

RT-AXE7800

Performance WiFi 6E Router

AXE7800 Tri-band WiFi 6E (802.11ax) Router, New 6GHz Band, ASUS Safe Browsing, Enhanced Network Security with AiProtection Pro and Instant Guard Sharable Secure VPN, Upgraded Parental Controls, 2.5G Port, Link Aggregation



- **Ultra-fast WiFi 6E Technology** – The whole-new 6 GHz band dramatically increases network capacity, delivering higher WiFi performance and more stable connectivity with speeds up to 7800 Mbps.
- **A Safer Browsing Experience** – Block undesirable content with ASUS Safe Browsing, and protect your kids online by filtering explicit content from search results.
- **Enhanced Security Anywhere** – Protect your home network with a free lifetime subscription to AiProtection Pro, powered by Trend Micro™. And when away from home, ASUS Instant Guard gives you a one-click sharable secure VPN.
- **Upgraded Parental Controls** – More flexible screentime scheduling, and customized settings that can make digital parenting feel effortless.
- **AiMesh Supported** – Expand your wireless network with ASUS AiMesh-compatible routers and enjoy powerful, flexible and seamless whole-home WiFi.

A Whole New 6GHz Band – Low Latency & Less Interference

The newly available 6 GHz frequency band is dedicated purely to WiFi 6E devices. This means that older WiFi devices can't interfere with 6E signals at all, enabling faster and more reliable connections for your 6E devices.

A stylized illustration of a race track with cars, representing the 6GHz frequency band. The track is blue and yellow, with cars in various colors. The text '6GHz' is written in large, bold, blue letters at the bottom.

6GHz

Flexible Network Port Configuration

Equipped with a 2.5Gbps WAN/LAN port, ASUS RT-AXE7800 also features both WAN and LAN aggregation, providing you more option in connecting to your network. The flexibility gives you the ability to deliver massive bandwidth to your wired devices, and take advantage of ultra-high-speed internet connections in any scenarios.



LAN Aggregation/WAN Aggregation

*Internet speeds dependent on ISP.

**To use the Link Aggregation Control Protocol (LACP) function, the devices must support IEEE 802.3ad protocol.

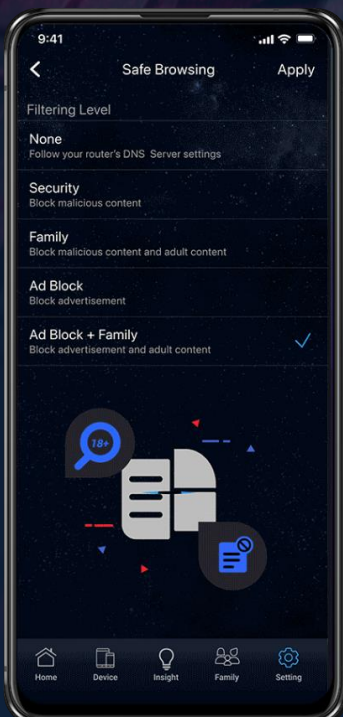
***The WAN and LAN aggregation leverage the same 1G WAN/LAN port, thus cannot be enabled at the same time.

Expanded Coverage with RangeBoost Plus

RT-AXE7800 is powered by a next-gen flagship Broadcom WiFi chipset and CPU, along with exclusive ASUS RF technology and RangeBoost Plus, it leverages multiple upgraded Broadcom features that improve WiFi signal range and overall coverage by up to 38%*.



*Disclaimer: Measured using WiFi 6 client connected at 200 Mbps to WiFi 6 router with RangeBoost Plus, compared to same WiFi 6 client connected at 200 Mbps to WiFi 5 router without RangeBoost Plus.



A Safer Browsing Experience

The wild internet contains various types of inappropriate content, intrusive ads or lurking dangers which may pose a safety risk. With no need to install extra security apps, ASUS Safe Browsing helps you block undesirable content in just a single tap. It provides a more lightweight DNS-based filtering that won't affect your router performance while securing your online privacy and browsing experience. It can even filter explicit content from the search results to protect your kids online.



