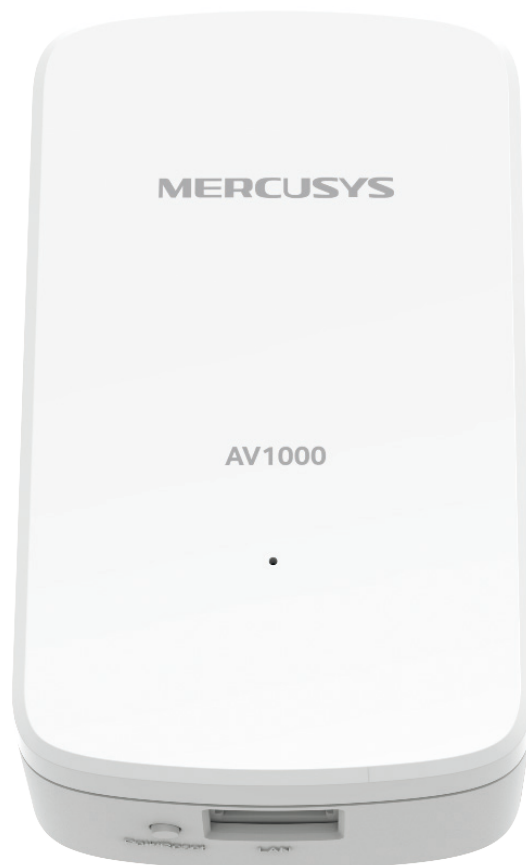


**MERCUSYS®**

# User Guide

AV1000 Gigabit Powerline Adapter

MP500



REV1.0.0  
1910080053

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**<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.

## EU Declaration of Conformity

MERCUSYS hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/30/EU, 2014/35/EU, 2009/125/EC, 2011/65/EU and (EU)2015/863.

The original EU declaration of conformity may be found at <https://www.mercusys.com/en/ce>.

## Korea Warning Statements

당해 무선설비는 운용중 전파혼신 가능성이 있음 .

## BSMI Notice

安全諮詢及注意事項

- 請按照本產品注明的電源類型使用本產品。
- 清潔本產品之前請先切斷電源。請勿使用液體、噴霧清潔劑或濕布進行清潔。
- 注意防潮，請勿將水或其他液體潑灑到本產品上。
- 插槽與開口供通風使用，以確保本產品的操作可靠並防止過熱，請勿堵塞或覆蓋開口。
- 請勿將本產品置放於靠近熱源的地方。除非有正常的通風，否則不可放在密閉位置中。
- 請不要私自拆開機殼或自行維修，如產品有故障請與原廠或代理商聯繫。

限用物質含有情況標示聲明書

設備名稱：AV1000 Gigabit Powerline Adapter		型號（型式）：MP500				
Equipment name		Type designation (Type)				
單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr <sup>+6</sup> )	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
PCB	○	○	○	○	○	○
外殼	○	○	○	○	○	○
電源供應板	—	○	○	○	○	○
網綫	○	○	○	○	○	○

備考 1. "超出 0.1wt%" 及 "超出 0.01wt%" 系指限用物質之百分比含量超出百分比含量基準值。  
備考 2. "○" 系指該項限用物質之百分比含量未超出百分比含量基準值。  
備考 3. "—" 系指該項限用物質為排除項目。



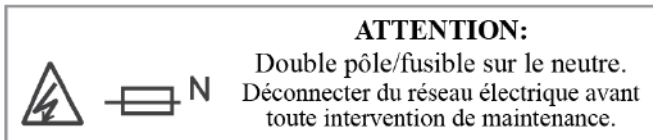
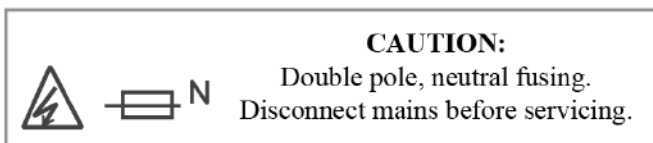
Продукт сертифіковано згідно з правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.

# EAC








## Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device. If you need service, please contact us.
- The socket-outlet shall be installed near the equipment and shall be easily accessible
- For passthrough devices, plug the power strips into the integrated electrical sockets of the devices, but devices of the same or another type not be stacked in normal use.
- Plug the powerline devices directly into the wall outlets but not the power strips.
- Plug the powerline devices into the wall outlets with earthing connection.

