MERCUSYS®

Quick Installation Guide

MS106LP/MS106P/MS110GMP

The images in this guide are for demonstration only and may differ from your actual product.

Switch Explanation

Recovery (For MS106LP/MS106P/MS110GMP)

Off: The PoE Auto Recovery function is disabled.

On: The switch will constantly detect the working status of a PoE powered device (PD). When the switch finds that the PD works abnormally, the switch will reboot it.

Isolation (For MS106LP/MS106P/MS110GMP)

Off: Ports can transmit data with each other.

On: The isolated ports cannot transmit data with each other. They can transmit data only with the uplink ports (ports 5-6 of MS106LP and MS106P/uplink ports of MS110GMP).

Extend (For MS106LP/MS106P/MS110GMP)

Off: Ports run at100/10 Mbps (1000/100/10 Mbps for MS110GMP) and support PoE power supply up to 100m away.

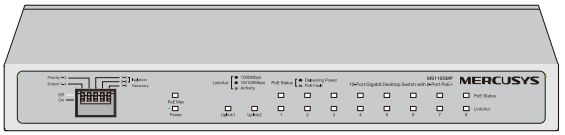
On: Ports run at 10 Mbps and support PoE power supply up to 250m away.

Priority (Only for MS110GMP)

Off: All the ports transmit data with the same priority.

On: The specific ports transmit data with a higher priority than other ports.

LED Explanation



MS106LP/MS106P:

Power
On: The power is on
Off: The power is off

Link/Act Status
On: Link present but no activity
Flashing: Transmitting or receiving data
Off: No link

PoE Status
On: Providing PoE power
Off: Not providing PoE power

MS110GMP:

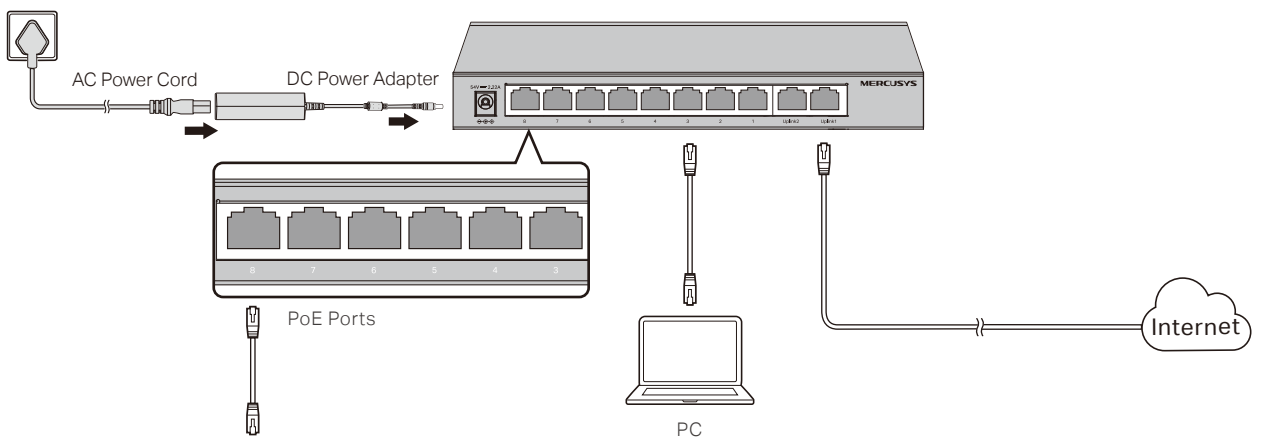
Power
On: The power is on
Off: The power is off

Link/Act; Uplink 1, Uplink 2
Green On: Running at 1000 Mbps, but no activity.
Green Flashing: Running at 1000 Mbps and is transmitting or receiving data.
Yellow On: Running at 10/100 Mbps, but no activity.
Yellow Flashing: Running at 10/100 Mbps and is transmitting or receiving data.
Off: No link

PoE Status
On: Providing PoE power
Flashing: PoE fault
Off: Not providing PoE power

PoE Max
On: 104 W≤Total power supply < 111 W
Flashing: Total power supply ≥ 111 W
Off: Total power supply < 104 W

Connection



Notes:

1. PoE ports can also connect to non-PoE devices, but only transmit data.
2. Non-PoE ports (ports 5-6 of MS106LP/MS106P and uplink ports of MS110GMP) are recommended to connect to uplink devices like gateways.
3. By default, ports 1-2 of MS106LP/MS106P have higher priority than other ports in transmitting data if network congestion occurs. It is recommended to connect key network devices (network cameras, APs, etc.) to ports 1-2.

