a visual inspection of the RPS for any signs of physical damage. If the device appears to be damaged, contact Extreme Networks. See "Getting Help" for more information.

Hardware Components

Figure 1 RPS-150W-XT Front View

Figure 2 RPS-150W-XT Rear View
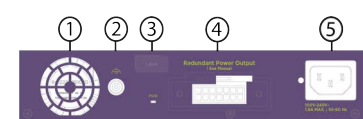
1	Fan	4	Redundant power supply connector
2	Ground	5	AC power input connector
3	Status LED		

Figure 3 RPS-550W and RPS-950W Front View

Figure 4 RPS-550W and RPS-950W Rear View

1	Ground	3	Redundant power supply connector
2	Status LED	4	AC power input connector

If for some reason the switch loses power from its internal power supply, all three models of the RPS can provide 12V power to support switch operation. Models RPS-550W and RPS-950W can also supply the 54V and 55V respectively necessary to support 802.3at and 802.3bt compliant PoE devices.

2 Install the RPS

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

⚠️ **Caution:** Observe all Electrostatic Discharge (ESD) precautions when handling sensitive electronic equipment.

You can install the RPS-150W-XT on a flat surface or in a 19-inch rack using the two-post rack mount kit (XN-2P-RMKIT-003). The RPS-550W and the RPS-950W can also be installed on a flat surface, or in a 19-inch rack using the included two-post rack mount kit (XN-2P-RMKIT-002).

Installation Site Requirements

The installation site must be within reach of the network cabling and meet the requirements listed below:
- 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.
- A temperature of between 0°C (32°F) to 60°C (140°F) with fluctuations of less than 10°C (18°F) per hour must be maintained for model RPS-150W-XT.
- A temperature of between 0°C (32°F) to 50°C (122°F) with fluctuations of less than 10°C (18°F) per hour must be maintained for models RPS-550W and RPS-950W.

⚠️ **Caution:** To ensure proper ventilation and prevent overheating, leave a minimum clearance space of 7.6 cm (3.0 in.) on all sides of the device.
Attention: Pour assurer une bonne ventilation et éviter une surchauffe, laissez un espace de dégagement minimum de 7,6 cm (3,0 po.) de tous les côtés de l'appareil.

⚠️ **Warning:** A readily accessible disconnect device shall be incorporated in the building installation wiring.
Avertissement: Un dispositif de déconnexion facilement accessible doit être incorporé dans l'installation électrique du bâtiment.

Dual Rack Mount the RPS

Two RPS-150W-XT models can be dual rack mounted in a two-post rack. To install:
1. Attach two short brackets to the outer sides of the two devices using four M3 screws per bracket.
2. Attach two additional short brackets to the inner side of the right device using two M3 screws per bracket.
3. Attach the final long bracket to the inner side of the left device using four M3 screws.
4. Slip the short connecting brackets on the device on the right into both ends of the long connecting bracket on the device on the left.
5. Attach the connecting brackets to each other using the four remaining chassis screws. The devices can be installed in the rack as a single unit.

Figure 1 Connecting the Devices
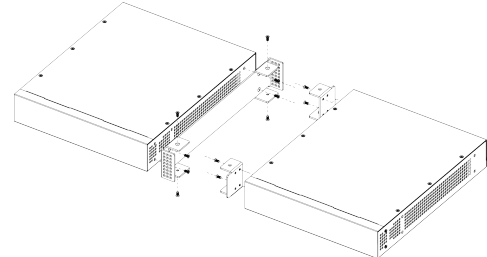
6. Attach the switches to the rack using rack-mounting hardware (not provided).

Figure 2 Mounting the Connected Devices
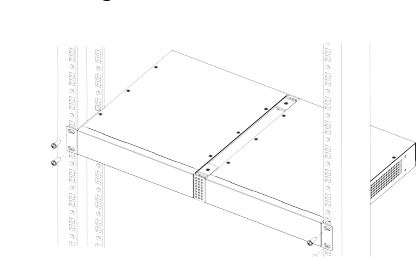
Install the RPS in a Two-Post Rack

The RPS can be installed in a four-post rack, using just the two front posts or two back posts. 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-mounting. To install the RPS you need:
- Two rack mount brackets and mounting screws (rack mount kit) shipped with the RPS.
- Four customer-supplied screws to attach the RPS to a standard 19-inch rack.

