

**MERCUSYS®**

# User Guide

AC650 High Gain Wireless Dual Band USB Adapter

MU6H



REV1.0.1  
1910080048

## **COPYRIGHT & TRADEMARK**

Specifications are subject to change without notice. **MERCUSYS**<sup>®</sup> is a registered trademark of MERCUSYS TECHNOLOGIES CO., LTD. Other brands and product names are trademarks or registered trademarks of their respective holders.

No part of the specifications may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from MERCUSYS TECHNOLOGIES CO., LIMITED. Copyright © 2019 MERCUSYS TECHNOLOGIES CO., LIMITED. All rights reserved.

<http://www.mercusys.com>

## CE Mark Warning



This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

## OPERATING FREQUENCY (the maximum transmitted power)

2400 MHz -2483.5 MHz(20dBm)

5150 MHz -5250 MHz(23dBm)

5250 MHz -5350 MHz (20dBm)

5470 MHz -5725 MHz (20dBm)

## RF Exposure Information

This device meets the EU requirements (2014/53/EU Article 3.1a) on the limitation of exposure of the general public to electromagnetic fields by way of health protection. This device has been tested and meets the ICNIRP exposure guidelines and the European Standard EN 62209-2. SAR is measured with this device at a separation of 0.5 cm to the body, while transmitting at the highest certified output power level in all frequency bands of this device. Carry this device at least 0.5 cm away from your body to ensure exposure levels remain at or below the as-tested levels.

## EU declaration of conformity

MERCUSYS hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/53/EU, 2011/65/EU and (EU)2015/863. The original EU declaration of conformity may be found at <http://www.mercusys.com/en/ce>

## National Restrictions

Attention: This device may only be used indoors in all EU member states and EFTA countries.

	AT	BE	BG	CH	CY	CZ	DE	DK
	EE	EL	ES	FI	FR	HR	HU	IE
	IS	IT	LI	LT	LU	LV	MT	NL
	NO	PL	PT	RO	SE	SI	SK	UK



Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.

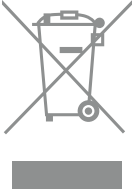


## Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device.
- Do not use damaged charger or USB cable to charge the device.
- Do not use the device where wireless devices are not allowed.
- This USB Adapter can be powered only by computers that comply with Limited Power Source(LPS).

Please read and follow the above safety information when operating the device. We cannot guarantee that no accidents or damage will occur due to improper use of the device. Please use this product with care and operate at your own risk.

## Explanation of the symbols on the product label

Symbol	Explanation
	<p>RECYCLING</p> <p>This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.</p> <p>User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.</p>

# CONTENTS

<b>Conventions</b> .....	<b>01</b>
<b>Chapter 1 Introduction</b> .....	<b>02</b>
1.1 Product Overview .....	02
1.2 Features .....	02
1.3 LED Status .....	02
<b>Chapter 2 Installation Guide</b> .....	<b>03</b>
2.1 Hardware Connection .....	03
2.2 Driver Installation .....	03
<b>Chapter 3 Connect to a Wireless Network</b> .....	<b>05</b>
3.1 Windows 10/8.1/8/7 .....	05
3.2 Windows XP .....	05
<b>Chapter 4 Uninstall Driver</b> .....	<b>06</b>
<b>Appendix: Specifications</b> .....	<b>07</b>

# Conventions

The Adapter or MU6H, or device mentioned in this User Guide stands for MU6H AC650 High Gain Wireless Dual Band USB Adapter without any explanations.

Note: Features of the adapter may vary by model and driver version. All images, steps, and descriptions in this guide are only examples and may not reflect your actual adapter experience.

## More Info

Specifications and the latest software can be found at the product page at the official website <http://www.mercusys.com>.

The Quick Installation Guide can be found where you find this guide or inside the package of the router.

## Speed/Coverage Disclaimer

\*Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage are not guaranteed and will vary as a result of 1) environmental factors, including building materials, physical objects, and obstacles, 2) network conditions, including local interference, volume and density of traffic, product location, network complexity, and network overhead, and 3) AP limitations, including rated performance, location, connection quality, and AP condition.

\*Use of 256-QAM requires your APs to also support 256-QAM.

\*To ensure compatibility, you may need to update the adapter's drivers after an OS update. You can find our latest drivers in the download center at <http://www.mercusys.com>.

# Chapter 1 Introduction

## 1.1 Product Overview

MU6H receives Wi-Fi signals on two separate bands. Supporting 256-QAM technology increases 2.4 GHz data rate from 150 Mbps to 200 Mbps for 33% faster performance. Choose the 2.4 GHz for surfing and social media, and 5 GHz for up to 433 Mbps for HD streaming and lag-free gaming.

With a high gain antenna, the adapter reaches your router from farther with more precise directional range, sustaining faster and more stable wireless connections.