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
	AC voltage
	DC voltage
	Indoor use only
	Functional earth wiring terminals only
	Warning electric shock
	Fuse is used in neutral N
	<p><b>RECYCLING</b></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>

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# Conventions

This guide is a complement to Quick Installation Guide. The Quick Installation Guide provides instructions for quick internet setup, while this guide contains details of each function and demonstrates how to configure them in typical scenarios.

When using this guide, please notice that features of the powerline adapter may vary slightly depending on the model and software version you have. The powerline adapter availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual powerline adapter experience.

\*Compatible with all HomePlug AV and AV2 Standard Powerline adapters. This product may not be compatible with routers or gateways with firmware that has been altered, is based on open source programs, or are non-standard or outdated.

## 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 network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.

\*Maximum Powerline signal rates are the physical rates derived from HomeplugAV/AV2 specifications. Actual Powerline data throughput and Powerline range are not guaranteed and will vary as a result of network conditions and environmental factors, including electrical interference, volume of traffic and network overhead, AFCI circuit breaker, and Powerline being located in a separate circuit.

\* The Power Saving feature takes effect when your appliances are disconnected or turned off. Actual power saving data will vary in different network conditions and environments

# Chapter 1 Introduction

## 1.1 Product Overview

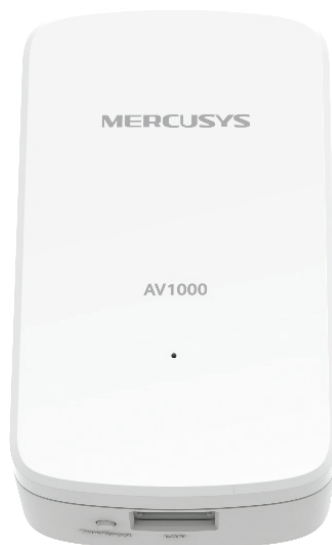
Mercusys powerline adapter aims to extend your existing home network, with the help of your home's electrical circuit.

## 1.2 Product Appearance

Your powerline adapter may differ in appearance slightly from that depicted because of the region and product version.

**Note:** MP500 KIT (EU Version) is used for demonstration in this guide.

### 1.2.1 LED Legend



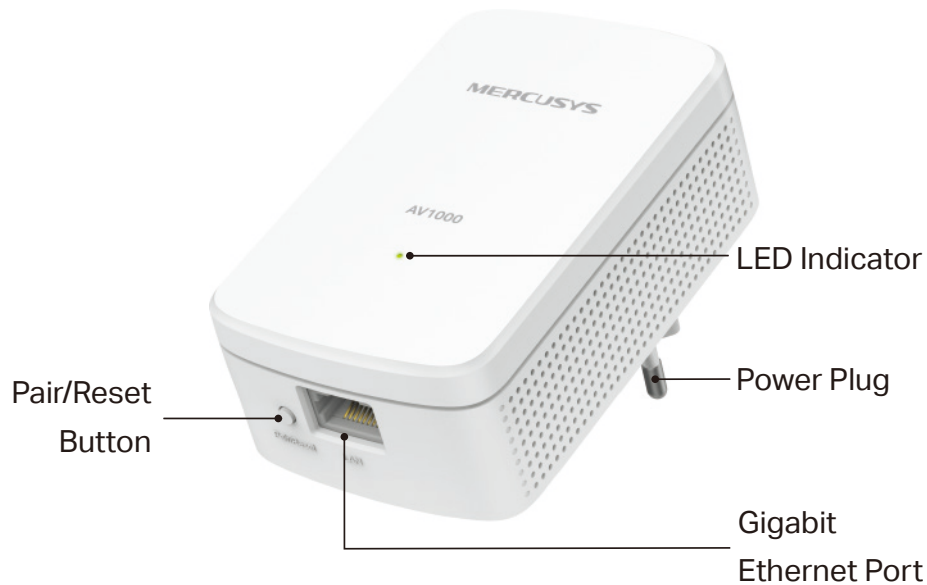
LEDs indicate the powerline adapter's working status. For more details, please refer to the following table.

Status	Indication
On	The powerline adapter is on.
Off	The powerline adapter is off, Or Power-Saving Mode* is on.
Blinking	Blinking quickly: Pairing is in process. Blinking slowly: The powerline adapter is not paired.

