MERCUSYS®

Wi-Fi 6

AX1800 Wi-Fi 6
Bluetooth 5.4 PCIe Adapter

Model: MA70XE

// Highlights

- 1201 Mbps + 574 Mbps Dual-Band Wi-Fi[†]

- Powerful Wi-Fi 6 Chipset

- Fixed High-Performance Antennas

- Armed with Bluetooth 5.4

- WPA3 for Overall Security Protection*

// Features

Upgrade Your PC to Wi-Fi 6

Wi-Fi 6 features 1024-QAM, OFDMA, and MU-MIMO, delivering faster, more efficient, and reliable data transmissions to meet the demand for high-performance wireless experiences.‡

802.11ax Wi-Fi 6, 5 GHz

1201 Mbps

802.11ac Wi-Fi 5, 5 GHz

867 Mbps

1.4× FASTER§

Super Stable Bluetooth 5.4

MA70XE upgrades your PC with cutting-edge Bluetooth 5.4, designed for enhanced stability, broader compatibility, and faster transmission speeds. Simply connect your Bluetooth devices to your computer and enjoy with ease.**

Boost Wireless Range

Two high-performance antennas reach your router from farther away with more precise directional range, sustaining faster and more stable wireless connections.

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
Compatible with 11ax/ac/a/b/g/n Wi-Fi standards[†]

Signal Rate
1201 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)

Reception Sensitivity
5 GHz:
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

Hardware

Antennas
2× Fixed High-Performance
Omni-Directional Antennas

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

Software

Working Mode
Infrastructure mode

Wireless Security
WEP, WPA/WPA2/WPA3, WPA-PSK/WPA2-PSK*

// 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

AX1800 Wi-Fi 6 Bluetooth 5.4 PCIe Adapter (MA70XE)

Bluetooth Header Cable

Quick Installation Guide

Resource CD

Certification

FCC, CE, RoHS

System Requirements

Windows 11/10 (64-bit)△

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†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 and features including OFDMA, MU-MIMO, 1024-QAM, or HE160 requires APs to also support the corresponding features.

△Functionality of MA70XE may be restricted on some computing systems and platforms. Please try to update the device's driver for feature compatibility.

§802.11ax enables 1201 Mbps maximum theoretical data rates on 5 GHz, 1.4× faster than 802.11ac (867 Mbps on 5 GHz) and nearly 2.7× faster than baseline 1×1 ac Wi-Fi (433 Mbps on 5 GHz) as documented in IEEE 802.11 wireless standard specifications, and require the use of similarly configured 802.11ax wireless network routers.

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

**Several new features were introduced in the Bluetooth Core Specifications 5.0, 5.3, and 5.4, including 2× faster speed and 4× broader coverage compared with Bluetooth 4.2.