NIGHTHAWK®

Nighthawk® AX12
12-Stream AX6000 WiFi Router

CES INNOVATION AWARDS 2019 HONOREE

WiFi 6 for Today's Smart Devices

Nighthawk® AX12 WiFi 6 Router is powered by the industry's latest WiFi 6 (802.11ax) standard with 4 times increased data capacity 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 2.2GHz 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.

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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. With MU-MIMO, WiFi 6 supports up to eight simultaneous streams for the number of users that can be served double at the same time as compared to an AC router.

Speed

Get ultra-fast wireless speeds with more connections for all devices with less congestion. You'll get some blazing connection speeds of 1Gbps 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 on the router amplify WiFi signals for maximized range and reliable coverage.

12-Stream WiFi 6

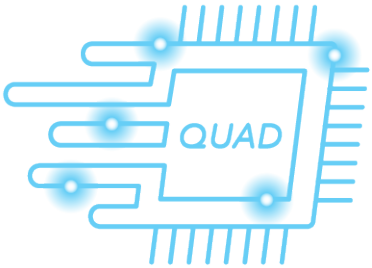
Ultra-smooth 4K streaming & the ultimate smart home experience with 12 WiFi streams.

8 High-performance Antennas

Enjoy up to 1.5X more usable WiFi coverage for things like Ultra-HD video & gaming.

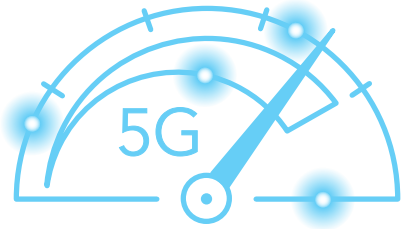
Quad-core 2.2GHz Processor

Engineered to deliver a new era of WiFi performance.



Up to 5Gbps Wired Speeds

Wait less & do more with up to 5X faster wired data speeds.



Versatile Multi-Gig Internet Support

Maximize your Internet speeds up to 5Gbps with new versatile Ethernet wired connections. Used for LAN or Internet connectivity, it is 5 times the wired speed of a typical Gigabit port. Or aggregate two Ethernet ports for up to 2Gbps of Internet speed.

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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 12-stream connectivity**
- 8x8 MU-MIMO‡—Go faster by simultaneously streaming to multiple devices
- AX OPTIMIZED QUAD-CORE PROCESSOR—Powerful 2.2GHz processor boosts wireless, wired & WAN-to-LAN performance
- MULTI-GIG 5G/2.5G/1G ETHERNET PORT—5 times the wired speed of typical Gigabit Ethernet port for LAN or faster Internet
- 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
- MULTI-GIG EXPERIENCE—Maximize your available Internet speeds with link port aggregation support. Ability to aggregate two Gigabit 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 at the same time§
- UP TO 8 SIMULTANEOUS WIFI STREAMS—8-stream MU-MIMO‡ enables up to four (4) 2x2 devices to stream content at the same time
- AX OPTIMIZED POWERFUL PROCESSOR—64-bit 2.2GHz 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—Eight (8) antennas extend wireless range coverage indoors and out.

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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

USB 3.0

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 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 AX12 antennas come pre-optimized for best WiFi performance

ADDITIONAL DFS CHANNELS–Reduce interference from neighboring networks

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

WIFI 6 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

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Security

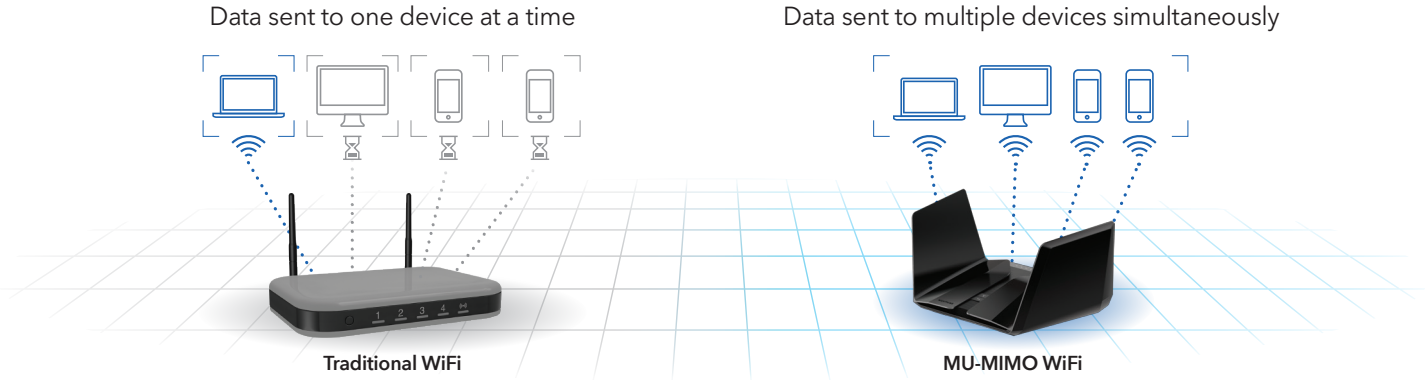
Maintain high security across your network to ensure your privacy & family is safe while online. Whether it's preventing phishing & spyware or just limiting access for kids & guests, NETGEAR has you covered.

