

NIGHTHAWK®Nighthawk® RAXE500
AXE11000 Tri-Band WiFi Router

WiFi 6E: Expanding WiFi with New Speeds

Nighthawk® RAXE500 Tri-Band WiFi 6E Router is powered by WiFi 6E, delivering the smoothest and fastest streaming, eLearning, video conferencing, and gaming experience. Now you can have all the power of 6th generation WiFi plus expanded speeds, connections, and capacity with a completely new and wider 6GHz WiFi band that has up to 3.5X more

WiFi channels. Up to 9x faster^Δ 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

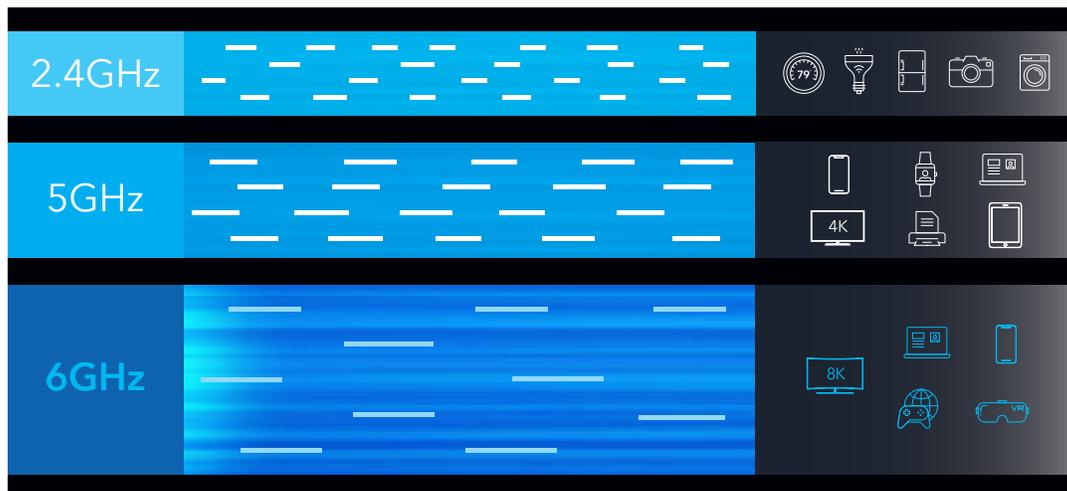
on the router amplify WiFi signals for maximized range and reliable coverage for a 5-6 bedroom home. With NETGEAR Armor™, you get complete cyber threat protection built into your router for an unlimited number of devices connected to your network, including IoT devices, tablets, computers, and smartphones.

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WiFi 6E: Expanding WiFi with New Speeds

Introducing WiFi 6E, delivering the smoothest and fastest streaming, eLearning, video conferencing, and gaming experience. Now you can have all the power of 6th-generation WiFi plus expanded speeds, connections, and capacity thanks to a completely new and wider 6GHz WiFi band with more WiFi channels.

- **New 6GHz WiFi Band**—Exclusive access for only devices supporting the new 6GHz band means less congestion and faster speed
- **More Spectrum**—Up to 200% more spectrum than dual band (2.4GHz & 5GHz) WiFi to WiFi 6E devices
- **More High-Bandwidth WiFi Channels**—Up to 3.5X more high-bandwidth 160MHz WiFi channels for applications such as your 8K video streaming
- **Ultra-Low Latency**—Less traffic on the 6GHz band gives you lower latency for your AR/VR gaming and other WiFi-intense applications
- **Cutting-Edge WPA3 Security**—The latest WiFi security protocol to keep your family and network safe

WiFi 6E delivers more bandwidth for new devices

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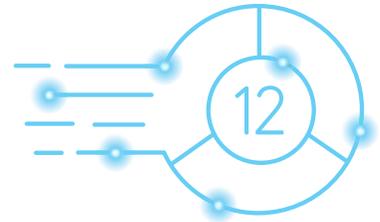
New 6GHz WiFi Band

Access the smoothest and fastest streaming experience for eLearning, video conferencing, and AR/VR gaming.