\*Five minutes after the device connected to the powerline adapter is turned off or inactive, the powerline adapter will automatically switch to Power-Saving Mode.



## 1.2.2 Physical Interface



### Power Plug

The powerline adapter has a Plug that can be connected to a power socket.

### Pair Button

Press and hold the button for 1 second to join a powerline network. Go to **Secure Powerline Network by Pairing** for more information.

Press and hold for more than 6 seconds to reset the powerline adapter.

### Ethernet Port

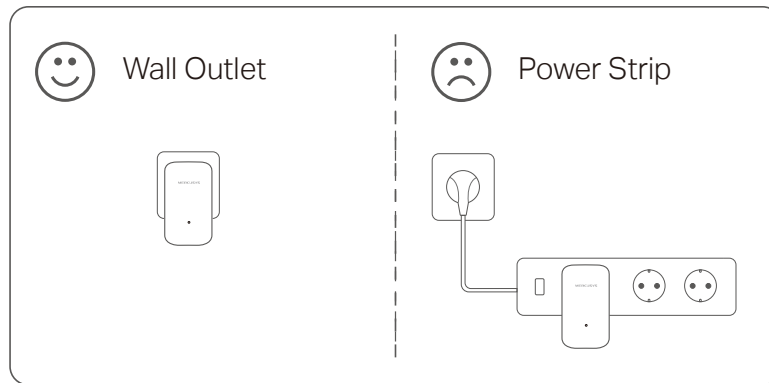
Connect the Ethernet port to your wired devices, such as a computer, a router or a game console, via an Ethernet cable.

## Chapter 2 Use the Powerline Adapter

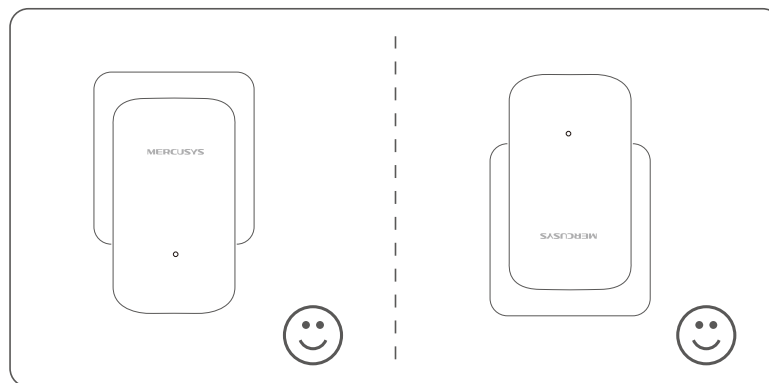
### 2.1 Requirements

Powerline adapters work in pairs. You should have at least two powerline products to build a powerline network. To optimize your network performance, please follow these principles:

- All powerline adapters should be on the same electrical wiring system.
- Avoid plugging in powerline adapters and high-powered household devices (such as washing machines and refrigerators) close to one another.
- Plug the powerline adapter directly into a wall outlet. Do not plug the powerline adapter into a power strip, extension cord, or surge protector.



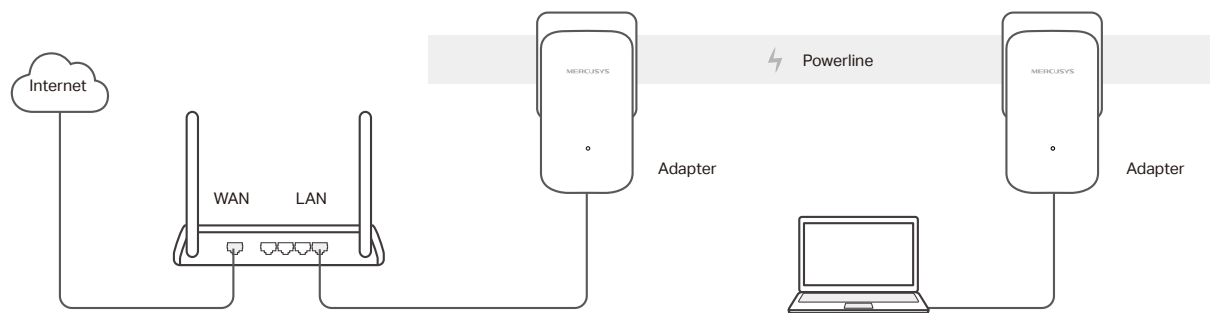
- Use the powerline adapter only in below directions.