Malicious Websites



Inappropriate Content



Advertisement

*Disclaimer: By using Safe Browsing, you acknowledge and agree that the standard for blocked and filtered content is established by a third-party DNS provider.

Enhanced Security Anywhere

Complete Security for Your Home Network

Alongside the latest WPA3 security protocol, the ASUS RT-AXE7800 also features AiProtection Pro powered by Trend Micro™, with automatic, regularly updated security signatures to protect your devices and personal data from internet threats.



Parental Controls at Your Finger Tips

Gain insight into your kids' online activity and customize settings for different age groups with RT-AXE7800's robust parental controls. You can also flexibly schedule internet access with one click, or you can grant extra online time for your kids to reward their good behavior.

Make Free WiFi Secure with Instant Guard

When you are away from home, the ASUS Instant Guard mobile app gives you one-tap secure internet access via your RT-AXE7800 router*, thanks to its encrypted VPN tunneling technology. Our newly upgraded app even lets you easily share this worry-free network connection with your family and friends through a URL link.

*Disclaimer: The router must have a public WAN IP address.



VPN Your Way

Enjoy secure and quick VPN access for streaming, gaming and other activities with the ASUS RT-AXE7800 router. Through both the ASUS Router app and the web interface, you can easily set up and manage your VPN connections, including OpenVPN and WireGuard to meet more of your VPN scenarios.



Easy Scalability for Your Network

With ASUS AiMesh technology, it's easy to combine multiple AiMesh-compatible ASUS router signals to create a whole-home WiFi network with centralized control. You can even use a single SSID for your entire home or office network, with seamless coverage and no more dead zones!



Disclaimer:

1. Actual data throughput and WiFi coverage will vary from network conditions and environmental factors, including the volume of network traffic, building material and construction, and network overhead, result in lower actual data throughput and wireless coverage.
2. To benefit from WiFi 6E features, the WiFi client needs to be WiFi 6E capable.
3. The number of speed is calculated with data rate of 2.4 GHz/5GHz/6GHz band, which are respectively 574 Mbps, 4804 Mbps, and 2402 Mbps. And the DFS channels may not be supported in some countries due to local regulations.
4. WPA/WPA2 enterprise is only available on single router, is not available under AiMesh mode.

Specifications

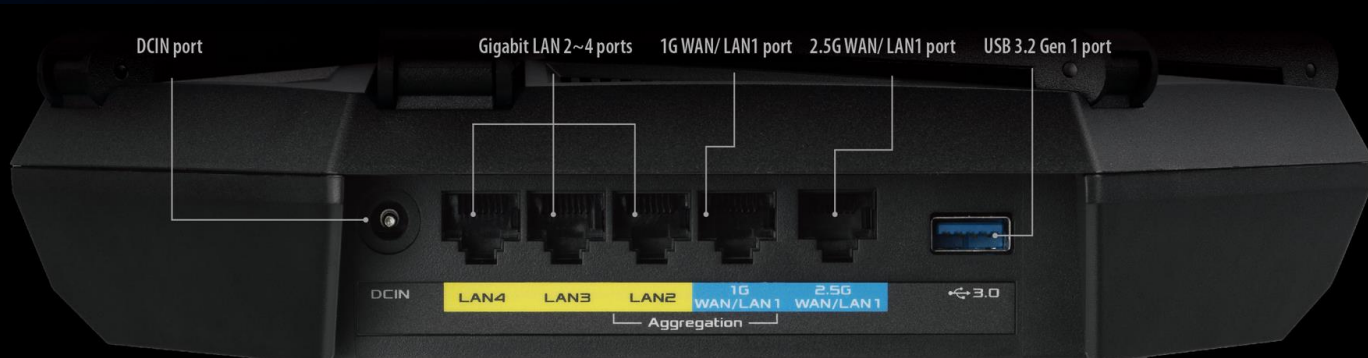
- Wireless Type : 802.11 ax(6GHz/5GHz/2.4GHz) /802.11ac/802.11n/802.11g/802.11a/802.11b
- Wireless Speed : 2.4GHz up to 574Mbps / 5GHz up to 4804 Mbps / 6GHz up to 2402 Mbps
- Wired Connectivity : 3x LAN, 1x 1G WAN/LAN, 1x 2.5G WAN/LAN
- USB Ports : 1 x USB 3.2 Gen 1

