

NIGHTHAWK®Nighthawk® AX8/8-Stream
AX6000 WiFi 6 Router

Leading the New Era of WiFi 6

Nighthawk® AX8 WiFi 6 Router is powered by the industry's latest WiFi 6 (802.11ax) standard with 4 times increased data capacities in a dense environment to handle

today and tomorrow's growing home network. Blazing-fast combined WiFi speeds up to 6Gbps and AX optimized 64-bit 1.8GHz Quad-core processor

powers smart home automation, ultra-smooth 4K UHD streaming, online gaming, and more.

NIGHTHAWK®Nighthawk® AX8/8-Stream
AX6000 WiFi 6 Router**WiFi 6—Ready for Today and Tomorrow's Smart Home**

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

With innovative technologies, such as Orthogonal Frequency-Division Multiple-Access (OFDMA)[§], 4x4 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

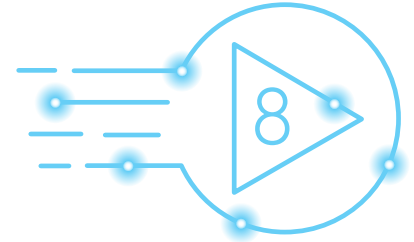
Get ultra-fast wireless speeds with more connections for all devices with less congestion. You'll get some blazing connection speeds of more than one gigabit per second or more, 4K/8K streaming, & VR/AR gaming.

Range

Experience reliable and stronger WiFi coverage indoors and outdoors for all your devices. High-performance antennas, pre-optimized for best performance, on the router amplify WiFi signals for maximized range and reliable coverage.

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.



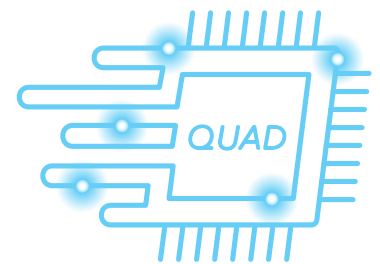
Uplink & Downlink OFDMA

Orthogonal Frequency-Division Multiple Access (OFDMA)[®] substantially improves the network capacity and efficiency. Facilitates efficient data transmission for up to 8 devices at the same time & improves upload speeds over WiFi.



Powerful Quad-Core 1.8GHz Processor

Ultra-fast processor for smoother 4K UHD streaming, online/VR gaming, and a stronger, more reliable WiFi experience. Equipped with co-processor to handle Multi-Gig* LAN-WAN traffic without incurring any CPU load, this powerful processor is optimized for AX ensuring speed and performance for even more smart home devices and high-speed applications.



Gigabit WiFi to Mobile Devices

Doubles the speeds as offered by 80MHz channels to provide Gigabit speeds for compatible mobile devices and laptops.



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Speed

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



UP TO 6GBPS SPEEDS—1.2+4.8 Gbps[†] with 8-stream connectivity^{**}



4x4 MU-MIMO[‡]—Go faster by simultaneously streaming to multiple devices



AX OPTIMIZED QUAD-CORE PROCESSOR—Powerful 1.8GHz processor boosts wireless, wired & WAN-to-LAN performance



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 router



TWO SUPERSPEED USB 3.0 PORTS—Up to 10x faster than USB 2.0



6 GIGABIT PORTS—Connect more wired devices for faster file transfer and uninterrupted connections



MULTI-GIG EXPERIENCE—Maximize your available Internet speeds with link port aggregation support. Ability to aggregate two Gigabit LAN ports or use Multi-Gig 5G Ethernet as WAN port (configurable).

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[§]



UP TO 4 SIMULTANEOUS WIFI STREAMS—4-stream MU-MIMO[‡] enables up to four (4) 1x1 devices to stream content at the same time



AX OPTIMIZED POWERFUL PROCESSOR—64-bit 1.8GHz Quad-core processor ensures smooth 4K UHD streaming & gaming - ideal for Gigabit Internet speeds

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—Four (4) hidden antennas extend strong and reliable WiFi signals over larger area. Antennas are pre-optimized for best WiFi performance

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Nighthawk® AX8/8-Stream AX6000 WiFi 6 Router

Sharing

With NETGEAR, sharing across your network is fun and easy, such as accessing stored photos & music. And make sure you keep it safe by using the included ReadySHARE Vault application for backing up Windows-based PCs.



