

AXE5400 Wi-Fi 6E Bluetooth 5.2 PCIe Adapter

Model: MA86XE

// Highlights

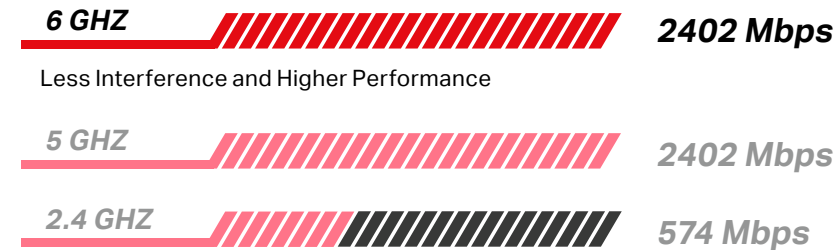
- 5400 Mbps Tri-Band Wi-Fi 6E
- Intel® Wi-Fi 6E Chipset
- Extends Your Wi-Fi into the 6 GHz Band
- Armed with Bluetooth 5.2
- Supported operating system: Windows 10, 11 (64 bit)



// Features

Upgrade Your PC to the Latest Wi-Fi 6E

MA86XE arms your PC with Wi-Fi 6E technology and the brand-new 6 GHz band, unlocking your Wi-Fi 6E router's full potential. The latest band is wide enough for 7 extra 160 MHz channels and exclusive to Wi-Fi 6E devices, which prevents drops in speed and interference from legacy devices.†



Stream Without Lag

By combining the Intel® Wi-Fi 6E Chipset, OFDMA, and MU-MIMO, MA86XE reduces latency by up to 75%. Game online, watch 4K videos, and crank up everything to the highest settings without lag.*



Bluetooth 5.2



MU-MIMO



Backwards Compatibility



Strong Chipset



WPA3 Security

Bluetooth 5.2 Supported

MA86XE makes your PC Bluetooth-capable with ultra-fast Bluetooth 5.2 which achieves more stable connection, farther range and faster transmission speeds than Bluetooth 4. Just connect your Bluetooth devices to your computer and enjoy with ease.***



Overall Security Protection

The latest security standard, WPA3, provides improved comprehensive Wi-Fi protection to defend your devices and private information against brute-force attacks.**

// Specifications

Wireless

Wireless Standards

IEEE 802.11 a/ac/ax 6 GHz
IEEE 802.11 a/ac/ax 5 GHz
IEEE 802.11 b/g/n/ax 2.4 GHz

Signal Rate

2402 Mbps on 6 GHz
2402 Mbps on 5 GHz
574 Mbps on 2.4 GHz

EIRP

5 GHz: 20dBm(FCC) / 15dBm(CE) (EIRP)
2.4 GHz: 20dBm(FCC) / 16dBm(CE) (EIRP)
6 GHz: 12dBm(FCC)

Hardware

Antennas

2× Fixed High-Performance
Omni-Directional Antennas

Dimensions

8.9 × 4.8 × 0.85 in
(226.3 × 120.8 × 21.5 mm)

Reception Sensitivity

6 GHz:
11ax HE160 MCS0: -86 dBm
11ax HE160 MCS11: -56 dBm
5 GHz:
11ax HE160 MCS0: -86dBm
11ax HE160 MCS11: -56dBm
11ac VHT160 MCS0: -87dBm
11ac VHT160 MCS9: -61dBm
11ax HE80 MCS0: -90 dBm
11ax HE80 MCS11: -59 dBm
11a 54Mbps: -77 dBm
11ac VHT80 MCS0: -92dBm
11ac VHT80 MCS9: -64dBm

2.4 GHz:

11ax HE40 MCS0: -91 dBm
11ax HE40 MCS11: -60 dBm
11g 54Mbps: -76 dBm
11n HT40 MCS7: -72dBm

Software

Working Mode

Infrastructure mode

Wireless Security

WPA-PSK/WPA2-PSK/WPA3-SAE**

// Specifications

Others

Environment

Operating Temperature: 0°C~40°C (32°F~104°F)

Operating Humidity: 10%~90% Non-Condensing

Storage Humidity: 5%~90% Non-Condensing

Package Contents

AXE5400 Wi-Fi 6E Bluetooth 5.2 PCIe Adapter (MA86XE)

Bluetooth Header Cable

Quick Installation Guide

Resource CD

Certification

FCC, CE, RoHS

System Requirements

Supported operating systems include Windows 10, 11(64-bit)[^]

[^]Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage, and number of connected devices are not guaranteed and will vary as a result of network conditions, AP limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and AP location.

[†]Use of Wi-Fi 6 (802.11ax), Wi-Fi 6E, and features including OFDMA, MU-MIMO, 1024-QAM, or HE160 require APs to also support the corresponding features. 160 MHz channels may not be all available in the 5GHz or 6 GHz band in some regions/countries due to regulatory restrictions.

[‡]Functionality of MA86XE may be restricted on some computing systems and platforms. Please try to update the device's driver for feature compatibility.

[§]Based on IEEE 802.11ax specification Intel Engineering simulation. 160 MHz channels and Wi-Fi 6/6E technology advantages related to network managed traffic enable lower latencies, more efficient operation, and higher reliability vs. random contention-based traffic of standard Wi-Fi 5 networks. Intel and the Intel logo are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

^{**}Up to 75% lower latency[†] is based on Intel simulation data of 802.11ax with and without OFDMA using 9 clients. Average latency without OFDMA is 36 ms, with OFDMA average latency is reduced to 7.6 ms. Latency improvement requires that the AP and all clients support OFDMA.

^{**}Use of WPA3 requires APs to also support the corresponding feature.

^{***}Several new features are introduced in the Bluetooth Core Specification 5.0 and 5.2 Release, including 2× faster speed and 4× broader coverage compared with Bluetooth 4.2.