What's Inside the Box

- RT-AXE7800 WiFi Router
- RJ-45 cable
- Power adapter
- Warranty card
- Quick start guide



Connectivity



SPECIFICATION OF RT-AXE7800

Network Standard	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.11ac, IEEE 802.11ax(WiFi 6 & WiFi 6E), IPv4, IPv6
Product Segment	AX7800 ultimate AXE performance
Coverage	Very Large homes
Data Rate	802.11ax (2.4GHz) : up to 574 Mbps 802.11ax (5GHz) : up to 4804 Mbps 802.11ax (6GHz) : up to 2402 Mbps
Antenna	External non-detachable antenna x 6
Transmit/Receive	2.4 GHz 2 x 2 5 GHz 4 x 4 6 GHz 2 x 2
Processor	1.7 GHz quad-core processor
Memory	256 MB Flash 512 MB DDR4
Wi-Fi Technology	OFDMA (Orthogonal Frequency Division Multiple Access) Beamforming: standard-based and universal 1024-QAM high data rate 20/40/80/160 MHz bandwidth
Operating Frequency	2.4 GHz, 5 GHz, 6 GHz
Encryption	WPA3-Personal, WPA2-Personal, WPA-Personal, WPA-Enterprise , WPA2-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, Port Trigger, Port Forwarding, DMZ, System Event Log
VPN Support	IPSec Pass-Through PPTP Pass-Through L2TP Pass-Through IPSec server PPTP server OpenVPN server PPTP client L2TP client OpenVPN client
WAN Connection Type	Internet connection type : Automatic IP, Static IP, PPPoE(MPPE supported), PPTP, L2TP
Utilities	Router setup wizard; Firmware restoration; Device discovery; printer setup utility
Ports	RJ45 for 2.5G BaseT for WAN/LAN x 1 RJ45 for Gigabits BaseT for WAN/LAN x 1, RJ45 for Gigabits BaseT for LAN x 3, USB 3.2 Gen 1 x 1

Features

Router app
Link Aggregation
MU-MIMO
Traffic Analyzer
Adaptive QoS
AiProtection Pro
Parental Control
Guest Network : 2.4 GHz x 3, 5 GHz x 3, 6 GHz x 3
VPN server : PPTP Server, OpenVPN Server, IPSec server
VPN client : PPTP client, L2TP client, OpenVPN client
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
3G/4G data sharing
Printer Server
- Multifunctional printer support (Windows only)
- LPR protocol support
Download Master
- Support bt, nzb, http, ed2k
- Support encryption, DHT, PEX and magnet link
- Upload and download bandwidth control
- Download scheduling
AiDisk file server
- Samba and FTP server with account management
Dual WAN
IPTV support
Roaming Assist
OFDMA
Beamforming
Instant Guard
Open NAT
VPN Fusion
Share Folder Privileges
Safe Browsing
DNS-over-TLS
VPN Client WireGuard
VPN Server WireGuard
New device connect notification
Login captcha
Connection diagnosis
Security scan
Auto Firmware Update
WPS Button, Reset Button, Power Switch
Power x 1, 2.4G x 1, 5G x 1, 6G x 1, LAN x 3, 1G WAN/LAN x 1, 2.5G WAN/LAN x 1
AC Input : 110V~240V(50~60Hz)
DC Output : 12 V with max. 3.0 A current
Windows® 11/ Windows® 10/ Windows® 8/ Windows® 7
Mac OS X 10.6/ Mac OS X 10.7/ Mac OS X 10.8
Wireless router mode, Access point mode, Media bridge mode, Repeater mode, AiMesh node mode

Button

LED Indicator

Power Supply

OS Support

Operation mode