

ExtremeRouting XR600 Branch Router

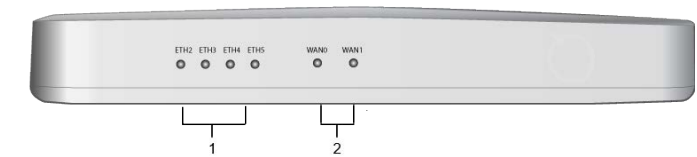
XR600 Overview

XR600 routers allow enterprises to provision branch office networks and teleworkers quickly and easily. The XR600 provides LAN and WAN connectivity support. The router has two WAN ports (WANO/ETH0 and WANI/ETH1), four LAN ports (ETH2 through ETH5), a Console port, and two USB ports (USB2 and USB3).

Figure 1 XR600 router

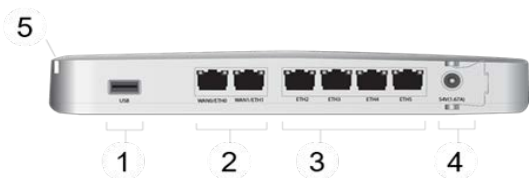


Figure 2 XR600 router front hardware components



Callout	Description
1	LAN port status LEDs
2	WAN port status LEDs

Figure 3 XR600 router back hardware components



Callout	Description
1	USB 2.0
2	WAN ports
3	LAN ports
4	Power connector and cable clip
5	Device status LED

XR600 Box Contents

The XR600 router box contains the following items:

- XR600 chassis
- Quick Reference Guide
- Power Supply
- One RJ45 Ethernet cable
- Screw pack
- Rubber feet pack

For detailed installation instructions about all mounting procedures, refer to the *ExtremeWireless XR600 Router Installation Guide* in the [Extreme Networks Documentation Support](#) site.

Status LED Activity Description

The XR600 has LEDs located on the top corner of the device, on the front panel, and adjacent to each port.

Device Status LED

The status LED on the top corner of the device indicates states of activity by color (dark, amber, and white) and pattern (steady or flashing).

- **Dark:** There is no power to the device.
- **Amber (steady):** The device is powered on and in bootup mode.
- **Amber (flashing):** The device is performing a firmware upgrade. Do not turn the device off while the LED is flashing.
- **White (steady):** The device has made a Control And Provisioning of Wireless Access Points (CAPWAP) connection to ExtremeCloud IQ and is operating properly.

Front Panel LEDs

You can view LAN (ETH2 through ETH5) and WAN (WANO and WANI) port status using the LEDs on the front panel.

- **Dark: There is no link.**
- **Green (steady):** The Ethernet link is up but inactive at 1000 Mbps speeds.

- **Green (flashing):** The Ethernet link is up and active at 1000 Mbps speeds.
- **Amber (steady):** The Ethernet link is up but inactive at 10/100 Mbps speeds.
- **Amber (flashing):** The Ethernet link is up and active at 10/100 Mbps speeds.

Port Link Status LEDs

The port link status LEDs located on the front panel of the device indicate link states for the WAN and LAN ports, and exhibit the following activity:

- **Dark: There is no link.**
- **Green (steady):** The Ethernet link is up but inactive at 1000 Mbps speeds.
- **Green (flashing):** The Ethernet link is up and active at 1000 Mbps speeds.
- **Amber (steady):** The Ethernet link is up but inactive at 10/100 Mbps speeds.
- **Amber (flashing):** The Ethernet link is up and active at 10/100 Mbps speeds.

Power Connector

The AC power input connector allows you to connect the router to a 100 – 240-volt AC power source using the DC 54V (1.67A, 90.18W) power supply that ships with the product. Because the router does not have an on/off switch, it automatically powers on when you connect it to a power source. A power cable retainer clip helps prevent the cable from becoming disconnected.

WAN Ports

Two 10/100/1000-Mbps Ethernet WAN ports (ETH0 and ETH1) act as WAN interfaces, are compatible with 10/100/1000Base-T/TX, and automatically negotiate half- and full-duplex connections with the connecting device. These ports are auto-sensing and adjust to straight-through and crossover Ethernet cables automatically. Use the yellow Ethernet cable that ships with the device to connect your router from the WAN port to a cable or DSL modem or other Internet device.

LAN Ports

The four 10/100/1000-Mbps Ethernet RJ45 LAN ports (ETH2 through ETH5) are compatible with 10/100/100Base-T/TX and automatically negotiate half- and full-duplex connections with the connecting device. These ports are auto-sensing and adjust to straight-through and crossover Ethernet cables automatically.

To provide Ethernet connections to devices on the LAN side, connect these interfaces on the router to a switch or host.

