ASUS RT-BE82U WiFi 7 AiMesh Extendable Router

AiMesh EXTENDABLE ROUTER

ASUS WiFi 7 Dual-Band Extendable Router, 4K-QAM, MLO, Five 2.5GbE ports, Commercial-Grade Network Security, Parental Control, IoT network, Kid's network and VPN network



- **Ultrafast WiFi 7-** WiFi 7 (802.11be) dual-band extendable router boosts speed up to 6500 Mbps, with 4096-QAM increasing a single frequency band's transmission speed by 1.2 times
- **Five 2.5GbE Ports –** 2.5GbE ports prioritize traffic, optimizing wired internet connectivity for maximum performance
- **Hassle-free AiMesh Extendable Network –** AiMesh extendable routers enable whole home seamless roaming with rich, advanced features
- **Multi-link Operation –** Link to multiple bands at the same time to ensure stable internet connections and efficient data transfers
- **Commercial-Grade Network Security –** AiProtection Pro powered by Trend Micro™, plus a one-tap security scan and Safe Browsing

ASUS
IN SEARCH OF INCREDIBLE

FAST Networking Solutions
FARTHEST · EASY · SECURE · TRUSTED



ASUS RT-BE82U

Worry-Free Smart Home WiFi 7

Elevate your smart home with blazing-fast dual-band Wi-Fi 7 speeds of up to 6500 Mbps and boosted coverage with AI-boosted Smart AiMesh technology. With next-gen ASUS Network Security and a suite of advanced network technologies such as IoT Network, the RT-BE82U safeguard your network end-to-end, 24/7.



IEEE 802.11BE

Faster, Smarter Home WiFi 7

The ASUS RT-BE58U boasts cutting-edge WiFi 7 technology. Enjoy next-generation speeds and connected experiences for home entertainment and cloud computing, including 8K streaming, HDR gaming, content creation, and AI network.

Learn more about WiFi 7 >

Dual-band
3600 Mbps

Dual-band MLO
Lag-free Connection

4K-QAM
Up to 20% Faster Data Transfer*

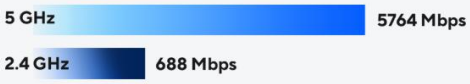
Advanced 160 MHz Channels
Faster, lower latency & more devices

*Compared to WiFi 6/6E 1024-QAM

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Blazing-Fast WiFi Speeds

The RT-BE82U unleashes blazing-fast dual-band WiFi 7 speeds of up to 6500 Mbps, ensuring seamless streaming, gaming, and compatibility with legacy IoT devices.



Comprehensive MLO Support

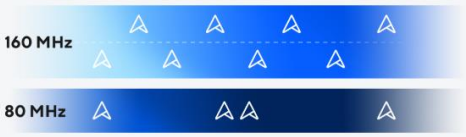
Multi-Link Operation (MLO) enables buffering-free connection by intelligently combining and switching between the 2.4 GHz and 5 GHz bands. ASUS RT-BE82U is built for the future of all WiFi 7 devices, regardless of the MLO mode they use*.



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

Advanced 160 MHz Channels

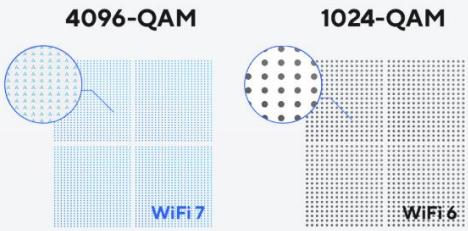
The RT-BE82U supports ultrawide 160 MHz channels, delivering ultrafast data transfer rates, reduced latency, and enhanced performance for a smoother network experience.



