

BE3600 Wi-Fi 7 Smart Mesh System

Model : BE3

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Product Design



BE3 is a BE3600 wireless dual-band Wi-Fi 7 router built with the latest generation of Wi-Fi 7 technology. Equipped with OFDMA with MRU technology, the BE3 provides wireless speeds of up to 3600Mbps and greater capacity to handle more devices on the network, ensuring you can enjoy blazingly fast internet connections on all your devices. Additionally, Easy Mesh enables easy Wi-Fi expansion and seamless roaming. Frankly speaking, the BE3 can be used in large homes and offices for a stable and fast Wi-Fi experience.

3600Mbps ultra-fast Wi-Fi speed

The BE3 offers Wi-Fi speeds of up to 2882Mbps on 5GHz and up to 688Mbps on 2.4GHz for a total of 3600Mbps. Wi-Fi speeds are significantly improved and every app feels smoother. Ideal for 4K/8K streaming, immersive AR/VR gaming, and blazing-fast downloads.

1GHz Dual-Core CPU for Powerful Processing

The BE3 can handle the needs of multiple users accessing the network at the same time, ensuring that everyone in the home has simultaneous and continuous access to the Internet.

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.

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%.

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

BE3 is equipped with 4 internal 4.5dBi antennas, providing everyone with a more powerful and reliable network at 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. BE3 supports multi-device Mesh networking and can achieve Wi-Fi coverage ranging from 90 square meters to 250 square meters. As you move around your home, the device automatically switches between BE3 at the fastest possible speed.

Features

- Complies with 802.11 be/ax/ac/a/b/g/n standards.
- Delivers up to 688Mbps on 2.4G band / 2882Mbps on 5G band
- The 4 * 4.5dBi internal antenna enhances throughput stability.
- 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
- Supports Easy Mesh
- Support Type-C power supply
- 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.

Easy Mesh function for easy Wi-Fi extension and seamless roaming.

Easy setup and management with phone UI and TOTOLINK Router APP.

Specification

Hardware	
Chipsets	AN7563PT+MT7991BV+MT7976CN
Flash	128Mbyte NAND Flash
DRAM	512MByte DDR3
Interface	1*10/100/100/1000Mbps WAN (Auto MDI/MDIX) 2* 10/100/1000Mbps LAN (Auto MDI/MDIX)
Power Supply	- Type-C 9V 2A
Button	- MESH*1、RST*1
LED Indicators	-1 *System
Antenna	-1 *4.5 dBi built-inl 2.4G band antenna -2 *4.5 dBi built-in 5G band antenna -1 *4.5 dBi built-in 2.4G/5G dual-band antenna
Dimensions (W x D x H)	- 115.2X45X175 mm
Wireless	
Standards	IEEE802.11n/g/b/a/ac/ax/be IEEE802.3、IEEE802.3u、IEEE802.3ab
RF Frequency	- 2.4GHz/5GHz
Data Rate	- 2.4G : 688Mbps - 5G : 2882Mbps
ERIP	- 2.4GHz < 20dBm
	- 5GHz < 23dBm
Wireless Security	-WPA, WPA2,WPA3 and WPA-PSK/WPA2-PSK

Wireless	
Reception Sensitivity	<p>2.4G:</p> <p>11b 11M: -85 dBm@8% PER</p> <p>11g 54M: -72 dBm@10% PER</p> <p>11n : HT20 MCS7: -68dBm@10% PER HT40 MCS7: -65dBm@10% PER HE40 MCS11:-49dBm@10% PER EHT40 MCS13:-43 dBm@10% PER</p> <p>5G:</p> <p>11a 54M: -72dBm@10% PER</p> <p>11n HT20 MCS7: -68dBm@10% PER HT40 MCS7: -65dBm@10% PER</p> <p>11ac VHT80 MCS9: -55dBm@10% PER</p> <p>11ax HE-SU40MCS11:-49dBm@10% PER HE-SU80 MCS11: -46dBm@10% PER HE-SU160 MCS11: -43dBm@10% PER</p> <p>11be EHT40_MCS13: -49dBm@10% PER EHT80_MCS13: -46dBm@10% PER EHT160_MCS13: -43dBm@10% PER</p>
Others	
Package Contents	<p>- BE3 Wireless Dual-band Wi-Fi 7 Router *1</p> <p>- Power Adapter *1</p> <p>- Ethernet Cable *1</p>
Environment	<p>- Operating Temperature: 0°C~40 °C (32 °F ~104°F)</p> <p>- Storage Temperature: -40°C~70 °C (-40 °F ~158°F)</p> <p>- Operating Humidity: 10%~90% non-condensing</p> <p>- Storage Humidity: 5%~90% non-condensing</p>