The pin assignments in the Ethernet ports follow the TIA/EIA-568-B standard. The ports accept standard Cat3, Cat5, or Cat6 Ethernet cable. Because the ports have auto-sensing capabilities, the wiring termination in the Ethernet cable can be either straight-through or crossover.

USB Ports

XR600 devices have two USB (USB 2.0 and USB 3.0) ports that support wireless USB modems for a WAN connection. The modem ports are located on the back panel and side panel of the chassis.

Extreme Networks currently supports the following modems:

- Skyus DS (Global)
- U620L (Verizon)
- Connected IO (LT1000)
- Huawei UMG366 (ATT & T-Mobile)
- Pantech UML290 (Verizon)

Before you can use a modem with an Extreme Networks device, you must first have the modem activated. You can have this done in the store where you purchased the modem, or you can install software such as the Verizon VZA Access Manager on your computer, connect the modem to the USB port on your computer, preferably at the site where you plan to deploy the router to confirm that the modem is working properly and that there is adequate wireless network coverage in your location.

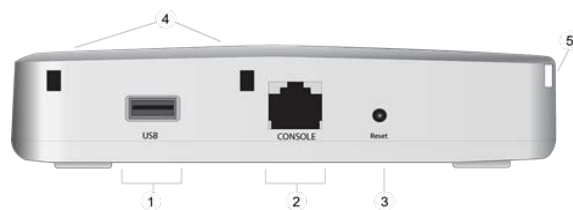
Console Port

Use the RJ45 Console port to make a serial connection between your management system and the router. The management station from which you connect to the device must have a VT100 emulation program, such as Tera Term Pro® (a free terminal emulator) or Hilgraeve Hyperterminal® (provided with Windows® operating systems from Windows 95 to Windows XP). The serial connection settings are: 9600 bits per second, 8 data bits, no parity, 1 stop bit, and no flow control.

Reset Button

To reset the device or restore factory setting, insert a paper clip or similar tool into the pinhole and press the Reset button. To reboot the device, hold the button down between 1 and 5 seconds. To return the configuration to the default settings, hold the button down for at least 5 seconds. When you release the button, the status LED goes dark as the system reboots, then turns amber while the firmware loads and the system performs a self-test. After the firmware has finished loading and the router has connected to ExtremeCloud IQ, the device status LED glows steady white.

Figure 4 Router side slots



Callout	Description
1	USB 3.0
2	Console port
3	Reset button
4	Modem cage slots
5	Device status LED

Install the Router

Electrical Hazard: Only qualified personnel must perform installation procedures.

Use these instructions as guidelines for mounting and connecting the XR600 router easily and safely. You can set XR600 routers on a desktop, mount them on a wall, or install them in a standard 19 in. equipment rack. The following sections describe these installations. Read the safety guidelines before you begin your installation.

Install the Router on a Wall

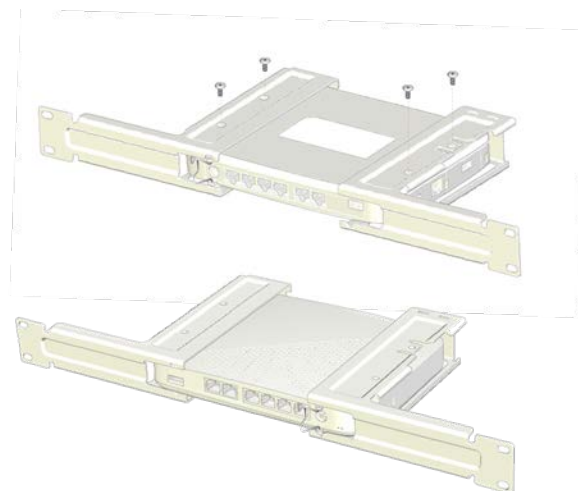
To mount the device on a wall, first install two drywall screws 5.875 in. (14.92 cm) apart in the wall. The heads of the screws must not be wider than 0.25 in. (0.64 cm) so that they will fit inside the openings in the keyholes. Place the wide section of keyholes on the back of the device over the screws and press the device down to secure it to the wall.

Install the Router in a Standard Equipment Rack

You can mount the XR600 in a standard 19 in. equipment rack using the rack mount brackets (ordered separately, AH-ACC-XR600-BKT).

- 1 Use four screws to attach the rack mounting brackets to the bottom of device as shown in Figure 5.

Figure 5 XR600 router rack mount installation



Note: The rack mount ears must align with the port panel on the device.

