





# Wi-Fi 7 Tri-Band Tiny USB Adapter

## EW-7822UN7

#### **FEATURES**

- **Tri-Band BE6500:** Maximize 6GHz, 5GHz, and 2.4GHz connectivity to deliver high speeds with low latency
- **Powerful 6GHz band:** Less congestion and interference for Wi-Fi connections
- WPA3 Encryption: High level Wi-Fi security supported with WPA3-enterprise ,WPA3-SAE (Personal), 802.1x, WPA and WPA2
- Built-in Driver: No need to download the driver before using
- MLO eMLSR Mode: Dynamically switch between the 2.4 GHz, 5 GHz, and 6 GHz bands to avoid network traffic and keep you connected
- **4K-QAM:** 4K-QAM technology, boosting data efficiency by 20% compared to Wi-Fi 6 1024-QAM.
- Wide Compatibility: Works with any Wi-Fi router/AP/extender and backward compliant with 802.11a/b/g/n/ac/ax standards

#### **OVERVIEW**

The EW-7822UN7 is a Tri-band 802.11BE USB adapter that supports 4K-QAM, MLO eMLSR(enhanced Multi-Link-Single-Radio), Multi-RU, MU-MIMO and OFDMA allowing greater Wi-Fi efficiency and low latency. Upgrade your Wi-Fi to the Latest Standard to transform your PC to the cutting-edge 802.11be standard with a simple USB connection.

No worries about the compatibility, the EW-7822UN7 works with any existing Wi-Fi router, access point and range extender, you can improve an older Wi-Fi 4 /5/6/6E connection to the utmost 11BE Wi-Fi 7 up-to - date speed standard and low latency by plugging this USB adapter into your laptop or PC.

The EW-7822UN7 is certainly a powerful and easy-touse gadget for instant upgrade of your existing computer's wireless network to the next 802.11BE level.

#### Multi-RU & Preamble Puncturing

The EW-7822UN7 supports Multi-RU(Multiple Resource Unit) technology that allows devices to utilize multiple RUs simultaneously by leveraging "Preamble Puncturing "technology. This intelligent resource allocation technology allows access points to 'carve out' or 'puncture' a portion of channel width that is affected by interference, resulting in the remaining channel being used for data transmission and eliminates bandwidth waste.

#### Greater Wi-Fi Efficiency by Leveraging MLO,4K-QAM, Multi-RU, MU-MIMO and OFDMA

With up-to-date Wi-Fi 7 new technologies, MLO(Multi-Link Operation), OFDMA, 4K-QAM, and MU-MIMO, For instance, Wi-Fi 7 introduces 4K-QAM, also known as 12-bit data modulation. Wi-Fi 6 used 1024 QAM (10-bit data modulation). The increase from 10-bit to 12-bit data modulation enables up to 20% higher data transmission rates to your Wi-Fi devices. EW-7822UN7 allows reducing latency, and facilitates higher speeds for applications that require high bandwidth.

#### Instant Upgrade and Works with All Wi-Fi

With quick and simple installation, the EW-7822UN7 USB adapter is the best choice for your laptop or PC, gaining an instant upgrade to Wi-Fi 7. It's stylish, slick, portable in design, so you can take it with you anywhere for Wi-Fi connectivity. Wide compatibly and backward compliant with 802.11a/b/g/n/ac standards, the EW-7822UN7 supports all existing Wi-Fi routers, access points and range extenders.

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### **SPECIFICATIONS**

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HARDWARE	
Interface	1 x USB Type A Port
Antenna	2 x Internal PIFA Antenna (2T2R)
Dimensions	31.5(H) x 19.0(W) x 8.5(D) mm
Weight	5.5g(0.19 ounces)
WIRELESS	
Standard	<ul> <li>2.4GHz: IEEE 802.11b/g/n</li> <li>5GHz: IEEE 802.11a/ g/ ac/ ax/ be</li> <li>6GHz: IEEE 802.11a/ g/ ac/ ax/ be</li> </ul>
Frequency Band	<ul> <li>2.4GHz: 2.4000~2.4835GHz</li> <li>5GHz: 5.150~5.825GHz</li> <li>6GHz: 5.925~6.425GHz</li> <li>*Subject to local regulations.</li> </ul>
Maximum Data Rate	<ul> <li>IEEE 802.11 a/b/g/n/ac/ax/be compliant</li> <li>2T2R in 2.4GHz with support of up to 688Mbps Data rate</li> <li>2T2R in 5GHz with support of up to 2880Mbps Data rate</li> <li>2T2R in 6GHz with support of up to 2880Mbps Data rate</li> <li>Support 20MHz, 40MHz at 2.4GHz bandwidth</li> <li>Support 20MHz, 40MHz, 80Mhz and 160MHz at 5GHz bandwidth</li> <li>Support 20MHz, 40MHz, 80Mhz and 160MHz at 6GHz bandwidth</li> <li>Support 20MHz, 40MHz, 80Mhz and 160MHz at 6GHz bandwidth</li> <li>Support 20MHz, 40MHz, 80Mhz and 160MHz at 6GHz bandwidth</li> </ul>
Security	• WPA3 Enterprise, WPA3-SAE (Personal), IEEE 802.1x ,WPA and WPA2
OTHERS	
Supported Operating System	<ul> <li>Windows 10/11</li> <li>*Additional version information will be announced on the EDIMAX website.</li> </ul>
Environmental Condition	Temperature:Humidity:• Operating: 0~40°C (32~104°F)• Operating: 10~90% (Non-condensing)• Storage: -20~65°C (-4~149°F)• Storage: Max. 95% (Non-condensing)
Certification	CE, FCC, SRRC

Maximum performance, actual data rates, and coverage will vary depending on network conditions and environmental factors. Product specifications and design are subject to change without notice. Copyright © 2025 Edimax Technology Co. Ltd. All rights reserved. 2



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