To install the RPS in a rack:
1. Attach a mounting bracket to each side of the RPS, using the screws provided. Align each mounting bracket so that the flange (ear) faces the front of the RPS to flush-mount, or faces the rear of the RPS to mid-mount.
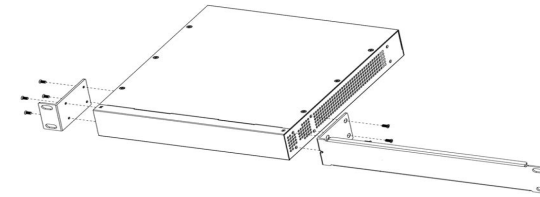
Figure 3 RPS-150W-XT: Attach Flush-Mount Brackets

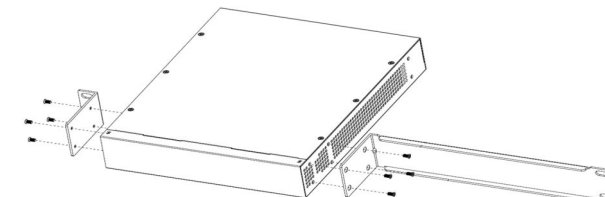**Figure 4 RPS-150W-XT: Attach Mid-Mount Bracket**

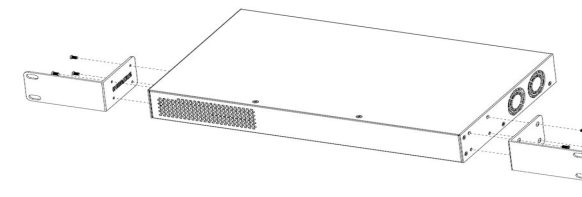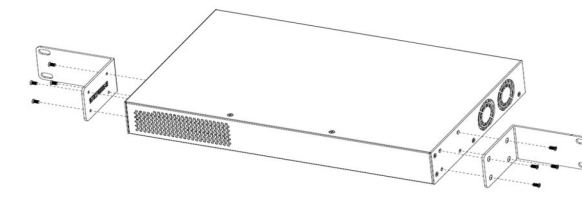**Figure 5 RPS-550W and RPS-950W: Attach Flush-Mount Brackets**

Figure 6 RPS-550W and RPS-950W: Attach Mid-Mount Brackets

2. With the mounting brackets attached, position the RPS between the vertical rack rails of the 19-inch rack.
3. Fasten the RPS securely to the rack rails using four customer-supplied rack screws.

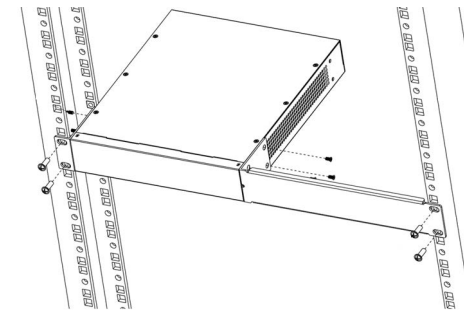**Figure 7 RPS-150W-XT: Flush-Mount in a Two-Post Rack**

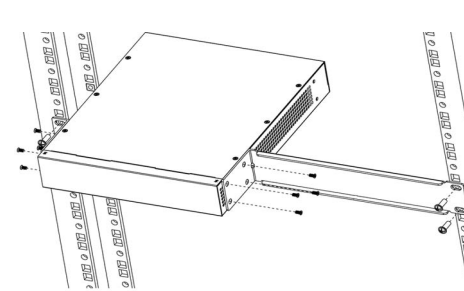**Figure 8 RPS-150W-XT: Mid-Mount in a Two-Post Rack**

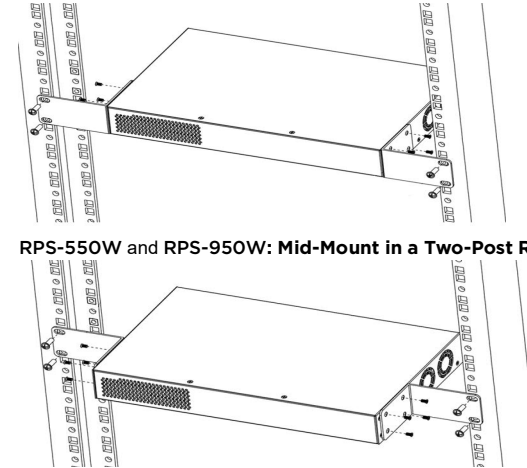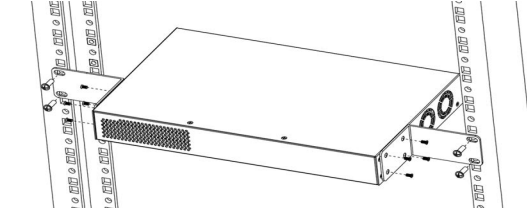**Figure 10 RPS-550W and RPS-950W: Flush-Mount in a Two-Post Rack**