12-Stream Tri-Band WiFi

Tri-Band WiFi 6E delivers multiple 4K/8K streaming, ultra-low latency gaming & new blazing-fast Internet speeds.



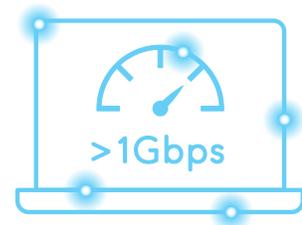
Multi-Gigabit Internet

Maximize your Internet speeds up to 2.5Gbps with new versatile Ethernet wired connections.



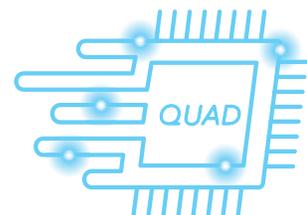
Greater than 1Gbps WiFi Speeds

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



Quad-core 1.8GHz Processor

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



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Speed

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



NEW 6GHZ WIFI BAND**—Enjoy faster speed and less congestion with up to 200% more available spectrum than dual band (5GHz & 2.4GHz) WiFi alone



UP TO 10.8GBPS† SPEEDS—1.2 + 4.8 + 4.8Gbps with 12-stream connectivity**



4X4 MU-MIMO†—Go faster by simultaneously streaming to multiple devices



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



MULTI-GIG 2.5G ETHERNET PORT—2.5X 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—Allows efficient data transmission to devices simultaneously§



12 STREAMS TRI-BAND WIFI—12 WiFi streams (four streams of 6GHz, four streams of 5GHz, and four streams of 2.4GHz) means more available bandwidth and less congestion for all devices on WiFi



AX-OPTIMIZED 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



MORE HIGH-BANDWIDTH WIFI CHANNELS—Blazing-fast speed and less interference with 3X more high-bandwidth 160MHz WiFi channels

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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 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 2.4GHz, 5GHz & 6GHz devices



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



ULTRA-LOW LATENCY—Very few devices on the new 6GHz band means lower latency for gaming and real-time traffic



PRE-OPTIMIZED ANTENNAS—Unfold and set antennas on the router, no further adjustment required. The AXE12 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!



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

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



GUEST NETWORK—Separate and secure network for your guests



AUTOMATIC FIRMWARE UPDATE—Delivers latest security patches to the router



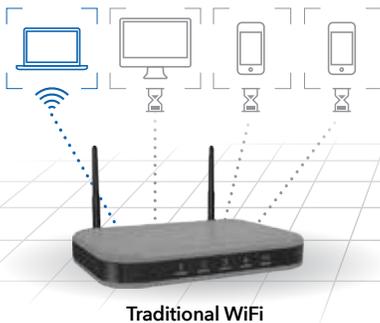
LATEST SECURITY STANDARD—Supports WPA3 the latest and cutting-edge WiFi security protocol

4x4 Multi-user MIMO

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.

Enjoy simultaneous streaming with MU-MIMO

Data sent to one device at a time



Data sent to multiple devices simultaneously



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Nighthawk® RAXE500 AXE11000 Tri-Band WiFi Router

Ultra-powerful AX-optimized Quad-core Processor

Nighthawk RAXE500 Tri-Band WiFi 6E 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.



Award-winning Industrial Design

This next-generation Nighthawk RAXE500 Tri-Band WiFi 6E 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.™



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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



NIGHTHAWK®Nighthawk® RAXE500
AXE11000 Tri-Band WiFi Router**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.

