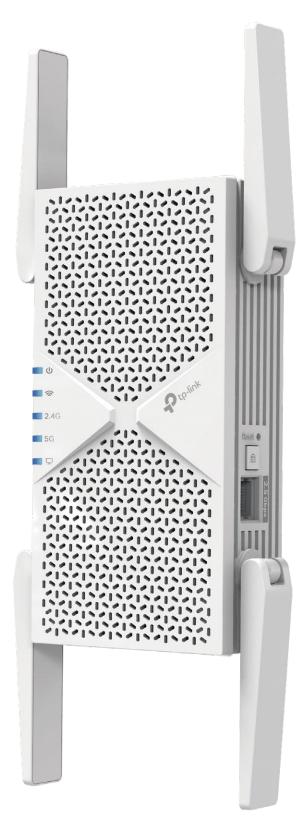


BE6500 Wi-Fi 7 Range Extender

Boost your Wi-Fi







Highlights

Wi-Fi 7 — Wi-Fi Like Never Before





6.5 Gbps Dual-Band Wi-Fi[†]

Multi-Link Operation (MLO) enables RE405BE to transmit data with Wi-Fi 7 clients across the 5 GHz and 2.4 GHz bands simultaneously, delivering faster Wi-Fi speeds than Wi-Fi 6/6E range extenders.



Ultra Smooth Wi-Fi with Lower Latency[★]

Lower latency than Wi-Fi 6/6E range extenders enables emerging applications like VR/AR, video conferencing, and online gaming to always run at top performance.



Higher Transmission Efficiency with 4K-QAM

4K-QAM packs 120% data for higher speeds. Enjoy full access to 8K streaming and high-speed downloading.†

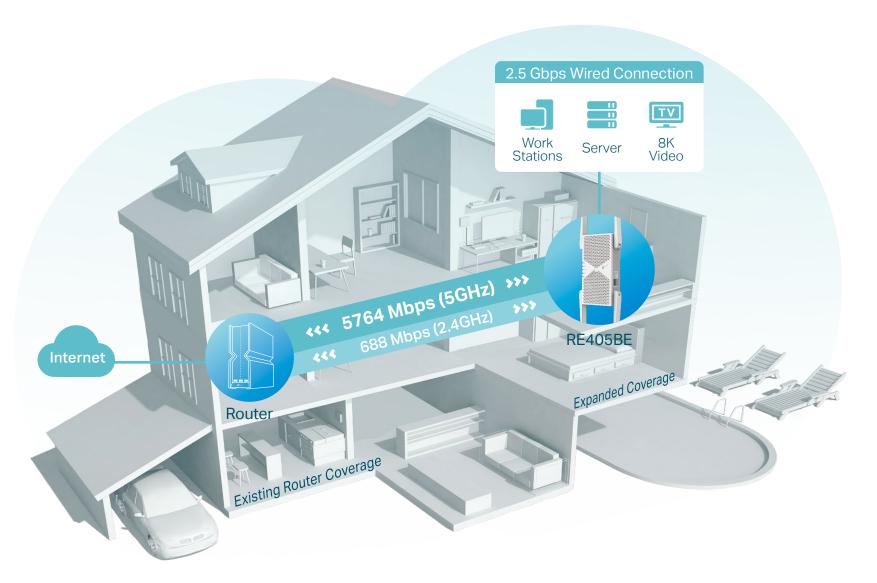


Higher Capacity for More Devices[†]

Communicates with multiple devices via 6 streams and dual-band simultaneously. Combined with its powerful CPU, Wi-Fi 7 provides congestion-free signals to your laptop, TV, thermostat, and baby monitor.

Highlights

Eliminate Wi-Fi Dead Zones with Unrivaled Wi-Fi 7



Flexible Whole Home Mesh Wi-Fi

More than a Traditional Wi-Fi Extender

Connect with an EasyMesh-compatible router to create a mesh network for seamless whole home coverage or any other Wi-Fi router to boost your Wi-Fi range.**



