

ASUS RT-BE90U WiFi 7 AiMesh Extendable Router



BE9400 Tri-band WiFi 7
(802.11be) AiMesh
Extendable Router, 320MHz,
4K-QAM, MLO, Quad 2.5G
ports, Commercial-Grade
Network Security, Smart
Home Master



- **Ultrafast WiFi 7** – WiFi 7 (802.11be) tri-band extendable router boosts speeds up to 9400 Mbps, with 320MHz and 4096-QAM increasing a single frequency band's transmission speed by 2.4 times
- **Unleashing Multi-link operation (MLO) for Ultra-Smooth Connectivity** – Link to multiple bands at the same time to ensure stable internet connections and efficient data transfers
- **Quad 2.5G Ports** – Traffic via 2.5G ports has top priority, supported by flexible WAN/LAN port configurations to maximize wired connectivity
- **Smart Home Master** – Easily establish up to three SSIDs with Smart Home Master for easy IoT device setup and management, instant VPN connections, and convenient parental controls
- **Hassle-free AiMesh Extendable Network** – AiMesh extendable routers enable whole home seamless roaming with rich, advanced features
- **Commercial-Grade Network Security** – Network security with commercial-grade AiProtection, plus a one-tap security scan and Safe Browsing
- **4G LTE/5G mobile tethering** – Supports 4G LTE/5G mobile tethering for always-on internet



ASUS RT-BE90U

Next-Level Smart Home WiFi 7

Elevate your smart home with blazing-fast tri-band WiFi 7 speeds of up to 9400 Mbps, boosted range with ASUS RF and AI-boosted Smart AiMesh technology. The ASUS RT-BE90U unleashes superior 6 GHz WiFi and ultra-fast 2.5G networking. With next-gen ASUS Network Security and a suite of advanced network technologies such as IoT Network, the RT-BE90U safeguards your network end-to-end, 24/7.



IEEE 802.11be

Faster, Smarter Home WiFi 7

The ASUS RT-BE90U boasts cutting-edge WiFi 7 technology with superior 6 GHz band. Enjoy next-generation speeds and connected experiences and cloud computing, including 8K streaming, HDR gaming, content creation and AI networking.

[Learn more about WiFi 7 >](#)

Tri-band
9400 Mbps

Up to
2.4X Faster
WiFi Speeds

Up to
2X Bandwidth
320 MHz Channels

Up to
20% More Transfers
4K-QAM
*Compared to 1024-QAM

Lag-Free
Connections
6 GHz band boosted MLO

Superior 6 GHz WiFi

Boasting a superior 6 GHz band, the RT-BE90U unleashes blazing-fast tri-band WiFi 7 speeds of up to 9400 Mbps. It ensures comprehensive WiFi compatibility for a wide range of devices, from cutting-edge WiFi 6E mobile devices to legacy IoT devices.



Ultra-Wide 320 MHz Channels

WiFi 7 introduces three ultrawide 320 MHz channels in the 6 GHz band, doubling data transmission capacity. This allows for significantly more simultaneous transmissions at the fastest possible speeds.



Comprehensive MLO Support

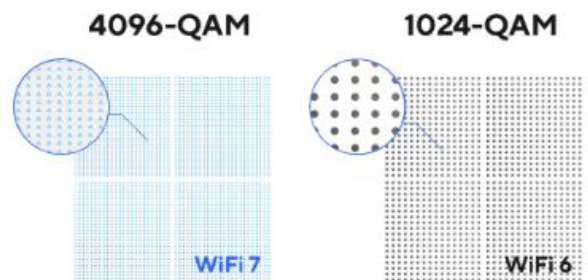
Multi-Link Operation (MLO) enables buffering-free connections by intelligently combining and switching between the 2.4 GHz, 5 GHz, and 6 GHz bands. The ASUS RT-BE90U is built for the future of all WiFi 7 devices, regardless of the MLO mode they use*.



*Supported MLO modes and bands may vary by device. Please refer to device specifications for details.

Efficient 4K-QAM Transmission

Compared to 1024-QAM with WiFi 6/6E, 4096-QAM allows each signal to more densely incorporate larger amounts of data, delivering up to 20% more efficient data transmission*.



