MERCUSYS°

AXE5400 Wi-Fi 6E Bluetooth 5.3 PCIe Adapter | Datasheet



AXE5400 Wi-Fi 6E Bluetooth 5.3 PCIe Adapter

Model: MA86XE

Highlights

- Ultra Fast 2402 Mbps + 2402 Mbps + 574 Mbps Tri-Band Wi-Fi[†]
- Powerful Wi-Fi 6E Chipset
- Extends Your Wi-Fi into the 6 GHz Band
- Armed with Bluetooth 5.3*
- Supported operating system: Windows 10, 11 (64 bit)

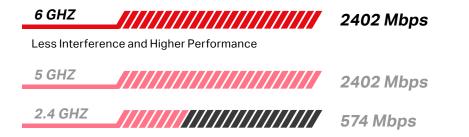


MERCUSYS°

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.[‡]



Bluetooth 5.3 Supported

MA86XE makes your PC Bluetooth-capable with ultra-fast Bluetooth 5.3 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.***





Stream Without Lag

MA86XE reduces latency by combining the powerful Wi-Fi 6E Chipset, OFDMA, and MU-MIMO. Game online, watch 4K videos, and crank up everything to the highest settings without lag.[‡]



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

 $226.3 \times 120.8 \times 21.5$ mm (8.9 × 4.8 × 0.85 in)

 Reception Sensitivity

 6 GHz:

 11ax HE160 MCS0:-86 dBm

 11ax HE160 MCS11:-56 dBm

 5 GHz:

 11ax HE80 MCS0: -90 dBm

 11ax HE80 MCS0: -90 dBm

 11ax HE80 MCS11: -59 dBm

 11a 54Mbps: -77 dBm

 11ac VHT80 MCS0: -92dBm

 11ac VHT80 MCS0: -92dBm

 11ac VHT80 MCS0: -91 dBm

 11ax HE40 MCS11: -60 dBm

 11ay HE40 MCS11: -60 dBm

Software

Working 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 5.3 PCle Adapter (MA86XE)

Bluetooth Header Cable

Quick Installation Guide

Resource CD

Certification

FCC, CE, RoHS

System Requirements

Windows 11/10 (64-bit)^

Specifications are subject to change without notice. All brands and product names are trademarks or registered trademarks of their respective holders. Copyright @ 2024 MERCUSYS. All rights reserved.

⁴Use of Wi-Fi 6, Wi-Fi 6E(802.11 ax), and features including OFDMA, MU-MIMO, 1024-QAM, or HE160 requires APs to also support the corresponding features. 160 MHz channels may not be all available in the 5 GHz 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.

[§]Use of WPA3 requires APs to also support WPA3.

*Several new features are introduced in the Bluetooth Core Specification 5.0, 5.2 and 5.3 Release, including 2× faster speed and 4× broader coverage compared with Bluetooth 4.2.

¹Maximum 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.