The brackets are identical, and when you attach them the flange for the modem cage automatically aligns with the USB port on the side of the device and the attachment hole on the bottom of the device. You can then attach a modem security cage to protect your modem from theft. For more details, see "Install the Modem Security Cage".

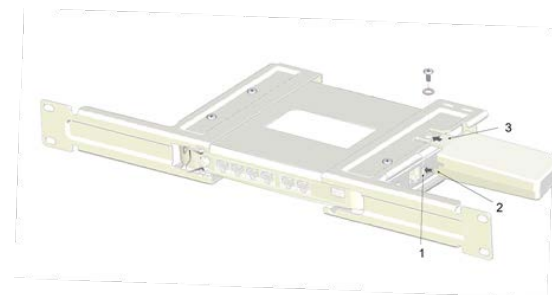
- 2 Slide the device and bracket assembly into the equipment rack, and secure the brackets to the front rack posts.

Install the Modem Security Cage

If you are using the USB port for a USB modem, you can protect the modem from theft by using the modem security cage (ordered separately, AH-ACC-XR600-USB). To install the security cage:

- 1 Remove the device from the equipment rack, if installed.
- 2 Install your USB modem.
- 3 Turn the device and bracket assembly upside down, and insert the side tabs on the modem cage into the slots on the device, as shown in Figure 6.

Figure 6 Security cage installation



Callout	Description
1	Device slot
2	Modem cage side tab
3	Modem cage top tab

- 4 Align the top tab on the modem cage with the hole in the bracket and secure it with the washer and screw.
- 5 Reinstall the device and bracket assembly in your equipment rack.

Secure the Power Cable

Use the cable retainer clip to secure the power cable in the power outlet, as shown in Figure 7:

Figure 7 Power cable retainer



Lock the Device

You can physically secure the router by attaching a lock and cable (such as a Kensington® notebook lock). Wrap the cable around an immovable object like a table or desk, and then insert the lock into the built-in security slot in the device.

Figure 8 Security slot



Callout	Description
1	Device security slot

Regulatory and Compliance Information Safety Guidelines

This section contains notices that are intended to protect your personal safety and to prevent damage to the equipment.

Qualified Personnel:

Electrical Hazard: Only qualified personnel must perform installation procedures. Within the context of the safety notes in this documentation, qualified persons are defined as persons who are authorized to commission grounding devices, systems, and circuits in accordance with established safety practices and standards. A qualified person understands the requirements and risks involved with installing outdoor electrical equipment in accordance with national codes.

European Union (EU) Radiation Warning Statement

Warning: This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 23 cm between the radiator and your body.

The device is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range.

Selling Countries:

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK

Federal Communications Commission (FCC) Radiation Exposure Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

Warning: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 23 cm between the radiator and your body.

Other Countries

Brazil

Este produto está homologado pela ANATEL, de acordo com os procedimentos regulamentados pela Resolução nº. 242/2000 e atende aos requisitos técnicos aplicados.

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados. Para maiores informações, consulte o site da ANATEL – www.anatel.gov.br.

Mexico Compliance Statement

La operacion de este equipo esta sujeta a las siguientes dos condiciones

- 1 es posible que este equipo o dispositivo no cause interferencia perjudicial y
- 2 este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operacion no deseada.

The operation of this equipment is subject to the following two conditions:

- 1 It is possible that this equipment or device does not cause disruptive interference and
- 2 This equipment or device must accept any interference, including interference that may cause undesired operation.

Industry Canada Notice

Warning: For indoor use only.
Pour une utilisation en intérieur uniquement.

This device complies with ISED's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit

accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Caution: The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Caution: Avertissement: les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

This radio transmitter [IC: 4141B-XR600] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed in *ExtremeWireless XR600 Router Installation Guide*, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Le présent émetteur radio [IC: 4141B-XR600] a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne répertoriés dans le Guide d'installation des routeurs sans fil extrêmes XR600, avec le gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'émetteur.

Warning: This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 23 cm between the radiator and your body.

Warning: Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 23 cm de distance entre la source de rayonnement et des personnes ou des animaux.

Supplement to Product Instructions

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr ⁶⁺)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
金屬零件 (Metal Parts)	○	○	○	○	○	○
電路模組 (Circuit Modules)	—	○	○	○	○	○
電纜及電纜組件 (Cables & Cable Assemblies)	○	○	○	○	○	○
塑料和聚合物零件 (Plastic and Polymeric parts)	○	○	○	○	○	○

備考1: “超出0.1 wt%”及 “超出0.01 wt%” 係指限用物質之百分比含量超出百分比含量基準值。
Note 1: “Exceeding 0.1 wt%” and “exceeding 0.01 wt%” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

備考2: “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。
Note 2: “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3: “—” 係指該項限用物質為排除項目。
Note 3: The “—” indicates that the restricted substance corresponds to the exemption.