*Compared to WiFi 6/6E

Mesh WiFi

AI-Boosted Smart AiMesh

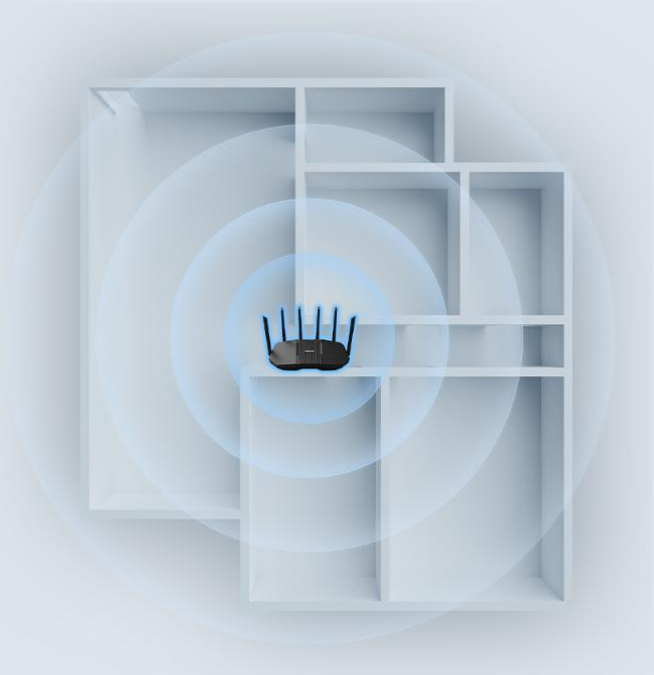
The RT-BE90U harnesses the power of WiFi 7 and next-gen Smart AiMesh technology to deliver wider coverage, a more stable and secure network and a feature-rich network experience – all under one network name for your entire smart home.

[Learn more about extendable routers >](#)



Coverage up to

2,500 sq. ft.



Intelligent Wireless Backhaul

The Smart AiMesh backhaul intelligently leverages WiFi 7 Multi-Link Operation, which automatically aggregates or switches across multiple bands for optimized performance and low latency.



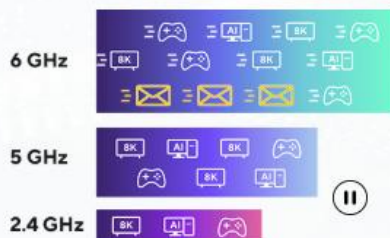
Flexible Backhaul Configurations

Experience lightning-fast speeds even in homes with thick walls. The RT-BE90U offers wireless backhaul and wired 2.5G backhaul options, ensuring a seamless whole-home WiFi experience.



Smart AiMesh MLO

Smart AiMesh uses Multi-link Operation to achieve a faster connection. Intelligent algorithms direct low-priority packets to the less congested band, ensuring that high-priority packets remain lightning-fast for optimal data transmission.



Values Beyond Extension

AiMesh goes beyond just extending coverage or seamless roaming. It works with all compatible ASUS routers, offering easy management, advanced security and smart home features across your entire network.



Specifications

Performance

Engineered for Always-On Connections

The robust design of the ASUS RT-BE90U delivers next-level WiFi and network performance and superior reliability. With six external antennas and six high-power front-end modules, it eliminates WiFi dead zones, delivering reliable signals in all directions.



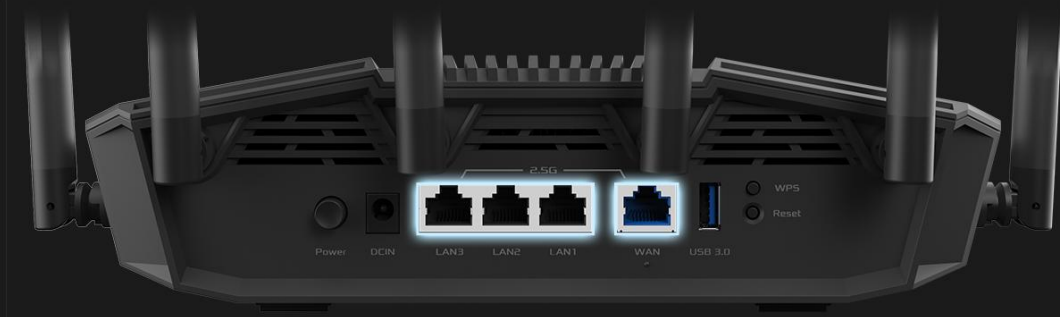
Next-gen Network Powerhouse

Fueled by a quad-core 1.5 GHz CPU and 1 GB of RAM, the RT-BE90U delivers exceptional processing power. This unleashes advanced features, optimizing your network for smoother 8K streaming, HDR gaming, and enhanced AI networking.



