NIGHTHAWK®

Leading the New Era of WiFi 6

NETGEAR® Nighthawk® 8-Stream WiFi 6 Mesh Extender (EAX80) supports the latest generation Wi-Fi 6 (802.11ax) standard. This powerful Nighthawk Mesh Extender works with your existing WiFi to create a powerful whole home mesh WiFi. Enjoy a better connected home experience and extend faster WiFi to the farthest corner of your home with blazing-fast speeds up to 6Gbps.

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WiFi 6—Ready for Today and Tomorrow's Smart Home

Introducing WiFi 6—the latest generation of WiFi that delivers up to four times better performance than AC WiFi.

With innovative technologies, such as Orthogonal Frequency-Division Multiple-Access (OFDMA)§, Multi-User MIMO, and intelligent scheduling, WiFi 6 delivers a huge boost in speed and total capacity. Rising to the challenges of modern smart home demands, this new standard of WiFi is ready to support more devices with better reliability and faster speeds.

Capacity
WiFi 6 gives you improved network capacity for more WiFi devices. Have more fun with the uninterrupted 4K/8K streaming, gaming, and the smart home experience.

Speed
Get ultra-fast wireless speeds with more connections for all devices with less congestion. You'll get some blazing connection speeds of more than one Gigabit per second or more, 4K/8K streaming, & VR/AR gaming.

Range
Experience reliable and stronger WiFi coverage indoors and outdoors for all your devices. It enables expansive coverage for your smart home with wider range to cover every corner of your home even where your router WiFi cannot reach.

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8 Stream WiFi 6–4X Better Performance

Eight WiFi spatial streams - four in the 2.4GHz band and four in the 5GHz band - offer four times the device capacity as compared to typical 2x2 AC WiFi. This results in a significantly improved network capacity and benefits the performance of all legacy devices.
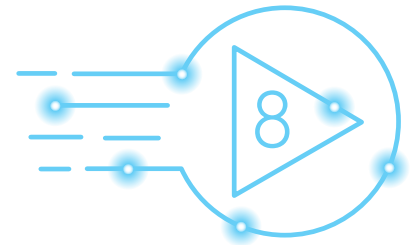
Expansive Coverage for Your Smart Home

Wider range to cover every corner of your home even where your router WiFi cannot reach. Get better coverage for your outdoor wireless security cameras or the garage.

Up to 6Gbps Ultra-fast WiFi Speeds

AX6000 WiFi with combined speeds up to 6Gbps (4.8+1.2Gbps)[†] extend Gigabit speeds throughout your home. The 160MHz Channel Support provides Gigabit WiFi connectivity speeds for compatible mobile devices and laptops[**], up to 2 times faster than standard 2x2 AC WiFi with 80MHz.

One WiFi Name & Smart Roaming

Extend coverage of your home's WiFi with same WiFi name and security password as your router. Smart Roaming automatically connects your mobile devices to the best available WiFi for superior streaming as you move around your house.

Built for Gigabit Internet Service & Beyond

Extend Gigabit Wi-Fi connectivity to compatible mobile devices & laptops. Gigabit Internet provides smoother ultra HD/4K streaming & gaming–wired or wireless.

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Speed

Get ultra-fast wireless speeds for better 4K/8K UHD streaming, gaming or video conferencing experience.

AX WiFi UP TO 6GBPS SPEEDS–1.2 + 4.8Gbps† with 8-stream connectivity**

MU-MIMO‡–Go faster by simultaneously streaming to multiple devices

POWERFUL PROCESSOR–64-bit 1.8GHZ dual-core processor ensures smooth 4K UHD streaming & gaming

160MHZ CHANNEL SUPPORT***–Doubles the speeds as offered by 80MHz channels to provide Gigabit speeds for compatible mobile devices and laptops

1024-QAM–25% increased data efficiency and faster speeds than a 256-QAM extender

ONE SUPERSPEED USB 3.0 PORT–Up to 10x faster than USB 2.0

4 GIGABIT PORTS–Connect more wired devices for faster file transfer and uninterrupted connections

Capacity

Get better performance for all your smart home devices even when your family is busy streaming videos or uploading media files during the Internet rush hour.

MORE WIFI FOR MORE DEVICES–OFDMA allows efficient data transmission up to 8 devices at the same time§

ORTHOGONAL FREQUENCY-DIVISION MULTIPLE ACCESS (OFDMA)– Substantially improves network capacity and efficiency. Facilitates efficient data transmission for more devices and simultaneously enables Gigabit WiFi speeds for compatible mobile devices and laptops **

MULTI-USER MIMO (MU-MIMO)–Enables simultaneously streaming to multiple devices, and improves capacity for wireless connections

WiFi Range

Faster and expanded coverage throughout your home and for all your devices.