Wi-Fi Dead Zone Killer



Uninterrupted Streaming§



One Wi-Fi Name



Unified Management**



Check the full list of TP-Link's EasyMesh-compatible extenders and routers at

tp-link.com/easymesh/product-list/

Highlights

BE6500 Wi-Fi 7 Range Extender

2.5 Gbps Wired Connection

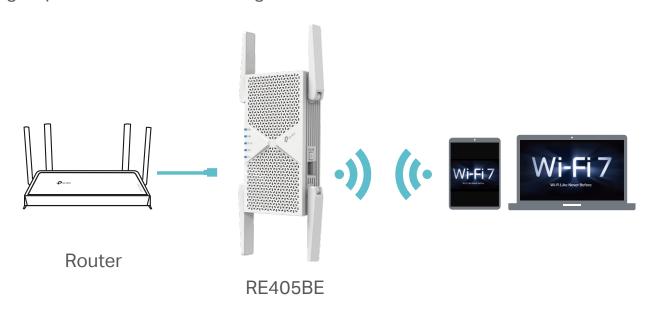
Range Extender Mode

Plug your PC, smart TV, game console, or NAS device into the 2.5 Gbps port for a blazing-fast wired connection.



Access Point Mode

Connect RE405BE with a router to easily turn that 2.5G wired connection into a high-speed tri-band wireless signal.





Eliminate Dead Zones with Wi-Fi 7

Expand your Wi-Fi with future-proof connectivity, powered by Wi-Fi 7 Multi-Link Operation (MLO), 4K-QAM.△



Whole-Home Coverage Made Simple

Pair with an EasyMesh-compatible router to eliminate weak spots and create a seamless Wi-Fi network with a single Wi-Fi name.*



Enhanced Security with WPA3

Extend your Wi-Fi with confidence. WPA3 encryption keeps your home network safe and secure.



Smart, Adaptive Networking

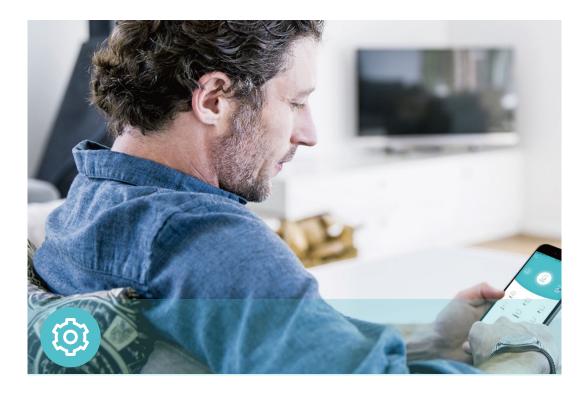
Always stay connected to the fastest, most stable path for seamless performance.



Broad Compatibility

Works with all Wi-Fi generations, Wi-Fi devices, and Wi-Fi routers for worry-free connectivity.***

Features







Ease of Use

- · Intuitive Web UI– Ensures quick and simple installation without hassle
- \cdot Fast Setup One-touch connection with the WPS button
- · Hassle-free Management with Tether App Network management is made easy with the TP-Link Tether App, available on any Android or iOS device
- · Online Upgrade Keeps you informed of the latest firmware and allows online updating on the web UI

Speed

- Ultimate Wireless Speed Combined wireless speeds of up to 688 Mbps at 2.4 GHz and 5764 Mbps at 5 GHz[†]
- · Support Wi-Fi 7 Turbocharge your devices with wireless speeds of up to 6.5 Gbps
- Adaptive Path Selection Keep your network running at top-speed by automatically choosing the fastest connection path to the router

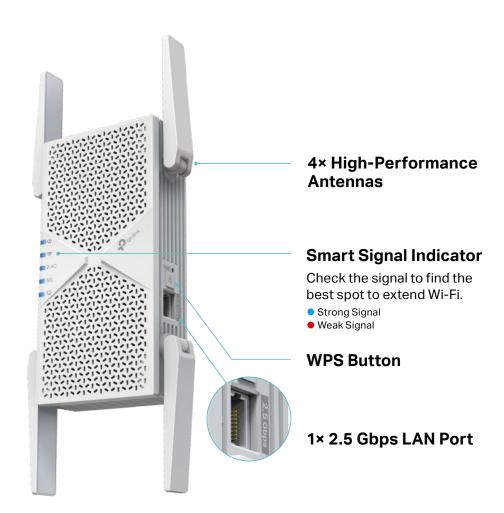
Reliability

- Simultaneous Dual-Band Separate Wi-Fi bands enable more devices to connect to your network without a drop in performance
- Reliable Connection External antennas for optimal Wi-Fi coverage and reliable wireless connections
- · Ultra-Low Latency Take advantage of ultra-low latency to enjoy smoother online experience

