# NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router Specification and DataSheet

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**NETGEAR**

**NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router**

**Performance & Use**



- WiFi speeds up to 600+1300Mbps†
- Dual-core processor
- Advanced features for lag-free gaming
- Prioritized bandwidth for streaming videos or music
- Now with NETGEAR genie® with remote access

**The NETGEAR Difference – R6900**

- Beamforming+ improves range & performance for both 2.4 & 5GHz devices
- ReadyCLOUD® USB Access—Enjoy personal and secure cloud access to USB storage anytime, anywhere
- High-power amplifiers & antennas to extend your WiFi coverage
- Upstream & downstream QoS for the best gaming & video streaming experience
- Airtime Fairness® prevents network lag when slower devices connect
- Free automatic backup software for Windows® PC & Time Machine® compatible with Macs
- Easy & automatic installation of the NETGEAR router with Internet provider gateway to upgrade your WiFi
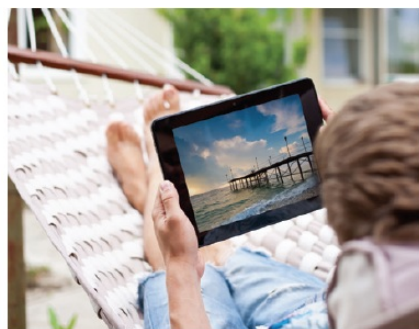
### GAMING | FOR THE WIN

Avoid character freezing & enjoy lag-free gaming with the ultimate in 11AC speed & performance. Nighthawk® delivers AC1900 WiFi, a powerful dual-core processor, & advanced upstream QoS for optimized gameplay on consoles. When microseconds count, let Nighthawk® accelerate your game. For the win.

### STREAMING | UNLIMITED HD

Stop buffering and start enjoying uninterrupted streaming media. With features like downstream QoS, Beamforming+, and a built-in iTunes® server you'll begin to stream like you mean it. Access your stored media quickly with USB 3.0 and keep it safe with free automatic backup software for PCs & Time Machine® compatible with Macs.

### MOBILE | UP TO 100% FASTER

Improve your mobile WiFi speeds by up to 100% with Nighthawk®! High-power amplifiers & antennas help extend WiFi coverage throughout large homes & even backyards. For the first time, Beamforming+ focuses WiFi signals to both 2.4 & 5GHz devices. With signals locked onto your device, experience what it really means to be mobile!

## Speed

Get the fastest WiFi currently available & enjoy a blazing-fast, lag-free WiFi experience for gaming, video streaming or surfing.

- WORLD'S FASTEST WIFI—Up to 600+1300 Mbps†

- GIGABIT WIFI—Next-generation WiFi now at Gigabit speeds

- GIGABIT WIRED—Ideal for HD gaming & video

- DUAL CORE PROCESSOR—Boosts wireless, wired & WAN-to-LAN performance

## WiFi Range

Got range? Homes come in all shapes and sizes and Nighthawk Smart WiFi Router provides WiFi coverage no matter where you connect in your home.

- ULTIMATE RANGE—WiFi coverage throughout very large homes

- ANTENNAS—High-power amplifiers with 3 external antennas

## Sharing

With NETGEAR, sharing across your network is fun and easy, anything from accessing stored photos & music to wireless printing. And enjoy personal and secure cloud access to USB storage anywhere with ReadyCLOUD.

- DLNA®—Find & play your media on DLNA TVs & game consoles

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

- ONE SUPERSPEED USB 3.0 PORT—Up to 10x faster than USB 2.0

- READYCLOUD® USB ACCESS—Enjoy personal & secure cloud access to USB storage anytime, anywhere

- READYSHARE PRINTER—Wirelessly access & share a USB printer

- TIME MACHINE—Automatic Mac backup to a USB hard drive connected to the router

- iTunes® COMPATIBLE—Play your USB-stored music using AirPlay or Apple Remote™

## 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.

- SIMULTANEOUS DUAL BAND—Reduces interference for better connections to more WiFi devices