Multi-gig Network Connectivity

Enjoy versatile and ultrafast multi-gigabit smart home networking with the RT-BE90U.



Quad 2.5G Ports

The RT-BE90U includes four 2.5G Ethernet ports, ready for next-gen entertainment, home studios and ultra-fast 2.5 Gbps ethernet backhaul.



Versatile WAN Options

The RT-BE90U provides versatile WANs, including a 2.5G WAN port, three 2.5G LAN ports, and a USB WAN for flexible network configurations



4G LTE & 5G Mobile Tethering

Stay connected any time with convenient USB 4G LTE and 5G mobile tethering, even during internet outages or on the go.

How to set up?



Worry-Free WiFi



NETWORK SECURITY

Safeguard Everyone and Every Connected Device

In a connected world, your home network is the gateway to your digital life. Gain complete visibility and control over your home network, defend against emerging threats, and ensure seamless protection for all your connected devices and personal data. ASUS Network Security provides peace of mind with robust router protection, device protection, and secure connections.

[Learn more about ASUS Network Security >](#)



Comprehensive Triple-level Protection

Robust router safeguards with commercial-grade cloud protection powered by Trend Micro™ shield your smart home network, while feature-packed controls and management empower every member of your household to manage their connected devices securely for the ever-evolving cybersecurity landscape. Additionally, advanced encrypted connections help to keep your online activity and data private.



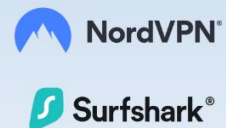
Top-Notch Security Within Reach

The intuitive ASUSWRT interface and mobile router app let you easily monitor, control and manage your network security, including advanced features such as VPNs.



Extendable Custom Network

ASUS AiMesh technology ensures your whole-home WiFi remains protected under the same SSID. The new Smart Home Master unlocks even more advanced settings for customization.



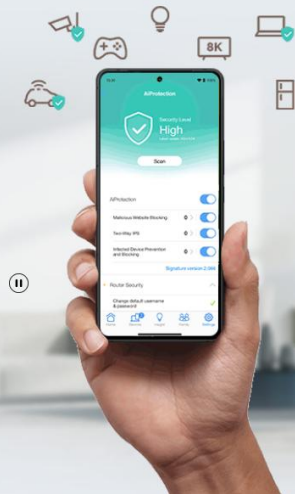
One-Stop Solutions

ASUS partners with trusted security and VPN solution providers to offer one-stop security solutions with optimal network performance.

USER FRIENDLY

Router Protection Made Easy

ASUS Network Security includes convenient network tools such as a one-tap Security Scan for diagnosing network health, fine-tuned settings options, and on-the-go notifications.



Instant Notifications

Receive instant notifications for new device connections to block unknown devices from accessing your network, and group new devices into a user profile.



Unknown device is connected to
RT-BE90U



Auto Security Updates

Secure your router with integrated defense measures that continuously update and scan to protect against malware and emerging threats.

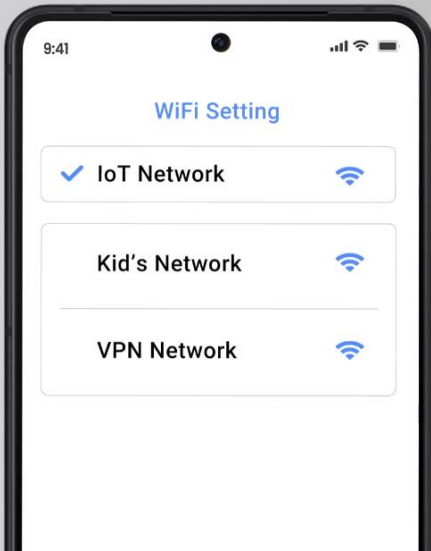


NETWORK SEGMENTATION

Feature-Packed Smart Home Master Subnet

ASUS Smart Home Master subnetwork management streamlines the process of creating or connecting to dedicated subnet via SSIDs with advanced features like parental controls and VPNs.

[Learn more about Smart Home Master Network >](#)



IoT Network

Set up and manage all your IoT devices under one secure SSID to provide enhanced security with commercial-grade protection.