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



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MESH WIFI

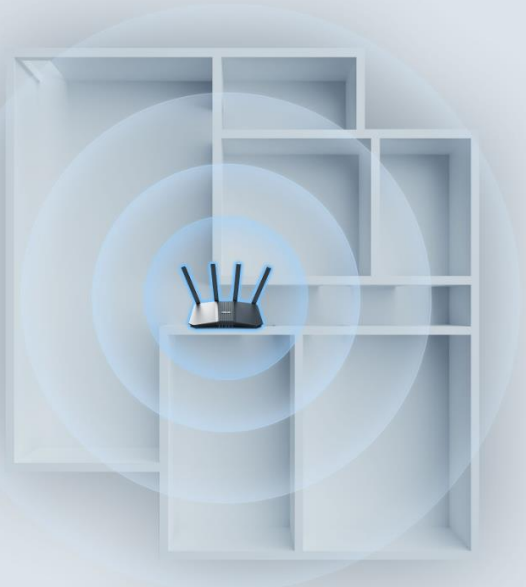
WiFi 7 Powering AiMesh

RT-BE82U utilizes the power of WiFi 7 MLO into next-gen AiMesh technology, delivering 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 >

AiMesh EXTENDABLE ROUTER

Coverage up to
2500 sq. ft.



Extend Your Network Easily

RT-BE82U extends your home network easily with any AiMesh-compatible ASUS router, regardless of WiFi generation. By repurposing your older routers as mesh nodes, you can enhance your network coverage while reducing electronic waste.



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.



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PERFORMANCE

Engineered for Always-On Connection

The robust design of the ASUS RT-BE82U delivers next-level WiFi and network performance and superior reliability. With four external antennas and Six high-power front-end modules, it eliminates WiFi dead zones, delivering reliable signals in all directions.

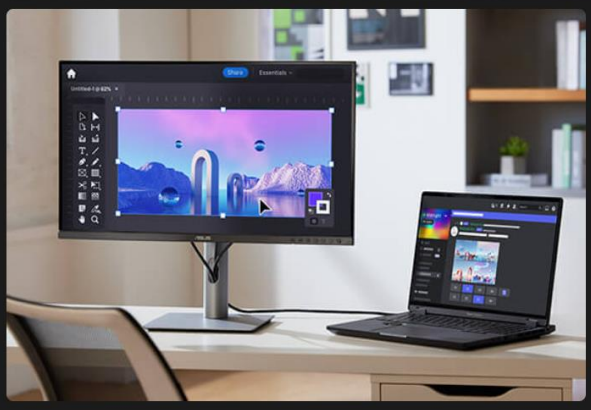


Next-gen Powerhouse

Fueled by a quad-core 2.0 GHz CPU and 1 GB of RAM, the RT-BE82U delivers exceptional processing power. This unleashes advanced features, optimizing your network for smoother 8K streaming, HDR gaming, and enhanced AI networking.



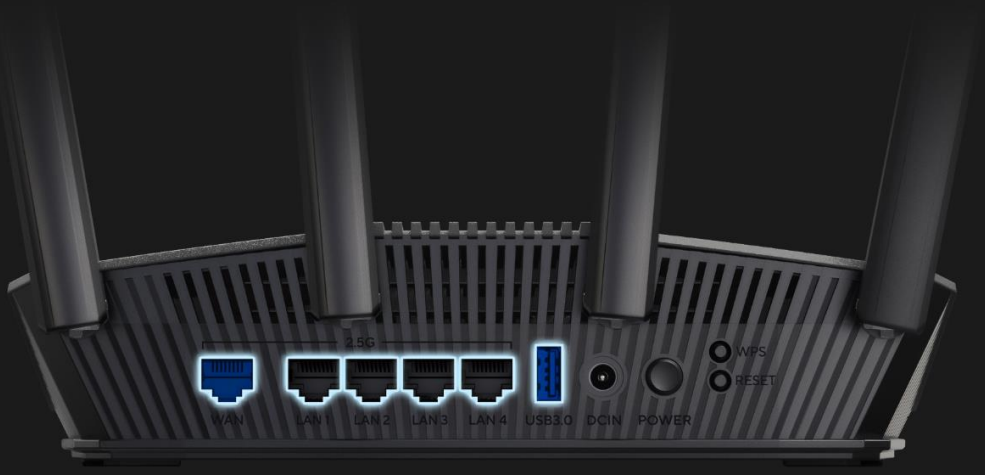




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Connectivity

Enjoy versatile and ultrafast multi-gigabit smart home networking with the RT-BE82U.



