### Data Sheet | RAX120v2

# NIGHTHAWK

## Nighthawk® AX12 12-Stream AX6000 WiFi Router



## 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<sup>™</sup>, you get complete cyber threat protection built into your router for an unlimited number of devices connected to your network, including IoT devices, tablets, computers, and smartphones.



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## Nighthawk® AX12 12-Stream AX6000 WiFi Router



#### 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. 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.

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#### 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.

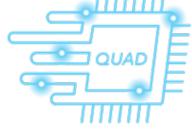
### **Up to 5Gbps Wired Speeds**

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

#### Versatile Multi-Gig Internet Support

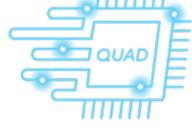
Maximize your Internet speeds up to 5Gbps with new versatile Ethernet wired connections. Used for LAN or Internet connectivity, it is 5 times the wired speed of a typical Gigabit port. Or aggregate two Ethernet ports for up to 2Gbps of Internet speed.















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Nighthawk® AX12 12-Stream AX6000 WiFi Router

#### 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  $^{\rm t}$  with 12-stream connectivity  $^{\rm **}$ 



 $8x8~\text{MU-MIMO^{\ddagger}-Go}$  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.



UP TO 8 SIMULTANEOUS WIFI STREAMS–8-stream MU-MIMO<sup>‡</sup> enables up to four (4) 2x2 devices to stream content at the same time

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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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Nighthawk<sup>®</sup> AX12 12-Stream AX6000 WiFi Router

#### Sharing

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

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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

#### **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 access from anywhere 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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Nighthawk® AX12 12-Stream AX6000 WiFi Router

#### 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<sup>™</sup>–Cybersecurity for your home<sup>††</sup>. 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



LATEST SECURITY STANDARD–Supports WPA3 the latest and cutting-edge WiFi security protocol

#### 8x8 Multi-user MIMO

Using multi-user MIMO<sup>‡</sup> 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





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Nighthawk® AX12 12-Stream AX6000 WiFi Router

#### 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.



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## Nighthawk® AX12 12-Stream AX6000 WiFi Router

#### **Nighthawk App**

The NETGEAR Nighthawk<sup>®</sup> 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!

- Anywhere Access–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



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## Nighthawk® AX12 12-Stream AX6000 WiFi Router

#### **NETGEAR Armor**<sup>™</sup>

Powered by Bitdefender<sup>®</sup>, NETGEAR Armor<sup>™</sup> is one of the most comprehensive and advanced security solutions that protects you and your family from hackers and viruses. It's built into your NETGEAR router and is easily managed through the NETGEAR iOS or Android app. NETGEAR Armor<sup>™</sup> includes Bitdefender's award-winning anti-virus, anti-malware, total protection suite for unlimited computers, smartphones, and tablets plus Bitdefender VPN to safeguard these devices–anywhere you go.



#### Advanced Security Built into Your NETGEAR Router



PROTECTS ALL CONNECTED DEVICES–Safeguard all your smart home devices, game consoles, TVs, and streaming players, as well as your tablets, computers, and smartphones.



SENSITIVE DATA PROTECTION–Keeps your data private by blocking attempts to send your login and banking info, SSNs, and more from being sent over unencrypted connections.



ANOMALY DETECTION–Blocks unusual behavior on your connected devices detected by our machine learning algorithm to protect your network against attacks.



BRUTE FORCE PROTECTION–Protects the entire network by preventing connected smart devices from being compromised by botnet attacks, such as credential and encryption key attacks.



DDoS PROTECTION–Prevents and protects your network against crippling denial-of-service attacks.

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EXPLOIT PREVENTION/IDS—Protects your data and devices by blocking attacks—like malicious intrusions—that try to exploit vulnerabilities in your connected devices or software.



AUTOMATIC THREAT BLOCKING–Blocks viruses, ransomware, phishing, spoofing, and other advanced cyberattacks threatening your network and connected devices with vulnerabilities.



WEB PROTECTION–Instantly blocks webpages that possibly contain harmful malware, phishing, or other malicious content. (For Android and iOS devices)



VULNERABILITY SCAN–Closes any backdoor entries or hackers by identifying weak passwords or credentials and firmware or services with vulnerabilities.



REAL-TIME ALERTS–Notifications of detected and blocked threats and when new devices connect to your network.



MANAGE NETGEAR ARMOR EASILY–Stay in the know with your Nighthawk App–anywhere, anytime.

#### Your Armor subscription also includes features that protect your devices outside your home:



BITDEFENDER SECURITY–Install this protection on your desktop and laptop computers and mobile devices for an extra layer of cybersecurity at home and on-the-go.



BITDEFENDER<sup>®</sup> VPN–Encrypts your Internet connection to keep your online activity private, even while you're on unsecured public networks.

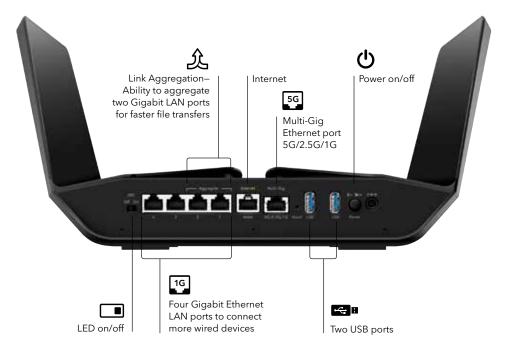


ANTI-THEFT PROTECTION–Remotely locate, lock, and wipe your lost or stolen devices.

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## Nighthawk® AX12 12-Stream AX6000 WiFi Router

### **Connection Diagram**



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## Nighthawk® AX12 12-Stream AX6000 WiFi Router

#### **Package Contents**

- NETGEAR<sup>®</sup> Nighthawk<sup>®</sup> AX12/12-Stream AX6000 WiFi Router (RAX120v2)
- Ethernet cable
- Quick start guide
- Power adapter

#### **Physical Specifications**

- Dimensions:
  <u>Folded size:</u> 11.81 x 8.76 x 3.35 in (300 x 222.4 x 85.2 mm)
- <u>Unfolded size:</u> 13.6 x 8.76 x 6.69 in (345.5 x 222.4 x 169.8 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
- 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
- Five (5) 10/100/1000Mbps Gigabit Ethernet ports
  - 1 WAN & 4 LAN

**NETGEAR**<sup>®</sup>

- 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 + 4.8Gbps<sup>+</sup> for ultra-fast wireless speeds\*\*
- 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<sup>®</sup> App–Easily set up your router and get more out of your WiFi. Includes access from anywhere to manage your network away from home
- NETGEAR Armor<sup>™</sup>-Advanced cyber threat protection for your home network and your connected devices<sup>††</sup>
- WiFi 6 supports all current WiFi devices and is backward compatible with WiFi 5 and earlier generation devices
- Works with Amazon Alexa<sup>®</sup> & the Google Assistant–Control your NETGEAR WiFi network with simple voice commands

#### **System Requirements**

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

#### Security

- Latest Security Standard–Supports WPA3 the latest and cutting-edge WiFi security protocol
- 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<sup>™</sup>-Advanced cyber threat protection for your home network and your connected devices<sup>††</sup>

#### Warranty

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

#### Support

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



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.

<sup>†</sup> 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.

<sup>++</sup>NETGEAR Armor<sup>™</sup> requires a paid subscription after the initial 30-day free trial. (No credit card required for the trial). Visit netgear.com/armor

<sup>‡</sup> MU-MIMO capability requires both router and client device to support MU-MIMO.

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

The country settings must be set to the country where the device is operating.

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