ULTIMATE RANGE–WiFi coverage throughout very large homes

HIGH-PERFORMANCE ANTENNAS–Internal antennas extend strong and reliable WiFi signals over larger area. Antennas are pre-optimized for best WiFi performance

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Sharing

With NETGEAR, sharing across your network is fun and easy, such as accessing stored photos & music.

USB 3.0 READYSHARE® USB ACCESS—Wirelessly access & share USB hard drive via USB port

READYSHARE® PRINT—Wirelessly access & share a USB printer

Reliable Connections

There's nothing more frustrating than lost connections! With NETGEAR's advanced features & best-in-class technology, you'll reduce interference & enjoy more reliable WiFi connectivity.

BEAMFORMING+—Improve range and performance for both 2.4 and 5GHz devices

SIMULTANEOUS DUAL BAND WIFI—Supports two WiFi bands simultaneously to double the available bandwidth and provide a reliable, dedicated WiFi network for smooth online gaming without any network congestion

Ease Of Use

Start enjoying your new device faster than ever. NETGEAR wants to make sure installation and management is simple & easy, so you can connect quickly & make sure you stay that way!

SMART CONNECT—Intelligently selects the fastest WiFi band for every device connection. One WiFi name for the entire home.

NIGHTHAWK® APP—Easily set up your extender and get more out of your WiFi.

AX WIFI SUPPORTS ALL CURRENT WIFI ROUTERS & WIFI DEVICES— Backward compatible with WiFi 5 and earlier generation devices
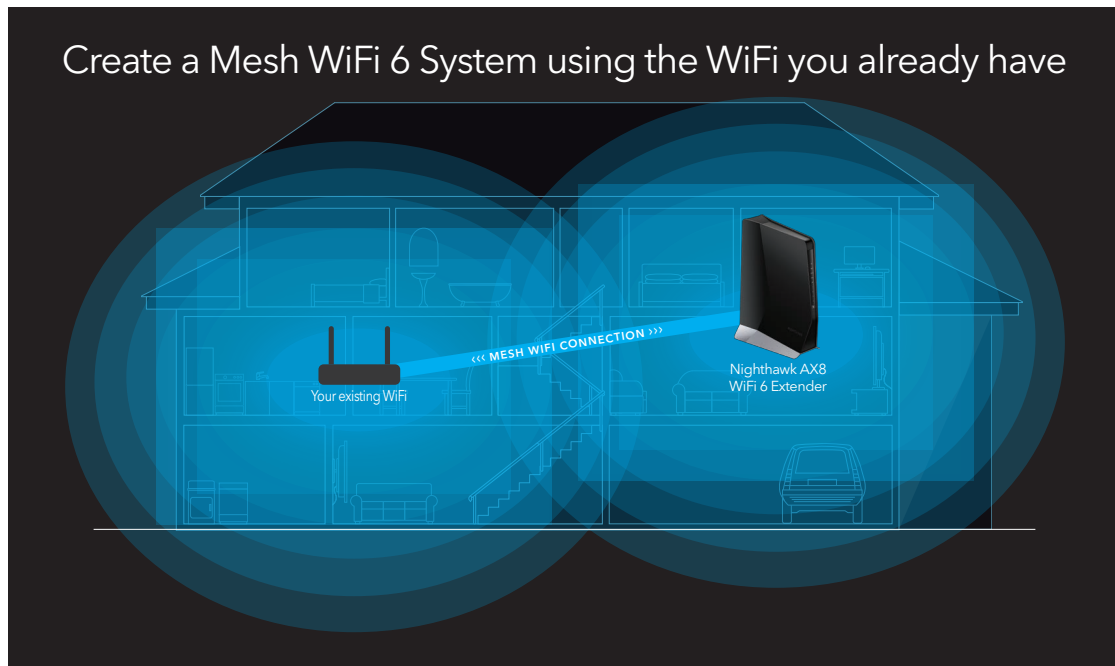
Security

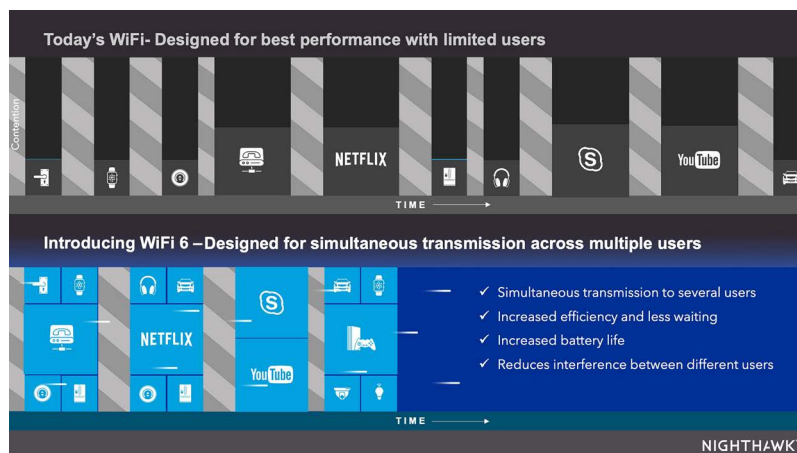Maintain high security across your network to ensure your privacy & family is safe while online.

