tp-link

Wi-Fi 7

EasyMesh
Extend Wi-Fi Seamlessly

BE6500 Wi-Fi 7 Range Extender

Boost your Wi-Fi

RE405BE

6.5 Gbps Dual-Band Wi-Fi Speeds

2.5G Multi-Gig Connectivity

Powerful Boosted Coverage

Quick, Simple Setup with Tether App

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△

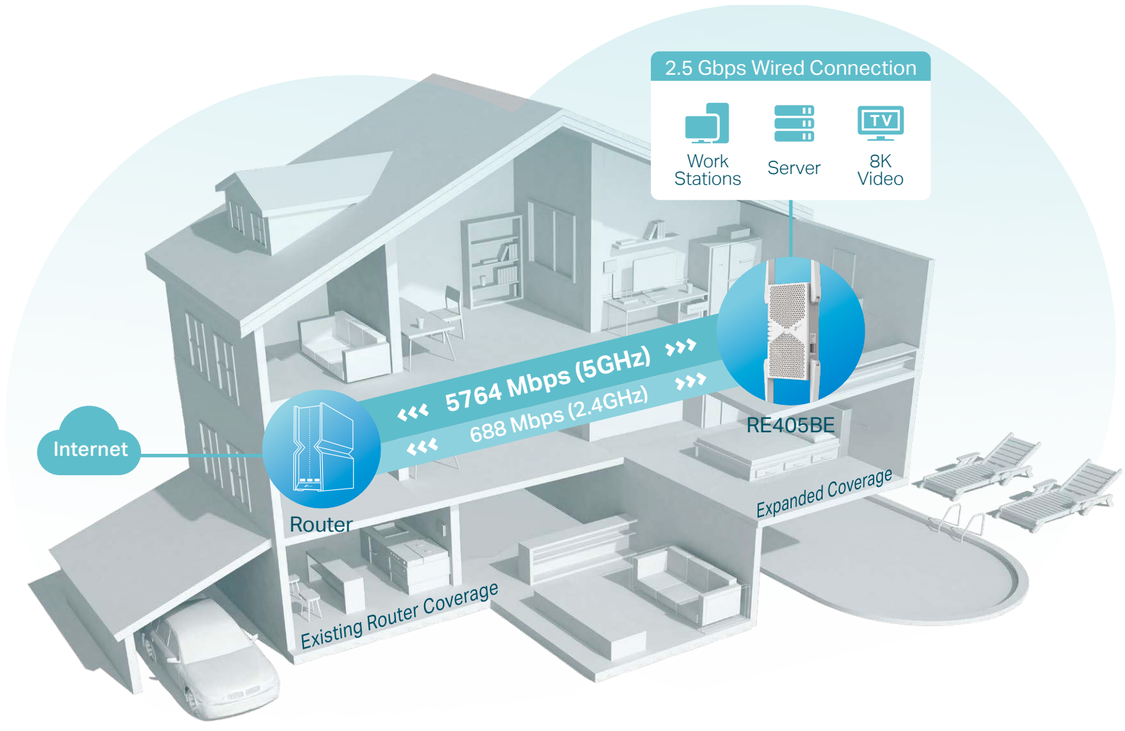
4K-QAM packs 120% data for higher speeds. Enjoy full access to 8K streaming and high-speed downloading.†△

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/

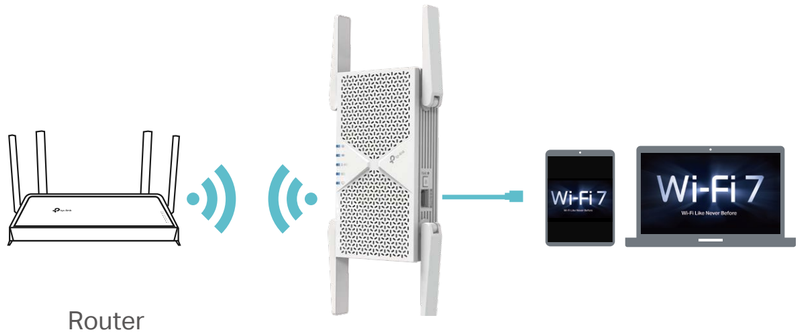
Highlights

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.



