EP-BE9726 PCIe Wireless Adapter Specification Sheet

1. Product Overview

The EP-BE9726 is a high-performance PCIe Full-Size wireless network card, designed for desktop PCs, industrial computers and embedded platforms. Based on the MediaTek MT7925 chipset, it supports Wi-Fi 7 (802.11be) and Bluetooth 5.4, delivering next-generation connectivity with ultra-low latency and excellent efficiency.

When used with a Wi-Fi 7 router, EP-BE9726 supports Multi-Link Operation (MLO)* and up to ~6.5 Gbps theoretical throughput across 2.4 GHz, 5 GHz and 6 GHz bands.

Built with an optimized RF architecture and MAC-offload engine, the card minimises host CPU load and power consumption while maintaining robust wireless performance. The dual high-gain external antenna interface offers flexible installation and wide coverage, making it ideal for both consumer and industrial applications requiring high bandwidth and stable connectivity such as gaming, VR/AR, 4K streaming, automation control and industrial IoT.

***Note:** MLO support depends on router/driver implementation.

2. Key Features
- MediaTek MT7925 chipset, compatible with AMD & Intel platforms
- PCIe x1 interface (full/half-height bracket options) for stable bandwidth
- Tri-band Wi-Fi 7: 2.4 GHz / 5 GHz / 6 GHz
- Theoretical high-speed performance: up to ~6.5 Gbps
- Supports IEEE 802.11a/b/g/n/ac/ax/be (Wi-Fi 7)
- Bluetooth 5.4 + BLE, reliable connectivity for peripherals
- Multi-Link Operation (MLO) for lower latency and higher throughput
- Enhanced metal bracket with LED indicators for link/activity status
- Dual external high-gain antenna ports (e.g., 6 dBi) for improved coverage
- WPA3 advanced security protocol support
- Optimised for low-latency, high-stability throughput in both desktop and industrial use cases

3. Technical Specifications

Interface	PCIe x1 (Full-size)
Dimension	PCIe:72mm*46mm*7mm
Wireless Standard	IEEE 802.11a/b/g/n/ac/ax/be (Wi-Fi 7)
Bluetooth Version	Bluetooth 5.4 + BLE
Frequency Band	2.4GHz / 5GHz / 6GHz
Data Rate	Up to 6.5Gbps (6GHz: 2882Mbps + 5GHz: 2882Mbps + 2.4GHz: 688Mbps)
Antenna	6 dBi high-gain antenna
Security	WPA3 / WPA2 / WPA / WEP
Supported OS	Requires PC with Windows 11 and above (Wi-Fi 7 features & 6 GHz require Windows 11). Not compatible with Windows 10 or earlier. Linux Kernel 6.7 + supports plug-and-play.
Operating Temperature	-10°C ~ +70°C
Storage Temperature	-40°C ~ +90°C
Humidity	5% ~ 90% (non-condensing)

4. Application
   Designed for desktop PCs, industrial computers and servers, the EP-BE9726 delivers ultra-fast and reliable wireless connectivity for demanding consumer and industrial environments — from high-frame-rate gaming and VR/AR to factory automation and embedded control systems.

5. Advantages
- Optimised RF and baseband architecture delivering stable wireless performance and broad coverage
- MAC offload engine and hardware accelerators reduce CPU load and enhance efficiency
- Support for multi-link and tri-band operation ensures low latency and high reliability
- Compact half-height PCIe form factor ideal for space-constrained desktop, workstation or embedded platforms
- External antenna support enables flexible deployment and maximised signal reach