Kid's Network

Create a dedicated SSID just for the kids to easily manage their screen time, without needing to configure each device individually.



VPN Network

Connect to your preferred VPN service with a single click through a dedicated subnetwork.



Parental Controls

Safer, Smarter Family Protection

Advanced family protection and parental controls empower you to cultivate a balanced digital life for you and your kids, all without subscriptions.

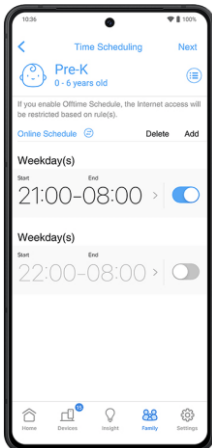
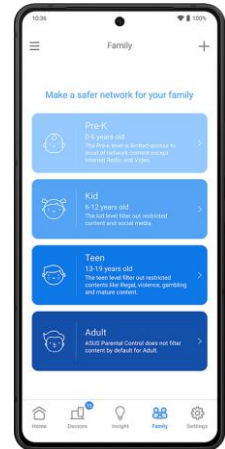


Internet Activity Dashboard

Monitor your kids' internet usage through a comprehensive graphical dashboard. See their online time, data consumption and device-specific activity at a glance.

Preset Age-Level Profiles

Preset profiles automatically filter inappropriate content and set screen time schedules, making it easy to apply settings based on your children's ages.

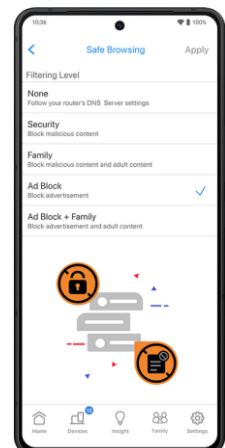


Flexible Time Scheduling

Define online and offline hours for each child, ensuring balanced screen time and fostering healthy digital habits. Reward good behavior with extra online time as positive reinforcement.

Safe Browsing

Customize protection for individual users or a group of devices with safety filters to secure online activities.



VPN

Stay Protected Anywhere, Anytime

Enjoy secure browsing, data privacy and remote access – extensive ASUS VPN capabilities handle it all. The RT-BE90U supports versatile VPN protocols, including the cutting-edge WireGuard® for lightning-fast speeds and optimal performance.

[Learn more about ASUS VPNs >](#)



WireGuard®
(via Ethernet)
Up to 300Mbps

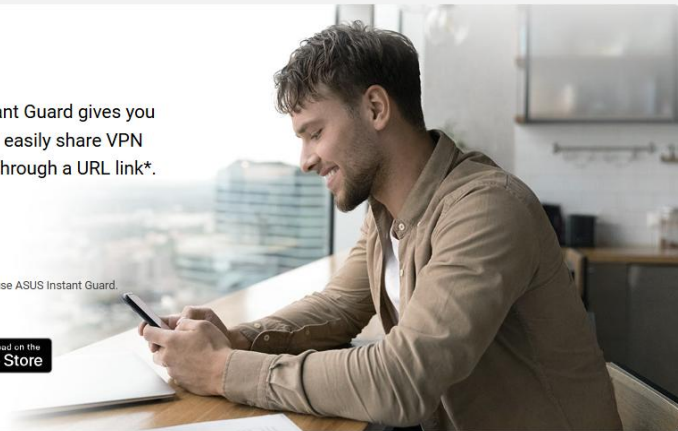
OpenVPN
(via Ethernet) Up to 150Mbps

Instant Guard

When away from home, ASUS Instant Guard gives you a one-tap secure VPN, and you can easily share VPN protection with family and friends through a URL link*.

[How to set it up?](#)

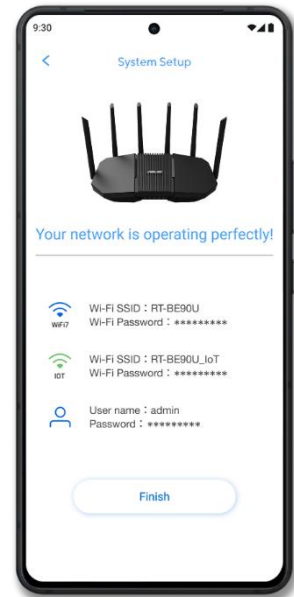
*The router must have a public IPv4 WAN IP address to use ASUS Instant Guard.