Router RE405BE

- **Access Point Mode**

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

Router RE405BE

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.◇

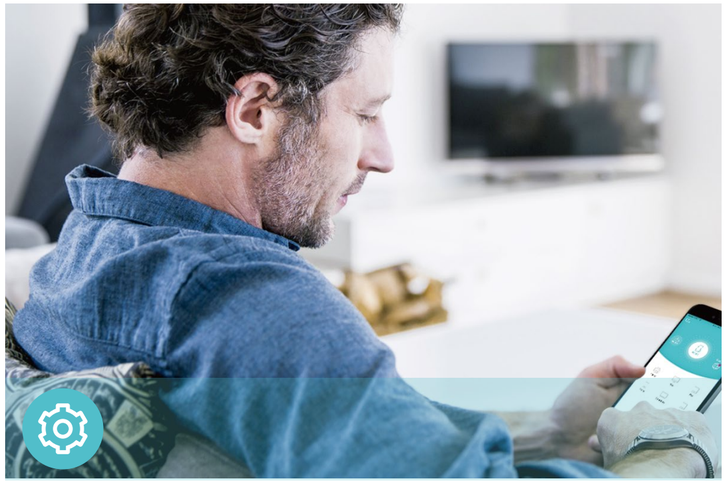
Smart, Adaptive Networking

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

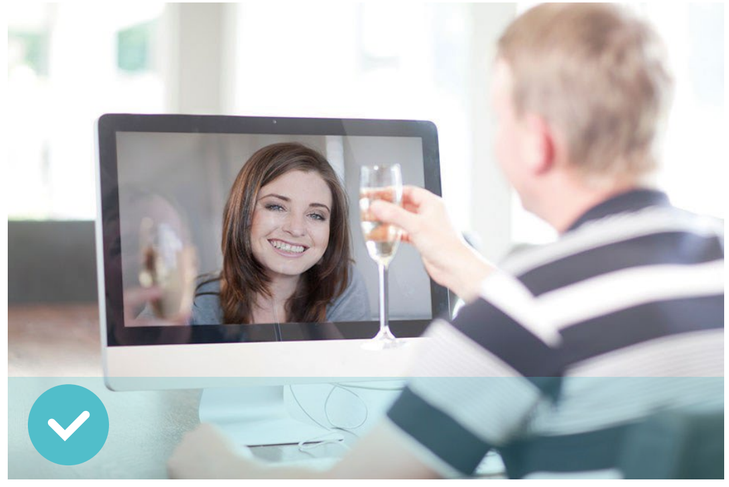


Ease of Use

- Intuitive Web UI– Ensures quick and simple installation without hassle
- 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



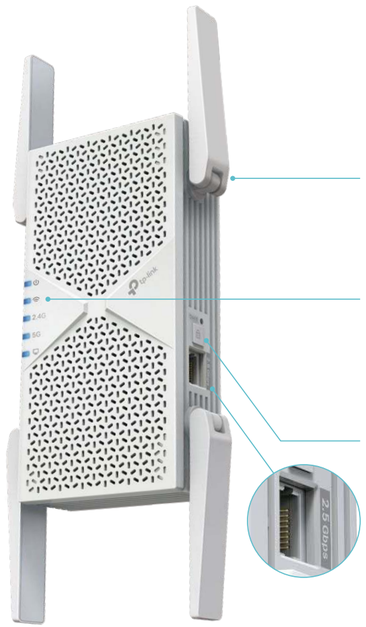
Reliability

- 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)



4× High-Performance Antennas

Smart Signal Indicator

Check the signal to find the best spot to extend Wi-Fi.

- Strong Signal
- Weak Signal

WPS Button

1× 2.5 Gbps LAN Port

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:

  FCC: EIRP≤30dBm (2.4GHz), EIRP≤23dBm (5GHz band2 and band3), EIRP≤30dBm (5GHz band3 and band4)
- 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

  FCC, 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

[1]Maximum wireless signal 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 simulated a typical home scenario by running simultaneous applications in the same room that included 4K video, 1080p video, 720p video, file 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.
[2]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.
[3]Uninterrupted Streaming is designed for devices that support the 802.11k/v standard.
[4]Use 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-compatible feature is still being developed on some models and will be supported in subsequent software updates. This product is compatible with standardized EasyMesh technology but has not obtained the Wi-Fi EasyMeshTM certification.
**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.
♡Use of WPA3 requires clients to also support the corresponding feature.
♡♡"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-frequency wireless interference and tested the maximum latencies of Wi-Fi 7 clients (with MLO turned on) connecting to the 5 GHz bands of RE405BE (with MLO turned on) simultaneously and to the 5 GHz of a Wi-Fi 6/6E 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 conditions.
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.
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