- ADVANCED QoS—Downstream & upstream QoS automatically recognize & prioritizes streaming & gaming applications

- AIRTIME FAIRNESS—Prevent network lag when slower devices connect

- BEAMFORMING+—Boosts speed, reliability, & range of WiFi connections for 2.4 & 5GHz

## 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!

- EASY INSTALL—Easy setup for iPad®, tablets, smartphones & computers

- NETGEAR GENIE® APP—Personal dashboard to monitor, control & repair your home network. Includes remote access to manage your network away from home

- PUSH 'N' CONNECT —Easy push button WiFi connections (WPS)

- WIFI & POWER ON/OFF —Convenient power savings

## Security

Maintain high security across your network to help ensure your privacy & family are safe while online. Whether it's preventing phishing & spyware or just limiting access for kids & guests, NETGEAR has you covered.

- VPN SUPPORT —Secure access to your home network

- PARENTAL CONTROLS—Website filtering for all your connected devices

- GUEST NETWORK ACCESS—Separate & secure access for guests

- SECURE WIFI CONNECTIONS—High-level wireless security with WPA/WPA2

- OPEN SOURCE SUPPORT—Download open-source firmware from **www.myopenrouter.com**

- PERSONAL FTP SERVER—Customized free URL to create an FTP server

**BEAMFORMING+—FOR MORE RELIABLE CONNECTIONS**

Unlike typical WiFi routers that just blast the WiFi signals in all directions, with Beamforming+ the router & device communicate with each other, so the router can directly beam the WiFi signal to the device. Boosting speed, reliability, and range for both Implicit and Explicit 2.4 & 5GHz WiFi devices, the result is a stronger, faster, more reliable connection that is locked in even when the device is moved around the home.

- WiFi Signal Focus—Focuses signals from the wireless router to WiFi devices like smartphones, tablets & laptops
- Automatic Signal Management—Checks with your device to keep the WiFi signal at its optimal strength
- Device Connections—Designed for home environments to support multiple WiFi device connections for the highest quality
- WiFi Coverage—Reduces dead spots, & boosts signal strength

**NETGEAR genie®—HOME NETWORKING SIMPLIFIED**

NETGEAR genie® makes getting the most out of your home network fun & easy. NETGEAR genie® allows you to easily monitor, connect & control your home network from an iPhone®, iPad® or Android® device. With NETGEAR genie® you can share & stream music or videos, diagnose & repair network issues, set up parental controls & more.

- Network Map—Allow or block access to your network using a real-time map of connected devices
- Traffic Meter—Track your internet data usage
- My Media®—Find & play media files in your network
- EZ Mobile Connect—Scan QR code to connect to your home network
- For iPhone®, iPad® or Android® devices
- Remote access to manage your network away from home. View the network map, block WiFi devices, set up guest WiFi & manage Parental Controls—anytime, anywhere

**Connection Diagram**



USB 3.0

**Gigabit Ethernet** | **Internet** | **Power On/Off**

## Package Contents

- Nighthawk AC1900 Smart WiFi Router (R6900v2)
- Three (3) detachable antennas
- Ethernet cable
- Quick start guide
- Power adapter

## Physical Specifications

- **Dimensions:** 11.22 x 7.26 x 1.97 in (285 x 184.5 x 50 mm)
- **Weight:** 1.65 lb (750 g)

## Standards

- One (1) USB 3.0 port
- IEEE® 802.11 b/g/n 2.4GHz + 256 QAM support
- IEEE® 802.11 a/n/ac 5.0GHz
- Five (5) 10/100/1000Mbps—(1 WAN & 4 LAN) Gigabit Ethernet ports

## Technical Specifications

- AC1900 (600 Mbps @ 2.4GHz with 256 QAM support + 1300 Mbps @ 5GHz 11ac)†
- Simultaneous Dual Band WiFi—Tx/Rx 3×3 (2.4GHz) + 3×3 (5GHz)
- Implicit & Explicit Beamforming
- Powerful dual-core processor
- High-power amplifiers—Three (3) external antennas