STANDARDS-BASED WIFI SECURITY (802.11i, 128-bit AES encryption with PSK)

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Create a Mesh WiFi 6 System using the WiFi you already have

Your existing WiFi

‹‹‹ MESH WIFI CONNECTION ›››

Nighthawk AX8
WiFi 6 Extender

Orthogonal Frequency Division Multiple Access (OFDMA)

Using the uplink and downlink OFDMA[§] feature of WiFi 6, the WiFi traffic is managed much more efficiently since data is transmitted from different devices concurrently, rather than having each device's data wait for its turn. This results in in an efficient use of air-time, reduced latency, and increased bandwidth to add more devices to your network.

Today's WiFi- Designed for best performance with limited users

NETFLIX

You Tube

TIME

Introducing WiFi 6 –Designed for simultaneous transmission across multiple users

NETFLIX

You Tube

✓ Simultaneous transmission to several users
✓ Increased efficiency and less waiting
✓ Increased battery life
✓ Reduces interference between different users

TIME

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Gigabit WiFi to Mobile Devices

Support for 160MHz channel allows the Nighthawk® 8-Stream WiFi 6 Mesh Extender to stream at Gigabit speeds to supported mobile devices, which are increasingly used for video streaming or gaming.
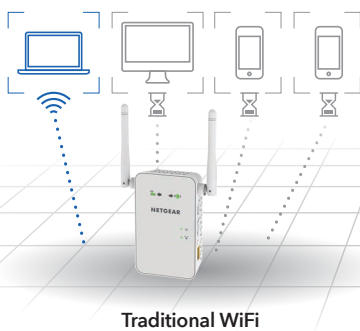

Multi-User MIMO

Using multi-user MIMO‡ technology, routers and extenders can stream data to multiple devices simultaneously. That means faster downloads and smoother streaming for your devices.

Enjoy simultaneous streaming with MU-MIMO

Data sent to one device at a time

Data sent to multiple devices simultaneously

Traditional WiFi

MU-MIMO WiFi

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Nighthawk App

The NETGEAR Nighthawk® App makes it easy to set up your extender and get more out of your WiFi. With the app, you can install your extender in a few steps—just connect your mobile device to the network and the app will walk you through the rest. Once set up, you can use the intuitive dashboard to manage your network.

- Network Management—Easily monitor and manage your home network

- Quick Setup—Get connected in just minutes

- Get it at nighthawk-app.com

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Connection Diagram

Reset

1G

Four Gigabit Ethernet
LAN Ports to connect
more wired devices

One 3.0
USB port
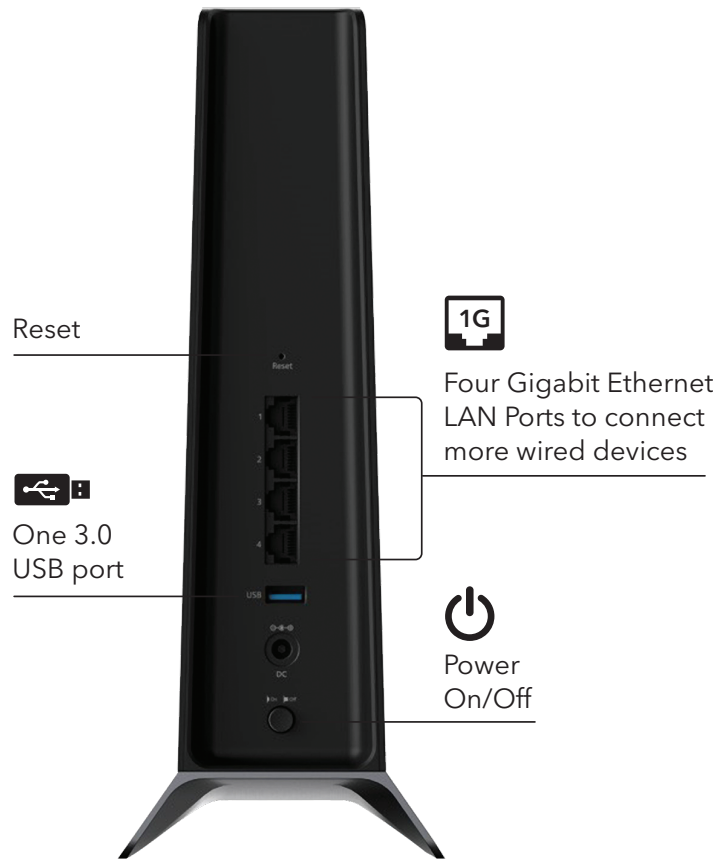
Power
On/Off

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Package Contents

- Nighthawk® 8-Stream WiFi 6 Mesh Extender (EAX80)
- Quick start guide
- Power adapter