READYSHARE® USB ACCESS—Wirelessly access & share USB hard drive via two (2) USB ports



TWO USB 3.0 PORTS—Faster streaming, backup and easy access to your stored media



READYSHARE® VAULT—Free software for automatic PC backup to a USB hard drive connected to the router



READYCLOUD® USB ACCESS—Enjoy personal & secure cloud access to USB storage anytime, anywhere

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



PRE-OPTIMIZED ANTENNAS—Unfold and set antennas on the router, no further adjustment required. The AX8 antennas come pre-optimized for best WiFi performance.



DYNAMIC QoS—Prioritizes Internet traffic by application and device for smoother streaming

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 router and get more out of your WiFi. Includes remote access to manage your network away from home



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



VOICE CONTROLLED BY AMAZON ALEXA® & THE GOOGLE ASSISTANT—Control your NETGEAR WiFi network with simple voice commands

Security

Maintain high security across your network to ensure your privacy & family is safe while online. Whether it's preventing phishing & spyware or just limiting access for kids & guests, NETGEAR has you covered.



VPN SUPPORT—On PC, MAC, & now also with OpenVPN Connect app on iOS & Android, securely access your home network & Internet connection from your mobile device remotely



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



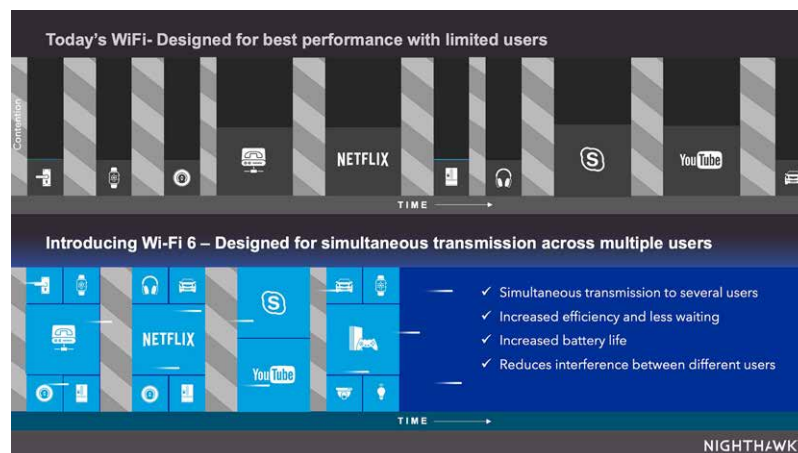
GUEST NETWORK—Separate and secure network for your guests



AUTOMATIC FIRMWARE UPDATE—Delivers latest security patches to the router

Orthogonal Frequency Division Multiple Access (OFDMA)

Using the uplink and downlink OFDMA^s 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 an efficient use of air-time, reduced latency, and increased bandwidth to add more devices to your network.



Powerful Quad-Core Processor

Nighthawk AX8 WiFi 6 Router is powered by a 64-bit 1.8GHz quad-core processor designed to transfer multi-gigs of data with almost zero CPU load. An additional quad-core co-processor handles all Multi-Gig LAN-WAN traffic, ensuring the main processor is available for all other applications. Enjoy smoother Ultra-HD 4K video streaming and gaming without interruptions.



Multi-Gig Internet*

Nighthawk AX8 WiFi 6 Router is one of the first routers to support WAN port aggregation that allows combining two Gigabit Ethernet ports to deliver more than one Gigabit internet speed to your home (where supported).



Gigabit WiFi to Mobile Devices

Support for 160MHz channel allows the Nighthawk AX8 WiFi 6 Router to stream at Gigabit speeds to supported mobile devices, which are increasingly used for video streaming or gaming.

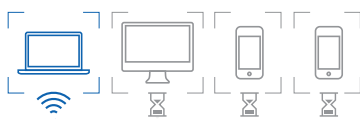


4x4 Multi-User MIMO

Using multi-user MIMO[†] technology, routers 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



Traditional WiFi

Data sent to multiple devices simultaneously



MU-MIMO WiFi

NIGHTHAWK®

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State-of-the-Art Industrial Design

The next-generation Nighthawk AX8 WiFi 6 Router design conceals four (4) high-performance antennas under the 'wings'. The antennas are optimally positioned for best WiFi performance and extend strong and reliable WiFi coverage indoors and outdoors.