Five 2.5G Ports

The RT-BE82U includes five 2.5G Ethernet ports, ready for next-gen entertainment, home studios and ultra-fast 2.5 Gbps ethernet backhaul.



Versatile WAN Options

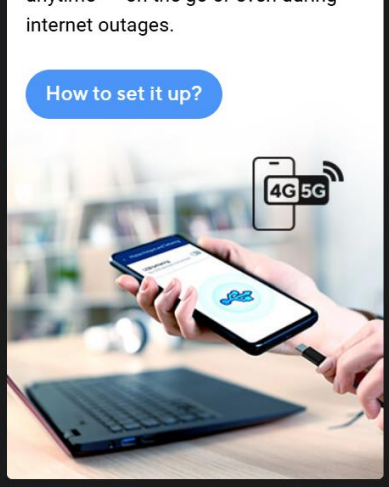
The RT-BE82U provides versatile WANs, including a 2.5G WAN port, four 2.5G LAN ports, and a USB WAN for flexible network configurations.



4G LTE & 5G Mobile Tethering

Convenient USB 4G LTE and 5G mobile tethering allows you to stay connected anytime — on the go or even during internet outages.

How to set it up?



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ENVIRONMENT

Sustaining an Incredible Future

ASUS is committed to sustainability via durable product design and eco-friendly packaging.





Up to 30% of PCR Plastic

The RT-BE82U uses 30% post-consumer recycled (PCR) plastics with higher quality, functionality, and durability than competing designs.



Certified FSC™ Mix Packaging

The RT-BE82U comes with FSC® Mix-certified packaging to reduce environmental impact.



Award-winning Reliability

ASUS LAB certification helps to ensure award-winning endurance and efficient performance through rigorous testing.

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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 >

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AiProtection

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.

NordVPN

Surfshark®

One-Stop Solutions

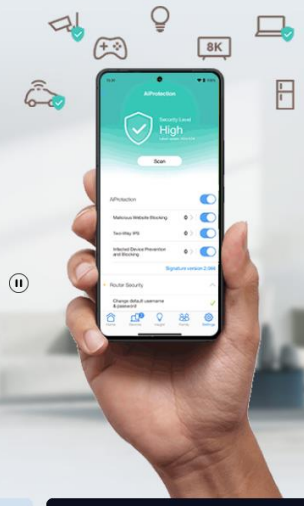
ASUS partners with trusted security and VPN solution providers to offer one-stop security solutions with optimal network performance.

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USER FRIENDLY

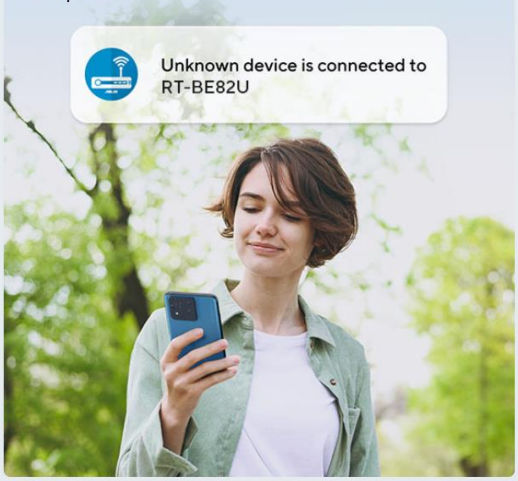
Router Protection Made Easy

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.



