Data Sheet | RAX200

NIGHTHAWK

Nighthawk[®] Tri-Band AX12 12-Stream AX11000 Tri-Band WiFi Router



Leading the New Era of WiFi 6

Nighthawk[®] Tri-Band AX12 WiFi 6 Router is powered by the industry's latest WiFi 6 (802.11ax) standard with 4 times increased data capacities to handle more devices in your growing home network. Blazing-fast combined WiFi speeds up to 10.8Gbps⁺ and AX optimized 1.8GHz quad-core processor powers smart home automation, ultra-smooth 4K/8K streaming, low latency gaming, and more. Multi-Gig 2.5G Ethernet interface can be used for wired devices on LAN or for getting faster multi-Gig Internet speed. Plus, eight high-performance antennas on the router amplify WiFi signals for maximized range and reliable coverage.



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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) 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.

High-performance processor delivers fast & reliable connections to all devices & applications.

Greater than 1Gbps WiFi Speeds

Enjoy streaming even more with ultra-fast WiFi speeds to compatible smartphones, laptops and more.

Maximize your Internet speeds up to 2.5Gbps with new versatile

Quad-core 1.8GHz Processor

Multi-Gigabit Internet

Ethernet wired connections.

12-Stream Tri-Band WiFi

NIGHTHAWK

Ultra WiFi 6 performance delivers multiple 4K streaming, low latency gaming & new blazing-fast Internet speeds.

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Speed

Get ultra-fast wireless speeds for better 4K/8K UHD streaming, gaming or video conferencing experience. 7

UP TO 10.8GBPS⁺ SPEEDS-1.2 + 4.8 + 4.8 Gbps with 12-stream connectivity^{**}



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



MULTI-GIG 2.5G ETHERNET PORT–2.5 times the wired speed of typical Gigabit Ethernet port for LAN or Internet connectivity



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 aggregation support. Ability to aggregate two Gigabit LAN ports and two Gigabit WAN ports (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 using 2 5GHz bands



AX OPTIMIZED POWERFUL PROCESSOR-64-bit 1.8GHz Quad-core processor ensures smooth 4K/8K 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) hidden antennas extend strong and reliable WiFi signals over larger area. Antennas are pre-optimized for best WiFi performance



160MHZ SUPPORT–Gigabit WiFi connection with today's and future mobile devices that support 160MHz bandwidth.***



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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 both 2.4 and 5GHz devices



(က)(က)(က) SIMULTANEOUS TRI-BAND WIFI–Ensures the best WiFi performance with more available bandwidth and less congestion for all devices on the network



PRE-OPTIMIZED ANTENNAS–Unfold and set antennas on the router, no further adjustment required. The AX12 antennas come pre-optimized for best WiFi performance

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.



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



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

4x4 Multi-user MIMO with Two 5GHz Bands

Using multi-user MIMO⁺ technology, routers can stream data to multiple devices simultaneously. That means faster downloads and smoother streaming for your devices with 4 streams with each 5G band.



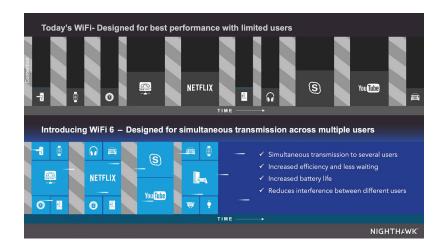


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Orthogonal Frequency Division Multiple Access (OFDMA)

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 Tri-Band AX12 WiFi 6 Router, powered by a 64-bit 1.8GHz 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.