Nighthawk App

The NETGEAR Nighthawk® App makes it easy to set up your router and get more out of your WiFi. With the app, you can install your router in a few steps—just connect your mobile device to the router network and the app will walk you through the rest. Once set up, you can use the intuitive dashboard to pause the Internet on your connected devices, run a quick Internet speed test, and much more!

- Remote Management—Easily monitor your home network anytime, anywhere
- Internet Speed Test—Check the broadband speeds from your service provider
- Pause Internet—Pause the Internet to any device
- Traffic Meter—Track Internet data usage
- Guest Networks—Set up separate WiFi access for guests
- Quick Setup—Get connected in just minutes
- Get it at nighthawk-app.com



NETGEAR®

Connection Diagram



NIGHTHAWK®

Nighthawk® AX8/8-Stream AX6000 WiFi 6 Router

Package Contents

- NETGEAR® Nighthawk® AX8/8-Stream AX6000 WiFi Router (RAX80)
- Ethernet cable
- Quick start guide
- Power adapter

Physical Specifications

- Dimensions:
 - **Folded size:** 10.75 x 7.95 x 2.83 in (273 x 202 x 72 mm)
 - **Unfolded size:** 12.0 x 7.95 x 6.34 in (305 x 202 x 161 mm)
- Weight: 2.82 lbs (1281g)

Standards

- Two (2) USB 3.0 ports
- 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
- Six (6) 10/100/1000Mbps—(1 WAN & 5 LAN) Gigabit Ethernet ports

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 router
- Powerful 64-bit Quad-Core 1.8GHz Processor
- 160MHz channel support
- Additional DFS channels for interference free experience
- MU-MIMO[‡]—Simultaneous streaming of data to multiple devices
- Longer range with 4 high-performance antennas

- Six (6) 10/100/1000 Mbps Gigabit Ethernet ports
 - 1 WAN & 5 LAN
 - Dual Gigabit Ethernet Port Aggregation
- IPv6 Support (Internet Protocol Version 6)
- On/Off LED light switch

Key Features

- 4X Better Performance than an AC Router—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.[§]
- Up to 4 Simultaneous WiFi Streams—4-stream MU-MIMO enables up to four (4) 1x1 devices at the same time
- 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 Quad-core processor ensures smooth 4K UHD streaming & gaming
- Dynamic QoS—Prioritizes Internet traffic by application and device for smoother streaming
- 6 Gigabit Ports—Connect more wired devices for faster file transfer and uninterrupted connections. Two (2) ports can be aggregated for faster LAN transfer and two (2) can be aggregated to enable Multi-Gig internet
- 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 router and get more out of your WiFi. Includes remote access to manage your network away from home
- WiFi 6 supports all current WiFi devices and is backward compatible with WiFi 5 and earlier generation devices
- Works with Amazon Alexa® & the Google Assistant—Control your NETGEAR WiFi network with simple voice commands

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

- Microsoft® Windows 7, 8, 10, Vista®, XP®, 2000, Mac OS®, UNIX®, or Linux®
- Microsoft® Internet Explorer® 11 or higher, Microsoft Edge, Google Chrome® 55 or higher, Firefox® 45 or higher, Safari® 10 or higher

Security

- Standards-based WiFi Security (802.11i, 128-bit AES encryption with PSK)
- Automatic firmware update delivers latest security patches to the router
- Guest network access—separate & secure
- VPN Support—Secure access to your home network away from home

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 router may not support all the mandatory features, ratified in Draft 3.0 of IEEE 802.11AX specification. This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller.

† Maximum wireless signal rate derived from IEEE 802.11 specifications. Actual data throughput and wireless coverage will vary and may be lowered by network and environmental conditions, including network traffic volume and building construction. NETGEAR makes no representations or warranties about this product's compatibility with future standards.

‡ MU-MIMO capability requires both router and client device to support MU-MIMO.

* Multi-Gig Internet speeds require compatible service plans and equipment. Please visit support.netgear.com for more information.

** When working with 160MHz clients as compared to a 2x2 AC router 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.

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