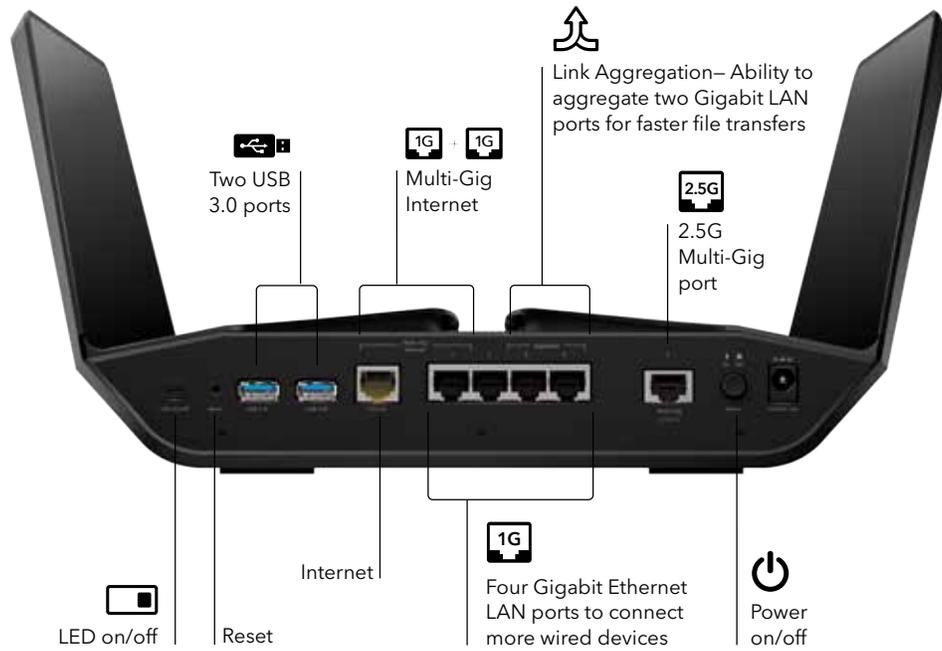
-  **EXPLOIT PREVENTION/IDS**—Protects your data and devices by blocking attacks—like malicious intrusions—that try to exploit vulnerabilities in your connected devices or software.
-  **AUTOMATIC THREAT BLOCKING**—Blocks viruses, ransomware, phishing, spoofing, and other advanced cyberattacks threatening 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.

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Connection Diagram



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Nighthawk® RAXE500 AXE11000 Tri-Band WiFi Router

Package Contents

- Nighthawk® AXE11000 Tri-Band WiFi 6E Router (RAXE500)
- Ethernet cable
- Quick start guide
- Power adapter

Physical Specifications

- Dimensions:
 - **Folded size:** 11.7 x 8.7 x 3.1 (298 x 221.2 x 78 mm)
 - **Unfolded size:** 13.5 x 8.7 x 6.7 in (345 x 221.2 x 169.5 mm)
- Weight: 3.2 lb (1.45 kg)

Technical Specifications

- WiFi 6E (IEEE® 802.11ax) Tri-Band WiFi (AXE11000)
 - 2.4GHz AX: 4x4 (Tx/Rx) 1024/256-QAM 20/40MHz, up to 1.2Gbps
 - 5GHz AX: 4x4 (Tx/Rx) 1024/256-QAM 20/40/80/160MHz, up to 4.8Gbps
 - New 6GHz AX: 4x4 (Tx/Rx) 1024/256-QAM 20/40/80/160MHz, up to 4.8Gbps
 - Backwards compatible with IEEE 802.11 a/b/g/n/ac WiFi
 - Supports new WiFi 6E devices on 6GHz WiFi band
- 1024-QAM—25% data efficiency and faster speeds than a 256-QAM router
- MU-MIMO±—4-stream MU-MIMO enables up to four (4) 1x1 devices at the same time
- 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 reduce interference from neighboring networks
- 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 (four streams each for 2.4GHz, 5GHz & 6GHz) 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)
- WiFi 6E 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
- 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††
- 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

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 cutting-edge WiFi security protocol
- 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

Support

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

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Nighthawk® RAXE500 AXE11000 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.

† Maximum wireless signal rate derived from IEEE 802.11 specifications. Actual data throughput and wireless coverage will vary and be lowered by network and environmental conditions, including network traffic volume, device limitations, and building construction. NETGEAR makes no representations or warranties about this product's compatibility with future standards. Up to 10.8Gbps wireless speeds achieved when connecting to other 802.11ax 10.8Gbps devices.

Δ As compared to a WiFi 5 (802.11ac) router.

** Clients must support 6GHz band (WiFi 6E).

§ Requires compatible AX clients with DL-OFDMA and UL-OFDMA support.

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

‡ MU-MIMO capability requires both router and client device to support MU-MIMO.

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

™ 6GHz band is limited to indoor range.

For indoor use only.

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