Auto Security Updates

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



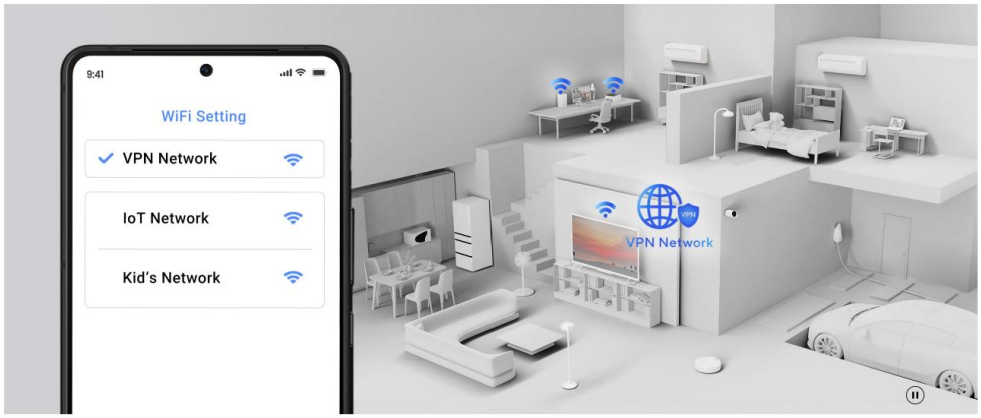
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NETWORK SEGMENTATION

Feature-Packed Smart Home Master SSIDs

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.

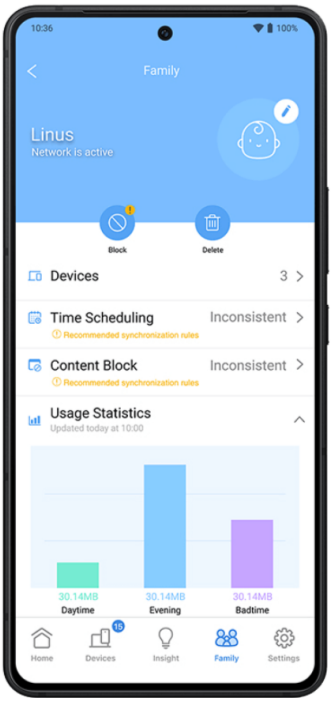


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PARENTAL CONTROLS

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 +

Flexible Time Scheduling +

Safe Browsing +



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VPN

Stay Protected Anywhere, Anytime

Enjoy secure browsing, data privacy, remote access – extensive ASUS VPN capabilities handle it all. The RT-BE82U supports versatile VPN protocols, including the cutting-edge WireGguard® 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

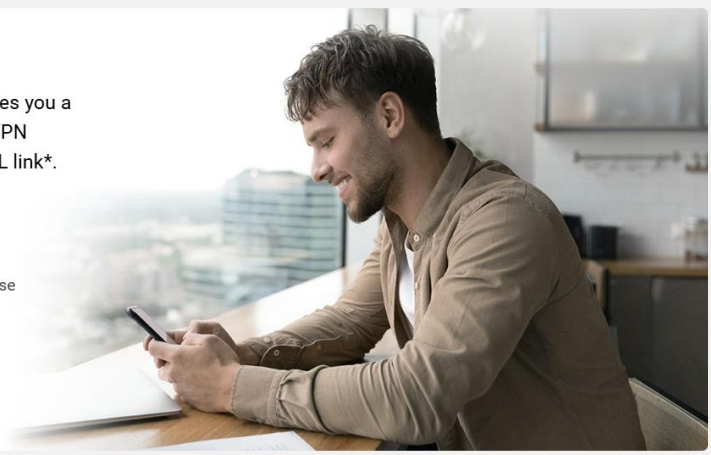
When away from home, ASUS Instant Guard gives you a one-tap secure VPN, and you can easily share VPN protection with family and friends through a URL link*.

How to set it up?