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 Environmental Compliance at Green@extremenetworks.com.

Hazardous Substances

This product complies with the requirements of Directive 2011/65/EU and its amendments 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.

Declaration of Conformity in Languages of the European Community

English Hereby, Extreme Networks declares that the radio equipment type (XR600) is in compliance with Directive 2014/53/EU. For full text of the EU Declaration of Conformity, please contact Extreme Regulatory Compliance at compliance@extremenetworks.com

Finnish Täten Extreme Networks vakuuttaa, että Radio laite tyyppi (XR600) on direktiivin 2014/53/EU mukainen.EU vaatimustenmukaisuusvakuutuksen täydellisestä tekstistä ota yhteyttä äärimmäisiin viranomais säädöksiin osoitteessa compliance@extremenetworks.com

Dutch Extreme Networks verklaart hierbij dat het type radioapparaatuur (XR600) in overeenstemming is met richtlijn 2014/53/EU.Voor de volledige tekst van de EU-conformiteitsverklaring u contact opnemen met extreme regelgeving op compliance@extremenetworks.com

French Par la présente, Extreme Networks déclare que le type d'équipement radio (XR600) est conforme à la directive 2014/53/UE.Pour le texte intégral de la Déclaration de conformité de l'UE, veuillez communiquer avec Extreme Regulatory Compliance à compliance@extremenetworks.com

Swedish Härmed intygar Extreme Networks att radioutrustning typ (XR600) överensstämmer med direktiv 2014/53/EU.För fullständig text av EU-försäkran om överensstämmelse, vänligen kontakta Extreme regellefterlevnad på compliance@extremenetworks.com

Danish Herved erklærer Extreme Networks, at radioudstyrstypen (XR600) er i overensstemmelse med direktiv 2014/53/EU.For den fulde ordlyd af EU-overensstemmelseserklæringen bedes du kontakte Extreme Regulatory Compliance på compliance@extremenetworks.com

German Dabe erklährt Extreme Networks, dass der Funkgerätetyp (XR600) mit der Richtlinie 2014/53/EU im Einklang steht.Für den vollständigen Wortlaut der EU-Konformitätserklärung wenden Sie sich bitte an extreme Regulatory Compliance unter compliance@extremenetworks.com

Greek Με την παρούσα, ακραία δίκτυα δηλώνουν ότι ο τύπος του ραδιοεξοπλισμού (XR600) συμμορφώνεται με την οδηγία 2014/53/EE.Για το πλήρες κείμενο της δήλωσης συμμόρφωσης EE, παρακαλούμε επικοινωνήστε με την ακραία κανονιστική συμμόρφωση στο compliance@extremenetworks.com

Icelandic Hérlandis, Extreme Networks, lýsa því yfir að útvarpsbúnaðargerðin (XR600) sé í samræmi við tilskipun 2014/53/ESB.Fyrir fullan texta í ESB yfirlýsingu um samræmi, vinsamlegast hafðu samband við Extreme Regluflygigni á compliance@extremenetworks.com

Italian Di conseguenza, Extreme Networks dichiara che il tipo di apparecchiature radio (XR600) è conforme alla direttiva 2014/53/EU.Per il testo integrale della Dichiarazione di conformità dell'UE, contattate Extreme Regulatory Compliance presso compliance@extremenetworks.com

Spanish Por la presente, Extreme Networks declara que el tipo de equipo radioeléctrico (XR600) cumple con la Directiva 2014/53/UE.Para obtener el texto completo de la Declaración de conformidad de la UE, póngase en contacto con Extreme Regulatory Compliance en compliance@extremenetworks.com

Portuguese Por este meio, a Extreme Networks declara que o tipo de equipamento de rádio (XR600) está em conformidade com a Diretiva 2014/53/UE.Para obter o texto integral da Declaração de Conformidade da UE, contacte o cumprimento regulamentar extremo em compliance@extremenetworks.com

Malti B' dan, networks estremi, jiddikjara li t-tip ta' taghmir tar-radju (XR600) huwa konformi mad-Direttiva 2014/53/UE.Ghat-test shih tad-dikjarazzjoni ta' konformità tal-UE, jekk joghgbok ikkuntattja lill-konformità regolatorja compliance@extremenetworks.com

Extreme Wireless™ Router

Quick Reference

XR600

Notice

Copyright © 2021 Extreme Networks, Inc. All Rights Reserved.

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/

Documentation, Installation Videos, and Support

For product support, including Documentation and Installation Videos, visit: www.extremenetworks.com/documentation