Figure 11 RPS-550W and RPS-950W: Mid-Mount in a Two-Post Rack

3 Connect the RPS Cable and the AC Power Cord

Connections must be made in a specific order when attaching an RPS to a powered system, known as "hot-plugging".

To connect the RPS:
1. Connect the RPS cable between the switch and the RPS **before** connecting the AC power cord. The RPS cable is connected from the Redundant Power Output on the rear panel of the RPS to the Redundant Power Input on rear panel of the switch.
2. Connect the AC power cord to the AC input power connector on the RPS, then plug the AC power cord into the main AC power outlet.

The AC power LED on the rear of the RPS turns green to indicate a successful connection and that the RPS is operating properly.

To disconnect the RPS:
1. Disconnect the AC power cord from the AC input power connector on the rear of the RPS **before** disconnecting the RPS cable.
2. Disconnect the RPS cable from the rear panel of the RPS and the rear panel of the switch.

Figure 9 RPS cable and AC Power Cord Connection
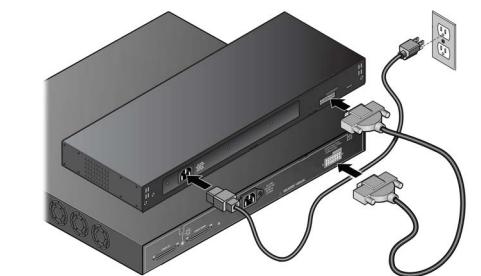
Power LED

The Power LED is located on the rear panel of the RPS The following table presents the LED status and recommended actions if the LED is off.

Color	Status	Recommended Action
Green	AC input to RPS is within specifications.	None.
Off	AC input power to RPS is out of specification.	1. Check AC power cord connection to the RPS. 2. Check AC power at the power outlet. 3. Swap power cord for a known good one. If the problem persists, contact Extreme Networks for support.

Interfaces

The following table lists the RPS models:

RPS-150W-XT	150W external redundant AC power supply, extended temperature, front-to-back airflow
RPS-550W	550W external redundant AC power supply, 370W PoE, side-to-side (left-to-right) airflow
RPS-950W	950W external redundant AC power supply, 740W PoE, side-to-side (left-to-right) airflow

📝 **Note:** The power cord for the RPS-950W model must be less than 2 meters in length.

RPS Cables

RPS-CBL-1M-2x7	1 meter RPS cable for use with 150W external RPS
RPS-CBL-1M	1 meter RPS cable for use with 550W & 950W external RPS

Available Rack-Mount Kit

|	
XN-2P-RMKIT-002	Two-post rack mount kit for RPS models RPS-550W and RPS-950W
XN-2P-RMKIT-003	Two-post rack mount kit for RPS model RPS-150W-XT
16572	Two-post dual rack mount kit