## 2.2 Extend Wired Network by Plug & Play

If your router has no enough LAN ports for all wired devices in the house, but you don't want complex and expensive cabling, you can solve the problem with two powerline adapters.

1. Connect one adapter to a LAN port of your router using an Ethernet cable.
2. Plug the other adapter into the wall outlets on the same electrical circuit.
3. Wait until the Power LED on any adapter turns solid on.
4. Connect your computer to the adapter using an Ethernet cable.



**Done!** Now enjoy the internet!

## 2.3 Secure Powerline Network by Pairing

All powerline adapters share some common factory settings, and can communicate with one another. If you want your powerline adapters to communicate only with your own powerline adapters, you should pair them. Thus a secured powerline network is formed and other powerline adapters can no longer join your powerline network without being paired.

**Note:** You can only pair two devices at a time.

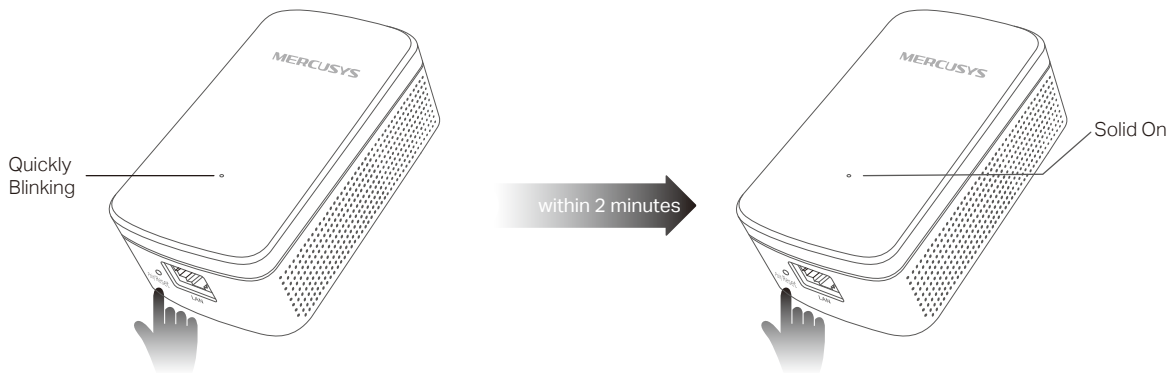
If you have extended the network using the Plug & Play method, but you want to secure the powerline network and prevent other powerline devices from being added to it, please follow the steps below.

### 1. Verify all powerline devices' LEDs are solid on.

**Tips:** We recommend that you plug in your powerline devices near each other, or as close to each other as possible when pairing. Your settings will not be affected. The devices can be relocated to where they are needed once pairing is complete.

### 2. Press the Pair button for 1 second on one adapter. Its LED starts blinking quickly.

### 3. Within 2 minutes, press the Pair button for 1 second on another adapter. Its LED starts blinking quickly as well. When the LED turns solid green, the pairing process is complete.