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

GET IT ON Google Play

Download on the App Store



Multiple VPN Connection

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



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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 >

GET IT ON Google Play Download on the App Store



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Specifications

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	BE6500 ultimate BE performance: 688+5764 Mbps
Coverage	Large homes
Data Rate	802.11b: up to 11 Mbps 802.11a/g: up to 54 Mbps 802.11n: up to 300 Mbps 802.11ac(5GHz): up to 3466 Mbps 802.11ax(2.4GHz): up to 574 Mbps 802.11ax(5GHz): up to 4804 Mbps 802.11be(2.4GHz): up to 688 Mbps 802.11be(5GHz): up to 5764 Mbps
Antenna	External antenna x 4
Transmit/Receive	2.4 GHz 2x2 5 GHz 4x4
Processor	2.0 GHz quad-core processor
Memory	256 MB Flash 1 GB RAM
Wi-Fi Technology	OFDMA (Orthogonal Frequency Division Multiple Access) Beamforming: standard-based and universal 4096-QAM high data rate 20/40/80/160 MHz bandwidth
Operating Frequency	2.4 GHz < 20dBm, 5 GHz < 30dBm
Encryption	WPA3-Personal, WPA2-Personal, WPA-Personal, WPA2-Enterprise , WPA- Enterprise , WPS support
Firewall & Access Control	Firewall: SPI intrusion detection, DoS protection Access control: Parental control, Network service filter, URL filter, Port filter
Management	UPnP, IGMP v1/v2/v3, DNS Proxy, DHCP, NTP Client, DDNS, PPPoE Port Trigger, Port Forwarding, DMZ, System Event Log
WAN Connection Type	Internet connection type : PPPoE, PPTP, L2TP, Automatic IP, Static IP
Utilities	Router setup wizard; Firmware restoration; Device discovery

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Specifications

Features	**Router app** **MU-MIMO** **Traffic Analyzer** **Adaptive QoS** **AiProtection Pro** **Parental Control** **Guest Network** : Up to 3 SSIDs **NAT Pass-Through**: PPTP Pass-Through, L2TP Pass-Through, IPSec Pass-Through, RTSP Pass-Through, H.323 Pass-Through, PPPoE relay **Mac OS Backup** **Enhanced media server (AiPlayer app compatible)** - Image : - Audio : mp3, wma, wav, pcm, mp4, lpcm, ogg - Video : asf, avi, divx, mpeg, mpg, ts, vob, wmv, mkv, mov **AiCloud** personal cloud service **Dual WAN** **4G & 5G Mobile Tethering** **Printer Server** - LPR protocol support **Download Master** - Support bt, nzb, http, ed2k - Support encryption, DHT, PEX and magnet link - Upload and download bandwidth control - Download scheduling **IPTV support** **Roaming Assist** **OFDMA** **Beamforming**

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Specifications

Ports	RJ45 for 2.5 Gigabits BaseT for WAN x 1, RJ45 for 2.5 Gigabits BaseT for LAN x 4, USB 3.2 Gen 1 x 1
VPN Support	IPSec server PPTP server OpenVPN server PPTP client L2TP client OpenVPN client WireGuard VPN/ Surfshark VPN / NordVPN
Button	WPS Button, Reset Button, Power Button
LED Indicator	Power x 1 2.4GHz x 1 5GHz x 1 LAN x 1 WAN x 1
Power Supply	AC Input : 100V~240V(50~60Hz) DC Output : 12 V with max. 3 A current
OS Support	Windows® 11 Windows® 10 Mac OS X 10.6 or above
Operation mode	Wireless router mode Access point mode Media bridge mode Repeater mode AiMesh node mode
Product Dimensions	238*146*97 mm / 9.37*5.79*3.82 inch
Product Weight	502 g / 1.107 lb

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Specifications

Giftbox dimension	288mm*195mm*111mm
Giftbox weight	1044g / 2.3 lb
Package contents	RT-BE82U WiFi 7 Dual Band Router RJ-45 cable Power Adapter Quick Start Guide Warranty Card

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