Multiple VPN Connection

Connect to multiple encrypted VPN tunnels simultaneously while maintaining performance for other devices on your network.





ASUS ROUTER APP

Three-Step Easy Setup, Powerful Controls

The intuitive interface of the ASUS Router mobile app makes managing your network simple on your smartphone. Simply follow the on-screen directions, and you will be up and running in no time!

Learn more about the ASUS Router App >



RT-BE90U Specification	
Network Standard	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.11ac, IEEE 802.11ax, 802.11be, IPv4, IPv6
Product Segment	BE9400 ultimate BE performance
Data Rate	2.4GHz BE: 2x2 (Tx/Rx) 4096 QAM 20/40MHz, up to 688 Mbps 5GHz BE: 2x2 (Tx/Rx) 4096 QAM 20/40/80/160, up to 2882 Mbps 6GHz BE: 2x2 (Tx/Rx) 4096 QAM 20/40/80/160/320MHz, up to 5764 Mbps
Antenna	External fixed antenna x 6
Transmit/Receive	2.4GHz 2 x 2, 5GHz 2 x 2, 6GHz 2 x 2
Processor	1.5GHz Quad-core Processor
Memory	256 MB Flash
	1 GB DDR4 RAM
Boosts speed	OFDMA (Orthogonal Frequency Division Multiple Access) Beamforming: standard-based and universal 4096-QAM high data rate 20/40/80/160/320 MHz bandwidth
Operating Frequency/Power	2.4 GHz <20dBm, 5 GHz < 30dBm, 6 GHz < 23dBm
Ports/Button	1 x 2.5 Gigabit WAN Port, 3 x 2.5 Gigabit LAN Ports, 1 x USB 3.2 Gen 1x1 Port WPS Button, Reset Button, Power Button
LED Indicator	WAN(Internet) x1, 6GHz x1, 5GHz x 1, 2.4GHz x1, Power x1
Power Supply	AC Input : 100V~240V(50~60Hz) DC Output : 12 V with max. 2.5 A current
AiMesh	AiMesh, Primary AiMesh router, AiMesh node
Alexa	Support Alexa skill
AiProtection	AiProtection Router Security Assessment Malicious site blocking Two-Way IPS
Parental Control	Parental Control Parental Control Customized Internet schedule
Traffic Control	Adaptive QoS Bandwidth Monitor Bandwidth limiter Traditional QoS Traffic Monitor Real-time traffic monitor Wired Traffic Monitor Wireless Traffic Monitor Traffic Analyzer Traffic analysis period : Daily, Weekly, Monthly Website history

Wireless	IPv6 MU-MIMO WiFi Encryption : WPA3 Personal, WPA2 Personal, WPA Personal, WPA Enterprise, WPA2 Enterprise, WPA3 Enterprise, Open System UTF-8 SSID Guest Network Guest Network Connection time limit WPS Wi-Fi MAC address filter Maximum MAC filters : 64 Wireless scheduler Wi-Fi Radar Airtime fairness RADIUS Server Universal beamforming
WAN	Explicit beamforming Dual WAN 3G/4G LTE dongle Android tethering Port forwarding Maximum port forwarding rule : 64 Port triggering Maximum port triggering rule : 32 DMZ, DDNS NAT Passthrough : PPTP, L2TP, IPSec, RTSP, H.323, SIP Passthrough, PPPoE relay Let's Encrypt, Safe browsing, DNS-over-TLS
LAN	DHCP Server, IGMP snooping, IPTV, Manually assign IP address
VPN	Client: L2TP, OVPN, PPTP, WireGuard Server: IPSec, OVPN, PPTP, WireGuard VPN Fusion
USB application	File System : HFS+, NTFS, vFAT, ext2, ext3, ext4 HDD hibernation Safely Remove disk Download master, Media Server Time Machine Samba Server, FTP Server Shared Folder privileges
Administration	Operating mode : Wireless router mode, AiMesh Node Mode, Access point mode, Media Bridge Mode, Repeater Mode Free OS upgrade Firewall Maximum Firewall keyword filter : Max 64 rules Maximum Firewall network service filter : Max 32 rules Maximum Firewall URL filter : Max 64 rules Wake on LAN (WOL) SSH Configuration backup and restore Diagnosis tools, Feedback system, System log New Device Connect Notification Login Captcha Connection Diagnosis Security Scan Auto Firmware Update