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Award-Winning Industrial Design

This next-generation Nighthawk Tri-Band AX12 WiFi 6 Router 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



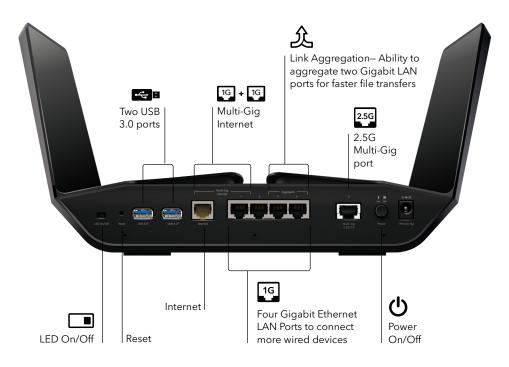




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Nighthawk® Tri-Band AX12 12-Stream AX11000 Tri-Band WiFi Router

Connection Diagram



Data Sheet | RAX200 Nighthawk[®] Tri-Band AX12

Nighthawk[®] Tri-Band AX12 12-Stream AX11000 Tri-Band WiFi Router

Package Contents

- Nighthawk[®] Tri-Band AX12/12-Stream AX11000 Tri-Band WiFi 6 Router (RAX200)
- Ethernet cable
- Quick start guide
- Power adapter

Physical Specifications

- Dimensions: 11.7 x 3.07 x 8.3 in (298 x 78 x 11 mm)
- Weight: 3.2 lb (1433 g)

Technical Specifications

- WiFi 6 (802.11ax) Tri-Band WiFi (AX11000)
 2.4GHz AX: 4x4 (Tx/Rx) 1024-QAM 20/40MHz, up to 1.2Gbps
 - 5GHz AX: 4x4 (Tx/Rx) 1024-QAM 20/40/80/160MHz, up to 4.8Gbps
 - 5GHz AX: 4x4 (Tx/Rx) 1024-QAM 20/40/80/160MHz, 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
- Two (2) USB 3.0 ports
- Powerful 64-bit quad-core 1.8GHz processor
- Longer range with 8 high-performance antennas
- Five (5) 10/100/1000 Mbps Gigabit Ethernet ports + one (1) 2.5G/1Gbps multi-Gig port (configurable)
 - LAN: 4xGbE (2x port aggregation LAN) + 2.5G/1Gbps multi-Gig port (configurable)
 - WAN: 1 GbE or 2.5G/1Gbps multi-Gig port (configurable)
 - Multi-Gig: Ability to aggregate two Gigabit LAN ports and two Gigabit WAN ports (configurable) concurrently
- One (1) 2.5G/1Gbps multi-Gig port (configurable)

- Memory: 512MB NAND flash and 1GB
 DDR3 SDRAM
- Additional DFS channels for interference free experience
- IPv6 Support (Internet Protocol Version 6)
- On/Off LED light switch

Key Features

- Blazing-fast 10Gbps WiFi speeds–12-Stream Tri-band WiFi with combined wireless speeds up to 10.8Gbps (1.2+4.8+4.8Gbps)[†]
- 12-Stream Tri-Band WiFi–12 WiFi streams (eight streams of 5GHz & four streams of 2.4GHz) means more available bandwidth and less congestion for all the devices on the WiFi network
- Increased capacity for the smart home— The latest generation WiFi 6 technology improves WiFi performance and reliability of connections to all your devices by up to 4 times**
- Multi-Gig experience—Maximize your available Internet speeds with link aggregation support. Ability to aggregate two Gigabit LAN ports and two Gigabit WAN ports (configurable)
- 160MHz support–Gigabit WiFi connection with today's and future mobile devices that support 160MHz bandwidth***
- WiFi 6 optimized powerful processor– 64-bit 1.8GHz quad-core processor ensures smooth 4K/8K UHD streaming & gaming - ideal for Gigabit Internet speeds
- Multi-Gig Ethernet 2.5G port-2.5 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
- WiFi 6 supports all current WiFi devices-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

- 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
- Standards-based WiFi Security (802.11i, 128-bit AES encryption with PSK)
- Supports WPA3, the latest and cuttingedge WiFi security protocol

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 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.

[‡] As compared to an AC1200 2x2 router.

** As compared to a WiFi 5 (802.11ac) router

*** To achieve Gigabit wireless speeds the network requires compatible devices that supports 160MHz channels. Intel Gigabit WiFi enabled devices supported. Clients must also support 11ax standards.

[§] Requires compatible AX clients

For indoor use only.

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