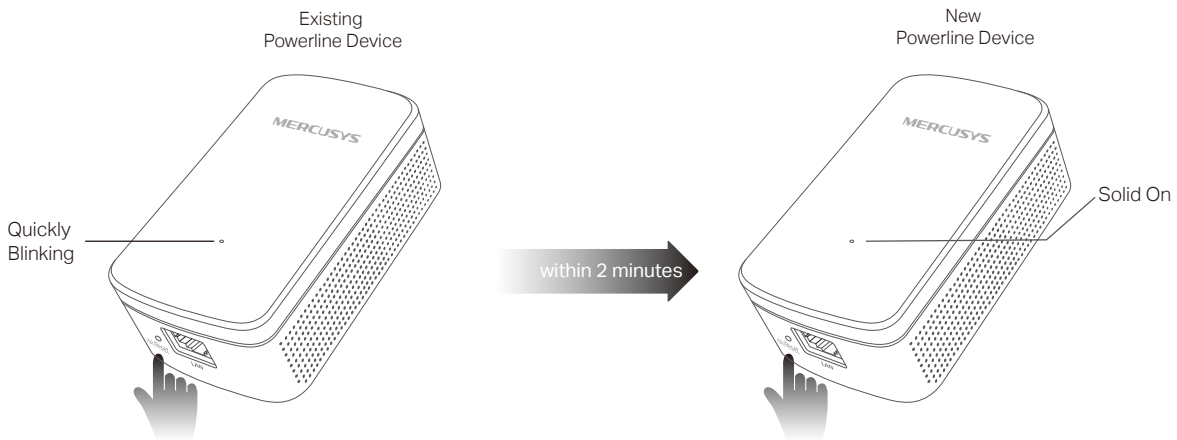


**Done!** Enjoy your secure powerline network!

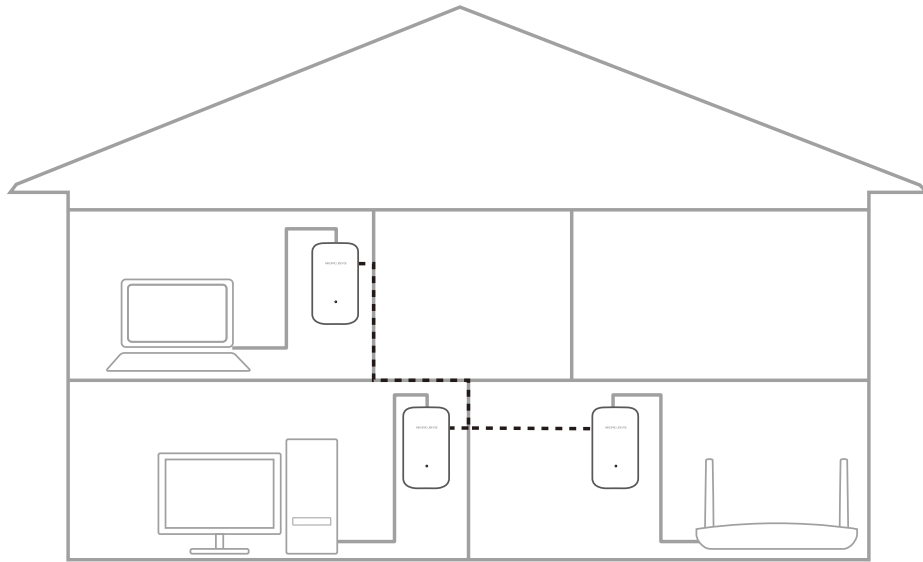
## 2.4 Add Another Powerline Adapter

If you have already set up a powerline network using powerline devices, but you want to further extend the network to reach everywhere you need it to, you can add a new powerline adapter into the existing powerline network.

1. Plug the new powerline adapter into a wall outlet near one of the existing powerline devices.
2. Wait for a minute, and check whether the LED turns on. If it's on, skip to step 3. If it's not, continue with step 2 to pair the new powerline adapter into the secured powerline network.
  - a. Press the Pair button on one of the existing powerline devices for 1 second. Its LED starts blinking.
  - b. Within 2 minutes, press the Pair button on the new powerline adapter for 1 second. Its LED starts blinking quickly as well. When the LED turns solid green, the pairing process is complete.



3. Relocate the new powerline adapter to the place where wired internet access is needed.



**Done!** Enjoy the internet through your extended network!

## **FAQ (Frequently Asked Questions)**

### **Q1. How do I reset my powerline adapter?**

With the powerline adapter plugged into to the electrical outlet, press and hold the Pair button until the Power LED goes off momentarily and comes back on.

### **Q2. How to troubleshoot if there is no internet connection in my powerline network?**

- Make sure all powerline devices are on the same electrical circuit.
- Make sure all Power LEDs are solid on. If not, pair your adapters and extenders again.
- Make sure all hardware connections are correctly and securely connected.
- Check if you have an internet connection by connecting the computer directly to the modem or router.
- Make sure your computer's IP address is in the same segment as your router's.

### **Q3. What can I do if a successfully-paired powerline device does not reconnect after it has been moved to a new location?**

- Try another socket and make sure it is on the same electrical circuit.
- Try to pair it again, and make sure the Power LED is solid on.
- Check for possible interference, such as a washer, air conditioner or other household appliances that may be too close to one of the powerline devices. Plug the appliance into the integrated electrical socket (if the powerline device has one) to remove some electrical noise.