- NETGEAR ARMOR™–Cybersecurity for your home††. Advanced cyber threat protection for your home network and your connected devices
- 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
- VPN CLIENT SUPPORT–Protect your network identity and prevent DDoS attack
- GUEST NETWORK–Separate and secure network for your guests
- AUTOMATIC FIRMWARE UPDATE–Delivers latest security patches to the router
- STRONGER PROTECTION–Stronger WiFi password protection with WiFi Certified WPA3™

8x8 Multi-user MIMO

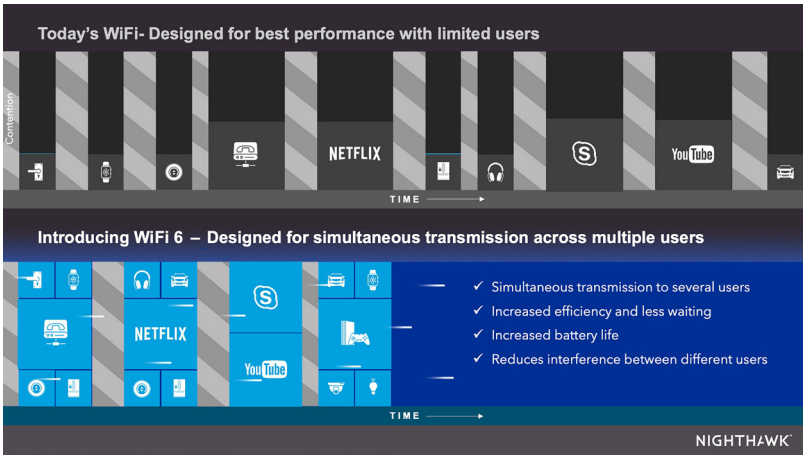
Using multi-user MIMO‡ technology, routers can stream data to multiple devices simultaneously. That means faster downloads and smoother streaming for your devices. WiFi 6 extends MU-MIMO to 8-stream support so it can support double the number of simultaneous transmissions as compared to 4x4 MU-MIMO AC WiFi routers.

Enjoy simultaneous streaming with MU-MIMO



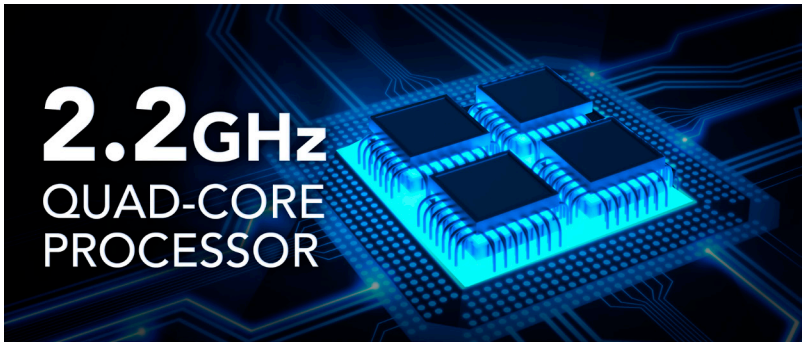
Orthogonal Frequency Division Multiple Access (OFDMA)

Using the 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.



Ultra-powerful AX-optimized Quad-core Processor

Nighthawk AX12 WiFi 6 Router, powered by a 64-bit 2.2GHz quad-core processor, is built for performance at an ultimate level. The ultra-fast processor enables the router to seamlessly handle data intensive applications such as 4K/8K UHD video streaming, VR/AR gaming, as well as provide a stronger, more reliable WiFi experience. This powerful processor is optimized for AX making intelligent spontaneous decisions to schedule data traffic to maximize WiFi Bandwidth utilization.



State-of-the-Art Industrial Design

This next-generation Nighthawk AX12 WiFi 6 Router design conceals eight (8) 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

GET IT ON Google Play

Download on the App Store

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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.