## 1.2 Features

- Dual Band 2.4GHz and 5GHz Support
- 5 dBi High Gain Antenna
- Interoperate with other wireless (802.11b/g/n, 802.11a/n/ac) products
- Supports WPA/WPA2 data security, IEEE802.1x authentication, WEP encryption
- Provides USB 2.0 Interface
- Supports Infrastructure mode
- Easy to Install
- Supports Windows 10/8.1/8/7/XP (32/64 bit)

## 1.3 LED Status

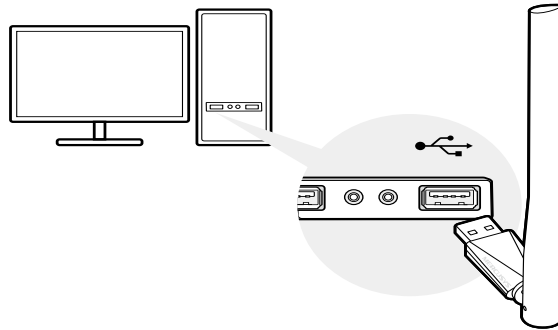
You can check the adapter's working status by following the LED Explanation table.

Status	Indication
Off	The driver is not installed. The adapter is not detected.
Blinking	The driver has been installed successfully. The adapter is working properly.

## Chapter 2 Installation Guide

### 2.1 Hardware Connection

Before you start using your adapter, insert the adapter into a USB port on your computer directly.



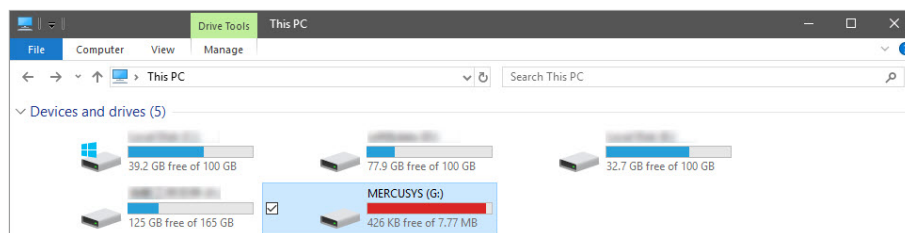
**Note:**

In Windows XP, a **Found New Hardware Wizard** window will appear when the adapter is detected. Please click **Cancel**.

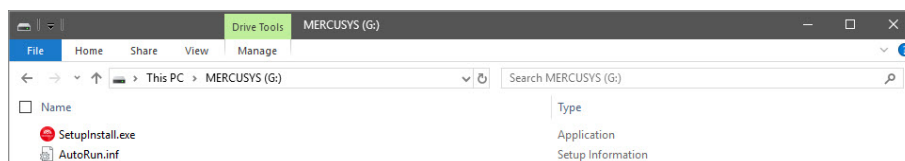
### 2.2 Driver Installation

The following instructions take Windows 10 as an example. The steps may vary slightly from other versions of Windows.

1. Go to **My Computer** or **This PC**.



2. Double click the **Mercusys** disk then run **SetupInstall.exe** to install driver.





**Note:**

- If you cannot find the Mercusys disk, download the driver at [www.mercusys.com/support](http://www.mercusys.com/support).
- In some operating systems, the driver installation will pop up automatically. Otherwise, run the application manually.

3. Wait until the installation completed.






## Chapter 3 Connect to a Wireless Network

With both the hardware and software successfully installed into your computer, you can quickly connect to a wireless network via Windows wireless utility.

Follow the instructions in the appropriate section below to use your computer system's built-in wireless utility: **Windows 10/8.1/8/7, Windows XP.**

### 3.1 Windows 10/8.1/8/7

1. Click the wireless icon ,  or  on the taskbar. Select the wireless network you want to join and then click **Connect**. Enter your Wi-Fi password when prompted.
2. When **Connected** displays next to the network name (SSID) on the screen, it indicates a successful network connection.

### 3.2 Windows XP

1. Right-click on the wireless icon in your taskbar (lower-right corner). Select **View Available Wireless Networks**.



2. Select the network you want to join and click **Connect**. Then enter your Wi-Fi password when prompted.

## Chapter 4 Uninstall Driver

You can remove the driver from **Windows Control Panel**.

1. Start **Control Panel**, go to **Programs and Features**, click **Uninstall a program**.
2. Find and uninstall the Mercusys program **MERCUSYS Wireless USB Adapter**.



3. Follow the on-screen instructions to complete the uninstallation.



4. Restart your computer.

## Appendix: Specifications

Normal	
Interface	USB 2.0
Standards	IEEE 802.11b/g/n 2.4 GHz, IEEE 802.11a/n/ac 5 GHz
Antenna	1 External High Gain 5dBi Antenna
LED	Status
Security	WEP, WPA/WPA2, WPA-PSK/ WPA2-PSK, 802.1x
Dimensions	2.28 × 0.66 × 6.83 in (57.8 × 16.8 × 173.4 mm)
Operating System	Windows 10/8.1/8/7/XP(32/64 bit)
Signal Rate	Up to 433 Mbps on 5 GHz Up to 200 Mbps on 2.4 GHz
Safety & Emissions	CE, ROHS

Environmental and Physical	
Operating Temperature	0°C~40°C (32°F~104°F)
Storage Temperature	-40°C~70°C (-40°F~158°F)
Working Humidity	10% - 90% RH, Non-condensing
Storage Humidity	5% - 90% RH, Non-condensing