Specifications

| Item	Specification		
	RPS-150W-XT	**RPS-550W**	**RPS-950W**
Electrical			
AC Input	100–240Vac, 50-60 Hz, 1.8A max. per PSU	100–240Vac, 50-60 Hz, 6.5A max. per PSU	100–240Vac, 50-60 Hz, 9.9A max. per PSU
DC Output	12Vdc, 12.5A max. total 150W max.	12Vdc, 12.5A max, 54Vdc, 7.4A max. total 550W max.	12Vdc, 8.58A max, 55Vdc, 15.4A max. total 950W max.
Physical			
Unit Dimensions	20.95 cm H x 4.4 cm W x 25.67 cm D 8.25 in H x 1.73 in W x 10.1 in D	32 cm H x 4.35 cm W x 20 cm D 12.6 in W x 1.71 in W x 10.1 in D	32 cm H x 4.35 cm W x 20 cm D 12.6 in W x 1.71 in W x 10.1 in D
Packaged Dimensions	40.4 cm H x 31 cm W x 16 cm D 15.91 in H x 12.2 in W x 6.3 in D	42.1 cm H x 33.6 cm W x 16 cm D 15.57 in H x 13.23 in W x 6.3 in D	42.1 cm H x 33.6 cm W x 16 cm D 15.57 in H x 13.23 in W x 6.3 in D
Net Weight (unit only) Gross Weight (1 unit and packaging)	1.44 kg (3.17 lb) 2.96 kg (6.53 lb)	2.26 kg (4.98 lb) 3.98 kg (8.77 lb)	2.43 kg (5.36 lb) 3.81 kg (8.4 lb)
Environmental			
Operating Temperature	0°C to 60°C (32°F to 140°F)	0°C to 50°C (32°F to 122°F)	
Storage Temperature	-40°C to 85°C (-40°F to 185°F)		
Operating Relative Humidity	5% to 95% non-condensing		

Pin Assignment for RPS Connector

For pin location and function, refer to the following figures and tables.

Note: The following information is for troubleshooting purposes only. For proper operation, use only the 1 meter RPS cable supplied with the RPS. This cable is specially designed for this application and meets all necessary regulatory and safety standards. The use of non-approved cables voids your warranty.
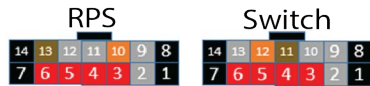
RPS Switch

150W RPS				Switch			
Pin	Function	Pin	Function	Pin	Function	Pin	Function
1	Ground	8	Ground	1	Ground	8	Ground
2	N/A	9	N/A	2	N/A	9	N/A
3	12Vdc output	10	RPS present	3	12Vdc output	10	N/A
4	12Vdc output	11	N/A	4	12Vdc output	11	12V-RPS-PG
5	12Vdc output	12	N/A	5	12Vdc output	12	RPS present
6	12Vdc output	13	12V-RPS-PG	6	12Vdc output	13	N/A
7	Ground	14	Ground	7	Ground	14	Ground
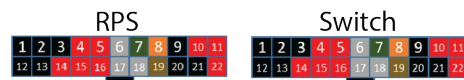
RPS Switch

550W / 950W RPS				Switch			
Pin	Function	Pin	Function	Pin	Function	Pin	Function
1	54V RTN	12	54V RTN	1	54V RTN	12	54V RTN
2	54V RTN	13	54V RTN	2	54V RTN	13	54V RTN
3	54V RTN	14	54V	3	54V RTN	14	54V
4	54V	15	54V	4	54V	15	54V
5	54V	16	54V	5	54V	16	54V
6	N/A	17	N/A	6	N/A	17	N/A
7	54V_RPS_PG	18	N/A	7	54V_RPS_PG	18	N/A
8	RPS present	19	12V-RPS-PG	8	RPS present	19	12V-RPS-PG
9	Ground	20	Ground	9	Ground	20	Ground
10	12V	21	Ground	10	12V	21	Ground
11	12V	22	12V	11	12V	22	12V

Getting Help

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

Product Documentation	https://www.extremenetworks.com/support/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

Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.
The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries. All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.
For additional information on Extreme Networks trademarks, please see: www.extremenetworks.com/company/legal/trademarks/

Warranty

Warranty information for the RPS is located online at: 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. 62368-1:19, 3rd Ed
- CAN/CSA C22.2 No. 60950-1-07
- IEC 62368-1
- IEC 60950-1
- EN 62368-1
- 2014/35/EU
- CNS 15598-1
- GB 4943.1

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 55035 (ITE Immunity), EN 61000-3-2 (Harmonics), EN 61000-3-3 (Flicker), 2014/30/EU (EMC Directive), EN 300 386 (Telecom), EN 55011 (ISM), RCM (Australia), VCCI (Japan), MSIP KCC (Korea), BSMI (Taiwan), 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: 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 4 段 126 號 5 樓

警告：在居住环境中, 运行此设

备可能会造成无线电干扰。

警告:為避免電磁干擾, 本產品

不應安裝或使用於住宅環境。

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 obtained on request from email address:
Email: Green@extremenetworks.com

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

Redundant Power Supply

Quick Reference

RPS-150W-XT
RPS-550W
RPS-950W

Extreme®