- **Memory:** 128 MB flash and 256 MB RAM
- Downstream & upstream QoS—Automatically recognizes & prioritizes applications
- ReadySHARE® USB—Share your USB hard drive and printer
- ReadyCLOUD® USB Access—Enjoy personal & secure cloud access to USB storage connected to your Nighthawk® WiFi Router anytime, anywhere
- IPv6 Support (Internet Protocol Version 6)
- On/off LED lights option

**System Requirements**

- Microsoft® Windows® 7, 8, 10, Vista®, XP®, 2000, Mac OS®, UNIX®, or Linux®
- Microsoft® Internet Explorer® 5.0, Firefox® 2.0, Safari® 1.4, or Google Chrome™ 11.0 browsers or higher

**Security**

- Customized free URL to set up personal FTP server
- VPN support—Secure remote access
- Guest network access—Separate & secure
- WiFi Protected Access® (WPA/WPA2—PSK)
- Double firewall protection (SPI and NAT)
- Denial-of-service (DoS) attack prevention

**Warranty**

- **[www.netgear.com/about/warranty](www.netgear.com/about/warranty)**

**Support**

- 90-day complimentary technical support*

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, the NETGEAR Logo, Nighthawk, MyMedia, ReadySHARE, ReadyCLOUD, and genie are trademarks of NETGEAR, Inc. Mac, Mac OS, Time Machine, Apple Remote Desktop, iTunes, iPhone, iPad, Macbook Air, and the Mac logo are trademarks of Apple Inc., registered in the U.S. and other countries. Other brand names mentioned herein are for identification purposes only and may be trademarks of their respective holder(s). Information is subject to change without notice. ©2017 NETGEAR, Inc.

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# FREQUENTLY ASKED QUESTIONS

What is the maximum wireless speed supported by the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router?

The NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router supports a maximum wireless speed of 1900 Mbps.

What is the maximum range of the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router?

The range of the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router can vary depending on environmental factors, but it is designed to cover a typical home or small office.

Does the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router support dual-band technology?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router supports dual-band technology, operating on both 2.4GHz and 5GHz frequencies.

Can the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router be used with a cable modem?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router can be used with a cable modem as a standalone router or in conjunction with a modem/router combo device.

Does the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router have USB ports?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router has two USB ports, which can be used for sharing storage devices or printers over the network.

What security features does the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router offer?

The NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router offers various security features, including WPA/WPA2 encryption, a built-in firewall, and the ability to set up a guest network.

Can I prioritize certain devices or applications with the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router supports Quality of Service (QoS) features, allowing you to prioritize specific devices or applications for better performance.

Is it possible to set up parental controls on the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router has built-in parental controls that enable you to restrict access to certain websites or set time limits for specific devices.

Can I connect multiple devices to the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router simultaneously?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router supports multiple device connections and is designed to handle the demands of a typical home network.

Does the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router support VPN (Virtual Private Network) passthrough?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router supports VPN passthrough, allowing you to connect to a VPN server from devices connected to the router.

What is the physical size of the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router?

The NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router has dimensions of approximately 11.22 x 7.26 x 1.97 inches (285 x 185 x 50 mm).

Can I set up a guest network with the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router allows you to set up a guest network, which provides separate access for visitors without giving them access to your main network.

Does the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router support IPv6?

Yes, the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router supports IPv6, the latest version of the Internet Protocol.

What is the maximum number of wireless devices that can connect to the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router?

The NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router can support a large number of wireless devices simultaneously, typically around 30 or more devices.

Can I connect a printer to the USB port of the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router for wireless printing?

Yes, you can connect a compatible printer to the USB port of the NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router and use it for wireless printing from any connected device on the network.

**DOWNLOAD THE PDF LINK: NETGEAR R6900 Nighthawk AC1900 Smart WiFi Router Specification and DataSheet**

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