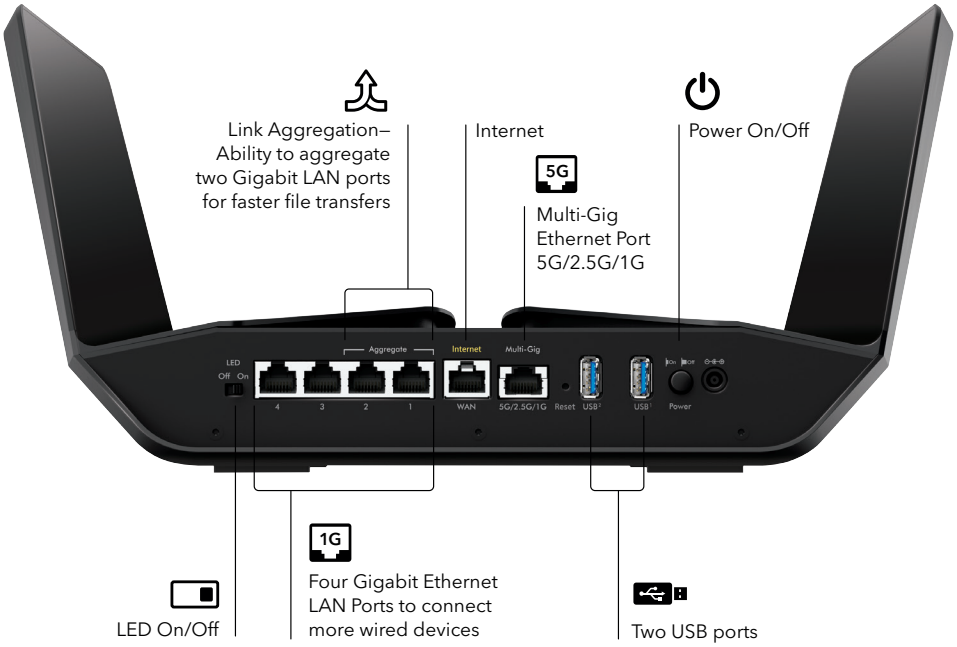
NETGEAR® ARMOR™ | POWERED BY Bitdefender

Advanced Cyber Threat Protection

Powerful Security On Your NETGEAR Router

- ANTIVIRUS & RANSOMWARE PROTECTION–Keeps you safe from phishing and online fraud
- VULNERABILITY ASSESSMENT–Scans and identifies networksecurity 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

Connection Diagram



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Nighthawk® AX12 12-Stream AX6000 WiFi Router

Package Contents

- NETGEAR® Nighthawk® AX12/12-Stream AX6000 WiFi Router (RAX120)
- Ethernet cable
- Quick start guide
- Power adapter

Physical Specifications

- Dimensions: 12.2 x 7.48 x 1.77 in (310 x 190 x 45 mm)
- Weight: 3 lb (1364 g)

Technical Specifications

- WiFi 6 (802.11ax) Dual Band WiFi (AX6000)
  - 2.4GHz AX: 4x4 (Tx/Rx) 1024-QAM 20/40MHz, up to 1.2Gbps
  - 5GHz AX: 8x8 (Tx/Rx) 1024-QAM 20/40/80/160MHz, up to 4.8Gbps
  - Backwards compatible with 802.11a/b/g/n/ac WiFi
- 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 2.2GHz processor
- Longer range with 8 high-performance antennas
- Additional DFS channels reduce interference from neighboring networks
- Stronger WiFi password protection with WiFi Certified WPA3™
- Five (5) 10/100/1000 Mbps Gigabit Ethernet ports
  - 1 WAN & 4 LAN
  - Dual Gigabit Ethernet port aggregation
- 5G/2.5G/1G multi-Gig Ethernet LAN/WAN port
- IPv6 support (Internet Protocol Version 6)
- On/Off LED light switch

Key Features

- 5X better performance than an AC Router–12-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 at the same time
- Up to 8 simultaneous WiFi streams–8-stream MU-MIMO enables up to four (4) 2x2 devices at the same time.
- Maximized range–Eight (8) antennas extend wireless range coverage indoors and out
- AX optimized powerful processor–64-bit 2.2GHz quad-core processor ensures smooth 4K UHD streaming & gaming – ideal for Gigabit Internet speeds.
- Multi-Gig Ethernet port 5G/2.5G/1G–5 times the wired speed of typical Gigabit port
- 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 and all your devices††
- 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

- Stronger WiFi password protection with WiFi Certified WPA3™
- 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
- VPN client support–Protect your network identity and prevent DDoS attacks
- NETGEAR Armor™–Advanced cyber threat protection for your home network and your connected devices††

Warranty

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

Supports Windows® 10

Mac

This router does not support some of the mandatory features ratified in Draft 3.0 of IEEE 802.11AX specification, such as Uplink OFDMA, Target Wake Time, and BSS Coloring.

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.

† 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.

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

‡ As compared to an AC1200 2x2 router.

**Compared to a 2x2 AC router working with a 2x2 AC mobile client such as iPhone X, Samsung S9

§ Requires compatible AX clients

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