Data Sheet | RAX50

Nighthawk[®] AX6 6-Stream AX5400 WiFi Router



Leading the New Era of WiFi 6

Built with the lastest generation WiFi 6 technology, the NETGEAR® Nighthawk® AX6 6-Stream AX5400 WiFi Router provides speeds up to 5.4Gbps so you can connect, stream, and download faster to newer mobile devices. Powerful 1.5GHz triple-core processor ensures superior performance for concurrent real-time applications such as mulitmedia streaming, online gaming, and audio/video chats. Engineered to deliver up to 4 times the data capacity over previous standards, WiFi 6 technology with OFDMA, 160MHz channel support, and 1024-QAM vastly improves network efficiency. High-power amplifiers increase range for reliable whole home network. This next-gen router is recommended for medium to large homes, suitable for up to 25 connected devices.



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WiFi 6-Ready for Today and Tomorrow's Smart Home

Introducing WiFi 6-the latest generation of WiFi that delivers up to 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 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 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 peformance, on the router amplify WiFi signals for maximized range and reliable coverage.

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6-Stream AX WiFi

Stream smooth 4K UHD content to smart TVs, mobile devices, and gaming consoles.

Faster Upload & Download Speeds

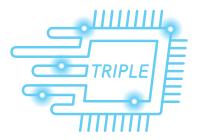
Faster WiFi download & upload speeds at the same time.

Greater than 1Gbps WiFi Speeds

Enjoy greater than 1Gbps WiFi speeds for blazing-fast streaming and downloading to newer mobile devices.

Powerful Triple-core 1.5GHz Processor

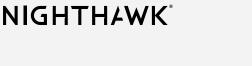
More processing power increases the overall performance of your network.













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Nighthawk® AX6 6-Stream AX5400 WiFi Router

Speed

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



4.5X BETTER PERFORMANCE THAN AN AC ROUTER–6-stream WiFi with up to 5.4Gbps^{+} for fast wireless speeds^{+}



UP TO 5.4GBPS⁺ SPEEDS–600Mbps + 4800Mbps with 6-stream connectivity^{**}



160MHZ CHANNEL SUPPORT^{***}–Doubles the speeds as offered by 80MHz channels to provide Gigabit speeds for compatible mobile devices and laptops



SUPERSPEED USB 3.0 PORT – Up to 10x faster than USB 2.0



5 GIGABIT PORTS–Connect more wired devices for faster file transfer and uninterrupted connections with 1 WAN & 4 LAN Ethernet ports



1024-QAM–25% increased data efficiency and faster speeds than a 256-QAM router

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



AX OPTIMIZED POWERFUL PROCESSOR–1.5GHz triple-core processor ensures smooth 4K UHD streaming

WiFi Range

Faster and expanded coverage throughout your home and for all your devices.



ULTIMATE RANGE–WiFi coverage throughout very large homes



MAXIMIZE RANGE–Four (4) high-power external 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.



USB 3.0 PORT–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



SIMULTANEOUS DUAL BAND WIFI–Reduces interference for better connections to more WiFi devices



ADDITIONAL DFS CHANNELS–Gives you an interference-free experience

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! 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–WiFi 6 supports all current WiFi device and is 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® AX6 6-Stream AX5400 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.



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



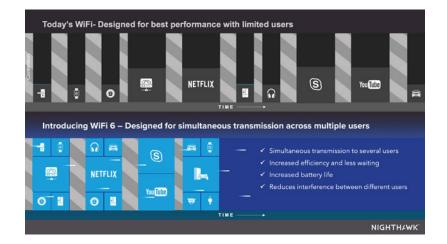
AUTOMATIC FIRMWARE UPDATE–Delivers latest security patches to the router



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

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 in an efficient use of air-time, reduced latency, and increased bandwidth to add more devices to your network.

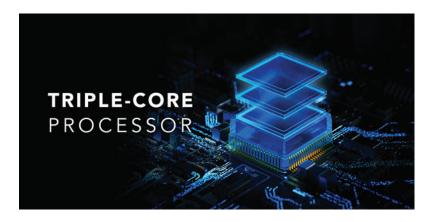


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Powerful Triple-core Processor

Nighthawk AX6 WiFi Router is powered by a powerful triple-core processor designed to transfer multi-Gigs of data. Full-packet processing offload means zero load on the CPU. Enjoy smoother Ultra-HD 4K video streaming and gaming without interruptions.



Gigabit WiFi to Mobile Devices

Support for 160MHz channel allows the Nighthawk AX6 WiFi Router to stream at Gigabit speeds to supported mobile devices, which are increasingly used for video streaming or gaming.



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Nighthawk® AX6 6-Stream AX5400 WiFi Router

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® AX6 6-Stream AX5400 WiFi Router

Connection Diagram



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Nighthawk® AX6 6-Stream AX5400 WiFi Router

Package Contents

- NETGEAR[®] Nighthawk[®] AX6 6-stream AX5400 WiFi Router (RAX50)
- Ethernet cable
- 4 external antennas
- Quick start guide
- Power adapter

Physical Specifications

- Dimensions: 11.65 x 8.11 x 2.25in (295.8 x 206 x 57.2mm)
- Weight: 1.25 lb (566 g)

Technical Specifications

- Wi-Fi 6 (802.11ax) Dual Band WiFi (AX5400)

 2.4GHz AX: 2x2 (Tx/Rx) 1024/256-QAM
 20/40MHz, up to 600Mbps
 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
- Powerful 1.5GHz triple-core processor
- One (1) USB 3.0 port
- Memory: 256MB flash and 512MB RAM
- 160MHz channel support
- Additional DFS channels for interference free experience
- Longer range with 4 high-performance antennas

 Five (5) 10/100/1000 Mbps Gigabit Ethernet ports

 1 WAN & 4 LAN

Key Features

- 4.5X better performance than an AC router–6-stream WiFi with up to 5.4Gbps for fast wireless speeds**
- More WiFi for more devices–OFDMA allows efficient data transmission to multiple devices at the same time. Uplink OFDMA improves scheduling during high volumes of upload traffic, particularly when that traffic is created simultaneously[§]
- 160MHz channel support^{***}-Doubles the speeds as offered by 80MHz channels to provide Gigabit speeds for compatible mobile devices and laptops
- Powerful processor– 1.5GHz triple-core processor ensures smooth 4K UHD streaming & gaming
- 4 Gigabit LAN Ethernet ports–Connect more wired devices for faster file transfer and uninterrupted connections
- 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
- Latest security standard–Supports WPA3 the latest and cutting-edge Wi-Fi 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



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.

* 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. NETGEAR makes no representations or warranties about this product's compatibility with AX standards.

** 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.
- ‡ As compared to an AC1200 2x2 router.

For indoor use only.

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