

# BE14000 Wi-Fi 7 Smart Home Mesh System

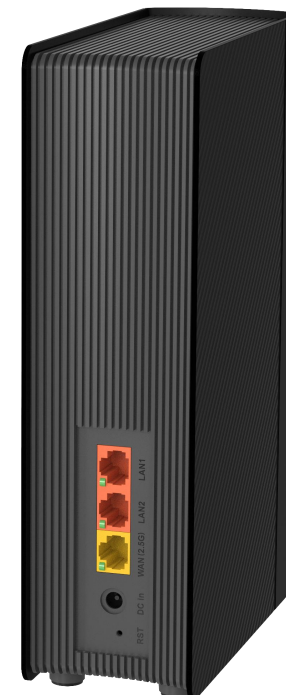
## Model : BE14

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## Product Design



BE14 is a BE14000 Wireless Tri-band Wi-Fi 7 Router, built with the latest generation Wi-Fi 7 technology. Equipped with OFDMA, BE14 provides wireless speed up to 14000Mbps, and greater capacity to handle more devices on your network, ensuring that you can enjoy blazing fast Internet connections on all your devices. Besides, Easy Mesh makes easy Wi-Fi extension and seamless roaming attainable. Frankly speaking, BE14 can be used in large houses and offices for a stable and fast Wi-Fi experience.

### **Dedicated New 6GHz Wi-Fi Band**

A congestion free frequency band suitable for Wi-Fi 7 devices. Enjoy clear 4K/8K video streaming, AR/VR games, and video conferencing.

### **14000Mbps Ultra-Fast Wi-Fi Speed**

BE14 delivers Wi-Fi speeds of up to 8646Mbps on 6GHz, 4323Mbps on 5GHz and 688Mbps on the 2.4GHz, and for a total of 14000Mbps. Every application feels more fluid with drastically improved Wi-Fi speeds. Perfect for 4K/8K streaming, immersive AR/VR gaming, and blazing-fast downloads.

### **1.8GHz Tri-Core CPU for Powerful Processing**

Equipped with MediaTek's new generation Filogic 880 chip, Tri-Core 1.8GHz CPU. BE14 handles demands of multiple users accessing your network simultaneously, ensuring everyone in your home is possible to surf the internet constantly at the same time.

### **Multi-RU -Makes Full Use of Every Resource**

With WIFI 6, each user can only send or receive frames on an assigned resource unit (RU), which significantly limits the flexibility of the spectrum resource scheduling. To solve this problem and further enhance spectral efficiency, WIFI 7 allows multiple RUs to be assigned to a single user and can combine RUs for increased transmission efficiency.

### **2500M ultra-fast network port**

Equipped with a 2500M ultra-fast network port, it can easily handle bandwidths above Gigabit. It can also be used with home storage to build a high-speed home data center with faster transmission rates.

### **4K QAM transmission technology, with a 20% increase in peak speed**

Compared to Wi-Fi 6 that supports 1024-QAM modulation, Wi-Fi 7 supports 4K QAM transmission technology, which increases the data density transmitted within a single time unit by 20% and increases the peak speed of mobile internet access by 20%.

### **Up to 320 MHz on 6 GHz**

Wi-Fi 7 unleashes the full potential of the 6 GHz band to double the bandwidth of the last generation. Extending channel width to 320 MHz also enables many more simultaneous transmissions at the fastest possible speeds

## Quick Setup by Using Phone UI & APP

You can setup your router in minutes by using the specific phone UI or TOTOLINK Router App. The App allows you to manage network settings from any Android or iOS device.

## High Performance Antennas for Greater Coverage

Equipped eight Built-in antennas, BE14 creates stronger and more reliable networks for all to enjoy in your home.

## MLO - aggregation of different frequency bands

Wi Fi 6 only allows devices to connect to one of the 2.4G/5G frequency bands at the same time. Wi Fi 7 supports MLO technology, which can aggregate two frequency bands for more efficient data transmission, significantly improving throughput, and reducing terminal device latency.

