Data Sheet | RAX70

Nighthawk® AX8 8-Stream AX6600 Tri-Band WiFi Router



WiFi 6 for Today's Smart Devices

Nighthawk® AX8 Tri-Band 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 40 devices in your growing home network. Blazingfast combined WiFi speeds up to 6.6Gbps and AX optimized 1.5GHz quad-core processor powers smart home automation, ultrasmooth 4K UHD streaming, online gaming, and more. With NETGEAR Armor[™], 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. One-year subscription included.^{††} Experience the ease of managing your kids` time online across their connected devices and promote healthy habits anywhere they go with NETGEAR Smart Parental Controls^{™ ∞}.

[∞] NETGEAR Smart Parental Controls[™] are not available in all regions and countries. Visit www.netgear.com/ NETGEAR-SPC-availability for availability.



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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. 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 peformance, on the router amplify WiFi signals for maximized range and reliable coverage.

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8-Stream Tri-Band WiFi

Ultra WiFi 6 performance delivering multiple 4K streaming 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.

Quad-core 1.5GHz Processor

More processing power increases the overall performance of your network.











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Nighthawk® AX8 8-Stream AX6600 Tri-Band WiFi Router

Speed

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



UP TO 6.6GBPS SPEEDS–1.2+4.8Gbps + 600Mbps⁺ with 8-stream connectivity^{**}



4x4 MU-MIMO[‡]–Go faster by simultaneously streaming to multiple devices



AX OPTIMIZED QUAD-CORE PROCESSOR-1.5GHz quad-core processor ensures smooth 4K UHD streaming & gaming



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



ONE 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



MULTI-GIG EXPERIENCE–Maximize your available Internet speeds with link port 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.



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–1.5GHz quad-core processor ensures smooth 4K UHD streaming & gaming - ideal for Gigabit Internet speeds

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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-Six (6) 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.



READYSHARE® USB ACCESS-Wirelessly access & share USB hard drive via USB port



One 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



(p)(p)(p) 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 AX8 antennas come pre-optimized for best WiFi performance



ADDITIONAL DFS CHANNELS- Reduce interference from neighboring networks for smoother streaming

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Nighthawk® AX8 8-Stream AX6600 Tri-Band WiFi Router

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



AX WIFI 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

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. One-year subscription included^{††}



NETGEAR SMART PARENTAL CONTROLS $^{\rm m}-$ Easily manage your kids time online across their connected devices $^{\rm m}$



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

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Powerful Quad-core Processor

Nighthawk AX8 Tri-Band WiFi 6 Router is powered by a 1.5GHz 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 Tri-Band 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).



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Gigabit WiFi to Mobile Devices

Support for 160MHz channel allows the Nighthawk AX8 Tri-Band WiFi 6 Router to stream at Gigabit speeds to supported mobile devices, which are increasingly used for video streaming or gaming.



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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Tri-Band WiFi

The Nighthawk AX8 AX6600 Router with breakthrough Tri-Band WiFi technology delivers a massive combined wireless speed of up to 6.6Gbps. The AX8 optimizes WiFi performance by intelligently assigning every device to the fastest WiFi band possible and doing so allows devices to connect at their maximum speed. Even if everyone and everything in the home that's connected to the Internet is streaming, gaming, working, playing, socializing or updating at the same time, the AX8 won't miss a beat–you'll enjoy seamless clarity and zero lag.

Tri-Band WiFi provides 3 dedicated WiFi Bands





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State-of-the-art Industrial Design

The next-generation Nighthawk AX8 Tri-Band WiFi 6 Router design conceals six (6) 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!

- 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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NETGEAR Armor[™]

Powered by Bitdefender[®], NETGEAR Armor[™] 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[™] 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[®] 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.

Nighthawk® AX8 8-Stream AX6600 Tri-Band WiFi Router

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NETGEAR Smart Parental Controls^{™∞}

Creating the safest online experience for your kids is important and our built-in Smart Parental Controls makes it easy.

You are in control of your kids' Internet access:

- Pause the Internet for needed breaks
- Create custom profiles to manage online time for each kid

With the Premium subscription*, you get even more insights into your kids' online activities to promote healthy habits:

- Get a detailed report of your kids' Internet usage and block any sites
- Customize filters for your kids and limit their Internet time

Key Features:



[∞]NETGEAR Smart Parental Controls[™] are not available in all regions and countries. Visit www.netgear.com/NETGEAR-SPC-availability for availability.

* NETGEAR Smart Parental Controls™ Premium requires a paid subscription after the 30-day free trial. (No credit card required for the trial). Visit netgear.com/spc for more information.

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Connection Diagram



Nighthawk® AX8 8-Stream AX6600 Tri-Band WiFi Router

Package Contents

- NETGEAR[®] Nighthawk[®] AX8/8-stream AX6600 Tri-Band WiFi 6 Router (RAX70)
- Ethernet cable
- Quick start guide
- Power adapter

Physical Specifications

- Dimensions:
- Folded size: 11.85 x 8.19 x 3.23 in (301 x 208 x 82 mm)
- <u>Unfolded size</u>: 13.66 x 8.19 x 6.50 in (347 x 208 x 165 mm)
- Weight: 2.58 lb (1171 g)

Technical Specifications

- WiFi 6 (802.11ax) Tri-Band WiFi (AX6600)
 2.4GHz AX: 2x2 (Tx/Rx) 1024/256-QAM 20/40MHz, up to 0.6Gbps
 - 5GHz AX: 2x2 (Tx/Rx) 1024/256-QAM 20/40/80MHz, up to 1.2Gbps
 - 5GHz AX: 4x4 (Tx/Rx) 1024/256-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
- One (1) USB 3.0 port
- Powerful quad-core 1.5GHz
 processor
- 160MHz channel support
- Additional DFS channels reduce interference from neighboring networks
- MU-MIMO[‡]–Simultaneous streaming of data to multiple devices
- Longer range with 6 high-performance antennas
- 5 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
- IPv6 support (Internet Protocol Version 6)
- Memory: 256MB NAND flash and 512MB DDR3 SDRAM
- On/off LED light switch

Key Features

- 5.5X better performance than an AC router–8-stream WiFi with up to 1.2 + 4.8Gbps + 600Mbps[†] for ultra-fast wireless speeds^{**}
- Up to 4 simultaneous WiFi streams– 4-stream MU-MIMO enables up to four (4) 1x1 devices at the same time
- 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 quad-core processor ensures smooth 4K UHD streaming & gaming
- Dynamic QoS-Prioritizes Internet traffic by application and device for smoother streaming
- 5 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 access from anywhere to manage your network away from home
- NETGEAR Armor[™]-Advanced cyber threat protection for your home network and your connected devices^{††}
- NETGEAR Smart Parental Controls[™]− Easily manage your kids time online across their connected 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

System Requirements

 Microsoft[®] Windows 7, 8, 10, Vista[®], XP[®], 2000, Mac OS[®], UNIX[®], or Linux[®]

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 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
- NETGEAR Armor[™]-Advanced cyber threat protection for your home network and your connected devices. One-year subscription included^{††}
- NETGEAR Smart Parental Controls[™]− Easily manage your kids time online across their 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

Support

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



Nighthawk® AX8 8-Stream AX6600 Tri-Band WiFi Router



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.

^a 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 6600Mbps wireless speeds achieved when connecting to other 802.11ax 6600Mbps 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.

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

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⁺⁺ NETGEAR Armor[™] is free during the initial 1-year free period. A yearly subscription, after the trial period, protects your connected devices. Visit www.netgear.com/armor. For indoor use only.

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