Specifications

Hardware

- Button: WPS Button, Reset Button
- · Port: 2.5 Gigabit Ethernet Port
- · Antennas: 4 External Antennas
- Dimensions: 3.1 × 1.5 × 6.3 in (80.6 x 39 x 161 mm)



Wireless

- · Wireless Standards: IEEE 802.11a/n/ac/ax/be 5 GHz, IEEE 802.11b/g/n/ax/be 2.4 GHz
- · Frequency: 2.4 GHz and 5GHz
- · Signal Rate: 688 Mbps at 2.4 GHz, 5764 Mbps at 5 GHz
- · Transmit Power:

CE: EIRP≤20dBm (2.4GHz), EIRP≤23dBm (5GHz band1 and band2), EIRP≤30dBm (5GHz band3)

· Reception Sensitivity:

2.4 GHz:

11BE EHT20 MCS0: -95dBm, 11BE EHT 20 MCS11: -65dBm 11BE EHT 40 MCS0: -93dBm, 11BE EHT 40 MCS11: -63dBm 5 GHz:

11be EHT 20 MCS0: -95dBm, 11be EHT 20 MCS13: -59dBm 11be EHT 40 MCS0:- 92dBm, 11be EHT 40 MCS13: -56dBm 11be EHT 80 MCS0: -89dBm, 11be EHT 80 MCS13: -53dBm 11be EHT 160 MCS0: -86dBm, 11be EHT 160 MCS13: -52dBm

- · Wireless Function: LED Control, Access Control, Power Schedule, Wi-Fi Coverage
- · Wireless Security: Enhanced Open, WPA/WPA-PSK2, WPA2/WPA3 encryptions

Others

Certification

CE, RoHS

System Requirements

Microsoft Edge, Firefox, Chrome, Safari, or other JavaScript-enabled browser

*You are recommended to use the latest version

Package Contents

Range Extender RE405BE

Quick Installation Guide

1Maximum wireless signal rates are the physical rates are the physical rates derived from IEEE Standard 802.11 specifications. Higher capacity is based on laboratory test data, which analyzed the connections of different devices on the 5 GHz, and 2.4 GHz bands simultaneously. These devices on the 5 GHz, and 2.4 GHz bands simultaneously. These devices on the 5 GHz, and 2.4 GHz bands simultaneously. downloading, web browsing, IP cameras, and other IoT devices. Actual wireless data throughput, wireless coverage, and connected devices are not guaranteed and will vary as a result of internet service provider factors, network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location The product may not be compatible with routers or gateways with firmware that has been altered, is based on open source programs, or is non-standard or outdated.

§Uninterrupted Streaming is designed for devices that support the 802.11k/v standard. 4Use of Wi-Fi 7 (802.11be), Wi-Fi 6 (802.11ax), and features including Multi-link Operation (MLO), 4K-QAM, Multi-RU, OFDMA, and MU-MIMO requires clients to also support the corresponding features

*TP-Link EasyMesh-compatible products can network with other devices that use EasyMesh. Failed connections may be due to firmware conflicts of different vendors. The EasyMesh technology but has not obtained the Wi-Fi EasyMesh technology but has not obtained the Wi-Fi EasyMesh technology but has not obtained the Wi-Fi EasyMesh.

**Unified management is available for TP-Link EasyMesh-compatible devices. This feature is not guaranteed for devices from other vendors

***Wi-Fi generations represent the wireless standard IEEE 802.11 a/b/g/n/ac/ax/be. All devices need to support 802.11 Wi-Fi protocols

OUSE of WPA3 requires clients to also support the corresponding feature.

a"Lower Latency" refers to the latency improvement of Wi-Fi 7 range extenders compared to Wi-Fi 6/6E range extenders, based on laboratory test data. The test conditions had the same 5 GHz single range extender (without the MLO function).

Actual network speed may be limited by the rate of the product's Ethernet WAN or LAN port, the rate supported by the network cable, internet service provider factors, and other environmental condition

This range extender may not support all the mandatory features as ratified in the IEEE 802.11be specification.

Further software upgrades for feature availability may be required.

Pictures are for reference only. If there are any inconsistencies between the product image and the actual product, the actual product shall prevail ©2025 TP-Link