Enable devices that support Wi Fi 7 technology to connect to both 2.4GHz and 5GHz frequency bands simultaneously.

## Preamble Puncturing Technology

Greatly improving anti-interference ability, more precise spectrum utilization, can skip small frequency bands with interference, and improve anti-interference ability or wireless performance in interference environments

## MU-MIMO

With MIMO, data would be divided into small packets, transmitted in multiple ways and finally assembled in the receiving antenna. Moreover , transmission can be easier and more flexible. The total data capacity also increases while decreasing the transmission pressure.

## Beamforming Technology for Stronger Connection

Beamforming technology detects the location of devices and sends targeted Wi-Fi signal to individual devices for stronger connections.

## Easy Mesh, Wider Coverage and Seamless Roaming

With advanced mesh technology, units work together to form a unified network with a single network name. BE14 supports multi-device Mesh networking and can achieve Wi-Fi coverage ranging from 90 square meters to 1,500 square meters. As you move around your home, the device automatically switches between E140s at the fastest possible speed.

## Features

- Complies with 802.11 be/ax/ac/a/b/g/n standards.
- Dedicated New 6GHz Wi-Fi Band
- Delivers up to 688Mbps on 2.4G band / 4323Mbps on 5G band / 8646Mbps on 6G band.
- Eight built-in antennas can enhance the stability of throughput.- Beamforming technology for stronger connection.
- Beamforming technology for stronger connection.
- Support MLO technology to significantly reduce latency and improve throughput- Supports easy and quick setup by smart phones.
- Supports 4K QAM technology, increasing peak rate by 20%
- Supports WPA/WPA2/WPA3 and WPA-PSK/WPA2-PSK encryption.
- Support OFDMA plus MRU technology, effectively improving data transmission efficiency and reducing latency
- Support 320MHz bandwidth on 6Ghz
- Support VPN server, Universal Repeater, Guest network, Smart QoS, Wi-Fi Scheduler.
- Parental Control on the router lets you easily manage content and time online on any connected device.
- Support 2.5Gbps Ethernet interface
- Supports Easy Mesh

Specification

Hardware	
Chipsets	MT7988DV+MT6682A+MT7995AV+MT7976CN+MT7977AN
Flash	128Mbyte NAND Flash
DRAM	512MByte DDR4
Interface	1*10/100/100/2500Mbps WAN (Auto MDI/MDIX) 2* 10/100/1000Mbps LAN (Auto MDI/MDIX)
Power Supply	- DC12V 2A
Button	- DC/IN*1、MESH*1、RST*1
LED Indicators	-1*PWR、1* CPU , 1* 6G/WIFI , 5G/WIFI*1、2.4G/WIFI*1、MESH*1
Antenna	- 2 * Built-in 2.4G band antennas - 3 * Built-in 5G band antennas - 3 * Built-in 6G band antennas
Dimensions (W x D x H)	- 235*160*65mm
Wireless	
Standards	IEEE802.11n/g/b/a/ac/ax/be IEEE802.3、IEEE802.3u、IEEE802.3ab , IEEE 802.3bz
RF Frequency	- 2.4GHz/5GHz/6GHz
Data Rate	- 2.4G : 688Mbps - 5G : 4323Mbps - 6G : 8646Mbps
ERIP	- 2.4GHz < 20dBm
	- 5GHz < 23dBm
	- 6GHz < 23dBm
Wireless Security	-WPA, WPA2,WPA3 and WPA-PSK/WPA2-PSK

Others	
Package Contents	- BE14 Wireless Tri-band Wi-Fi 7 Router *1 - Power Adapter *1 - Ethernet Cable *1
Environment	- Operating Temperature: 0℃~40 ℃ (32 ℉ ~104℉ ) - Storage Temperature: -40℃~70 ℃ (-40 ℉ ~158℉ ) - Operating Humidity: 10%~90% non-condensing - Storage Humidity: 5%~90% non-condensing