Physical Specifications

- Dimensions: 10 x 7.75 x 4.2 in (279 x 197 x 106 mm)
- Weight: 1.9lb (0.86kg)

Standards

- AX6000‡ WiFi
  - Band 1: 1.2Gbps @2.4GHz - 1024-QAM
  - Band 2: 4.8Gbps @5GHz - 1024-QAM
- IEEE® 802.11 b/g/n/ax 2.4GHz
- IEEE® 802.11 a/n/ac/ax 5GHz
- IEEE® 802.11 k
- Four (4) 10/100/1000 Ethernet ports with auto-sensing technology
- One (1) USB 3.0 port

Technical Specifications

- WiFi 6 (802.11ax) Dual Band WiFi (AX6000)
  - 2.4GHz AX: 4x4 (Tx/Rx) 1024-QAM 40MHz, up to 1.2Gbps
  - 5GHz AX: 4x4 (Tx/Rx) 1024-QAM 160MHz, up to 4.8Gbps
- Backwards compatible with 802.11a/b/g/n/ac WiFi
- Uplink & Downlink OFDMA§—Improved capacity and efficiency
- 1024-QAM—25% data efficiency and faster speeds than a 256-QAM extender
- Powerful 64-bit dual-core 1.8GHz processor
- 160MHz channel support
- MU-MIMO‡—Simultaneous streaming of data to multiple devices
- IPv6 Support (Internet Protocol Version 6)

Key Features

- 4X Better Performance than an AC Extender—8 Stream WiFi with up to 1.2 + 4.8 Gbps† for ultra-fast wireless speeds**
- More WiFi for More Devices—OFDMA allows efficient data transmission up to 8 devices at the same time. Uplink OFDMA improves scheduling during high volumes of upload traffic, particularly when that traffic is created simultaneously.§
- Smart Roaming and One WiFi Name—Extend coverage of your home's WiFi with same WiFi name and security password as your router
- 160MHz Channel Support***—Doubles the speeds as offered by 80MHz channels to provide Gigabit speeds for compatible mobile devices and laptops
- Powerful Processor—64-bit 1.8GHz dual-core processor ensures smooth 4K UHD streaming & gaming
- 4 Gigabit Ports—Connect more wired devices for faster file transfer and uninterrupted connections
- Smart Connect—Intelligently selects the fastest WiFi band for every device connection. One WiFi name for the entire home
- Nighthawk® App—Easily set up your extender and get more out of your WiFi.
- WiFi 6 supports all current WiFi devices and is backward compatible with WiFi 5 and earlier generation devices

Support

- 90-day complimentary technical support following purchase from a NETGEAR authorized reseller
- Join the NETGEAR Community Forum. Visit http://community.netgear.com

System Requirements

- 2.4 and/or 5GHz 802.11 a/b/g/n/ac/ax WiFi router or gateway
- Microsoft® Internet Explorer® 8.0, Firefox® 20 or Safari® 5.1 or Google Chrome® 25.0 browsers or higher

Security

- Standards-based WiFi Security (802.11i, 128-bit AES encryption with PSK)

Warranty

- www.netgear.com/warranty
- Extend your warranty & technical support within 90 days of product purchase [US only]. Visit: prosupport.netgear.com/home

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This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller. www.netgear.com/warranty.

* 90-day complimentary technical support following purchase from a NETGEAR authorized reseller.

¹ Works with devices supporting WPS.

≈ Gigabit Internet speeds require compatible service plans and equipment.

** When working with 160MHz clients as compared to a 2x2 AC extender that does not support 160MHz.

***Requires client device that supports 160MHz bandwidth on WiFi.

§ Requires compatible AX clients with DL-OFDMA and UL-OFDMA support.

† Comparable with an AC1200 WiFi Range Extender.

††Performance compared to IEEE 802.11ac wireless technology.

‡ Maximum wireless signal rate derived from IEEE® standard 802.11 specifications. Actual data throughput and data over distance will vary. Network conditions and environmental factors, including volume of network traffic, building material and construction, and network overhead, result in lower actual data throughput rate and wireless coverage. Data throughput, signal range, and wireless coverage per sq. ft. are not guaranteed and may vary due to differences in operating environments of wireless networks, including without limitation building materials and wireless interference. Specifications are subject to change without notice. The product may not be compatible with routers or gateways with firmware that has been altered, is based on open source programs, or is non-standard or outdated.

For indoor use only.

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