Nighthawk® AX8 8-Stream AX6000 WiFi 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 up to 30 devices in your 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. With NETGEAR Armor™, you get the best-in-class cybersecurity to protect your family from malware, stolen passwords, identity theft, and hacker attacks.
WiFi 6—Ready for Today and Tomorrow’s Smart Home

Delivering four times better performance than AC WiFi, WiFi 6 allows more devices to connect and stream simultaneously, without impacting speed or reliability, by efficiently packing and scheduling data.

With innovative technologies, such as Orthogonal Frequency-Division Multiple-Access (OFDMA) 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
Concurrently stream high-definition & Ultra HD content to multiple devices.

Faster Upload & Download Speeds
Facilitates efficient data transmission for multiple devices at the same time & improves upload speeds over WiFi.

Greater than 1Gbps WiFi Speeds
Enjoy streaming even more with ultra-fast WiFi speeds to compatible smartphones, laptops and more.

Quad-core 1.8GHz Processor
High-performance processor delivers fast & reliable connections to all devices & applications.
**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 SUPER_SPEED USB 3.0 PORTS**—Up to 10x faster than USB 2.0
- **6 GIGABIT ETHERNET 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
- **MULTI-GIG EXPERIENCE**—Maximize your available Internet speeds with link port aggregation support. Ability to aggregate two Gigabit LAN ports

**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 for faster WiFi download & upload speeds 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
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.

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.

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!
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.

- **NETGEAR ARMOR™**—Cybersecurity for your home††. Advanced cyber threat protection for your home network and your connected devices
- **CIRCLE® SMART PARENTAL CONTROLS‡‡**—The smart way for families to manage content and time online, on any device.
- **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 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.

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**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.

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**Enjoy simultaneous streaming with MU-MIMO**

<table>
<thead>
<tr>
<th>Data sent to one device at a time</th>
<th>Data sent to multiple devices simultaneously</th>
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<tr>
<td>Traditional WiFi</td>
<td>MU-MIMO WiFi</td>
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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 Armor™

NETGEAR Armor empowers you to eliminate vulnerabilities or simply know the status of your home network and devices, anytime, anywhere. Get instant notifications when malicious threats are detected, block unknown devices from joining your home network or take action on vulnerabilities as they are discovered easily through the Nighthawk App.

Powerful Security On Your NETGEAR Router

- **ANTIVIRUS & RANSOMWARE PROTECTION**—Keeps you safe from phishing and online fraud
- **VULNERABILITY ASSESSMENT**—Scans and identifies network security flaws
- **BITDEFENDER TOTAL SECURITY 2020**—Protects all connected devices at home and on-the-go
- **BITDEFENDER VPN**—Encrypts your internet connection to keep your online activity private even while you’re on unsecured public networks
- **STAY SAFE EVEN WHEN AWAY FROM HOME WIFI**—Stay in the know with Nighthawk App. Anywhere, anytime

**circle** Circle is the smart way for families to manage content and time online, on any connected device. With the Circle app, you can easily:

- Limit daily Internet time for websites, apps, and more
- Set a BedTime for your family’s devices
- Set individual filter for each family member that matches their age and interests
- Pause Internet by device or by user with a press of a button
- Schedule specific ‘no internet’ times with OffTime
- Check out where your family spends time online
- Reward kids with extended Time Limits, no OffTime, and a late BedTime for the day
- Use voice commands to ask Alexa™ about Time Limits and Usage

Learn more netgear.com/circle

Key Features:

- **FILTERS**
- **TIME LIMITS**
- **BEDTIME**
- **USAGE**
- **PAUSE**
- **OFF TIME**
- **REWARDS**
- **HISTORY**
- **CONNECTIONS**
Connection Diagram

- **Link Aggregation**: Ability to aggregate two Gigabit LAN ports for faster file transfers.
- **Multi-Gig Internet Port**: Ability to aggregate two ports to get more than Gigabit Internet speeds.
- **Power On/Off**
- **Internet**
- **LED On/Off**
- **Two USB ports**
- **Five Gigabit Ethernet LAN Ports to connect more wired devices**
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 lb (1281 g)

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
- Uplink & Downlink OFDMA—Improved capacity and efficiency
- 1024-QAM—25% data efficiency and faster speeds than a 256-QAM router
- Two (2) USB 3.0 ports
- Powerful 64-bit quad-core 1.8GHz processor
- 160MHz channel support
- Additional DFS channels reduce interference from neighboring networks
- 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

- 5X better performance than an AC router—8-stream WiFi with up to 1.2 + 4.8 Gbps\(^2\) for ultra-fast wireless speeds**
- More WiFi for more devices—OFDMA allows efficient data transmission to multiple devices at the same time\(^3\)
- Up to 4 simultaneous WiFi streams—4-stream MU-MIMO enables up to four (4) 1x1 devices at the same time\(^3\)
- 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
- NETGEAR Armor™—Advanced cyber threat protection for your home network and your connected devices\(^††\)
- Circle® Smart Parental Controls\(^‡‡\)—Manage content and time online for your connected devices. Learn more at netgear.com/circle.

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
- NETGEAR Armor™—Advanced cyber threat protection for your home network and your connected devices\(^††\)
- Circle® Smart Parental Controls\(^‡‡\)—Manage content and time online for your connected 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

- 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

Warranty

- www.netgear.com/warranty
- Extend your warranty & technical support within 90 days of product purchase [US only]. Visit: prosupport.netgear.com/home
This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller.

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

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

† 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. Up to 6000Mbps wireless speeds achieved when connecting to other 802.11ax 6000Mbps devices.

‡ As compared to an AC1200 2x2 router.

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

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

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

‡‡ NETGEAR Armor requires a paid subscription after the initial introductory period.

"Circle" includes the Free Basic Plan. Fees apply for a Premium Plan. Visit netgear.com/circle for more information.

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