Specifications

General Specifications

Standard	IEEE 802.3i, IEEE 802.3u, IEEE 802.3x (for all models) IEEE 802.3ab (only for MS110GMP)
Protocol	CSMA/CD. 802.3af/at PD supported
Interface	MS106LP/MS106P: 6 10/100 Mbps RJ45 Ports Auto-Negotiation/Auto MDI/MDIX PoE Ports: Port 1–4 MS110GMP: 10 1000 Mbps RJ45 Ports Auto-Negotiation/Auto MDI/MDIX PoE Ports: Port 1–8
Network Media (Cable)	10BASE-T:2-pair UTP/STP (≤100m) of Cat. 3 or above 100BASE-TX:2-pair UTP/STP (≤100m) of Cat. 5 or above 1000BASE-T:4-pair UTP/STP (≤100m) of Cat. 5e or above (only for MS110GMP)
Switching Capacity	MS106LP/MS106P:1.2 Gbps MS110GMP: 20 Gbps
Forwarding Method	Store-and-Forward
MAC Address Learning	Automatically learning, automatically aging
Power Supply	**MS106LP:** External Power Adapter Input: 100-240 VAC, 50/60 Hz Output: 53.5 VDC/0.81 A **MS106P:** External Power Adapter Input: 220-240 VAC, 50/60 Hz Output: 53.5 VDC/1.31 A **MS110GMP:** External Power Adapter Input: 100-240 VAC, 50/60 Hz Output: 54 VDC/2.22 A
PoE Budget	**MS106LP:** 40 W (up to 30 W for each PoE port) **MS106P:** 67 W (up to 30 W for each PoE port) **MS110GMP:** 111 W (up to 30 W for each PoE port)
Certification	CE, RoHS

Environmental and Physical Specifications

Certification	CE, RoHS
Operating Temperature	MS106LP: 0˚C to 40˚C (32˚F to 104˚F) MS106P: -20˚C to 40˚C (-4˚F to 104˚F) MS110GMP: -10˚C to 40˚C (14˚F to 104˚F)
Storage Temperature	-40˚C to 70˚C (-40˚F to 158˚F)
Operating Humidity	10% to 90% non-condensing
Storage Humidity	5% to 90% non-condensing

Frequently Asked Questions (FAQ)

Q1. Why is the Power LED not lit?

The Power LED should be lit when the power system is working normally. If the Power LED is not lit, please check as follows:

A1: Make sure the AC power cord/power adapter is connected the switch with power source properly.

A2: Make sure the voltage of the power supply meets the requirements of the input voltage of the switch.

A3: Make sure the power source is on.

Q2. Why is the Link/Act LED not lit when a device is connected to the corresponding port?

It is recommended that you check the following items:

A1: Make sure that the cable connectors are firmly plugged into the switch and the device.

A2: Make sure the connected device is turned on and working well.

A3: The cable must be less than 100 meters long (328 feet). If Extend Mode is enabled, it should be less than 250 meters (820 feet).

Q3. Why are PoE ports not supplying power for PoE devices?

A: When the total power consumption of connected PoE devices exceeds the maximum, the PoE port with a smaller port number has a higher priority. The system will cut off power to the ports with larger port numbers to ensure supplying to other ports.

Taking MS110GMP as an example, if port 1, 2, 3 and 5 are consuming 25 W respectively, and an additional PoE device with 15 W is inserted to port 4, the system will cut off the power of port 5 to compensate for the overload.

Q4. What should I notice before using the PoE Auto Recovery feature?

A1: Before upgrading a connected PoE powered device (PD), disable PoE Auto Recovery to avoid the PD's damage.

A2: When a PD does not send data packets to the switch for a long period in certain scenarios (e.g. an IPC in sleep mode), disable PoE Auto Recovery to avoid the PD repeatedly rebooting.

For technical support, replacement services, user guides, and other information, please visit **https://www.mercusys.com/support/**.

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, 2011/65/EU and (EU)2015/863.
The original EU declaration of conformity may be found at https://www.mercusys.com/en/ce/

UK declaration of conformity

Mercusys hereby declares that the device is in compliance with the essential requirements and other relevant provisions of the Electromagnetic Compatibility Regulations 2016 and Electrical Equipment (Safety) Regulations 2016.
The original UK declaration of conformity may be found at https://www.mercusys.com/support/ukca/

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.
- Place the device with its bottom surface downward.
- Do not use damaged charger or USB cable to charge the device.
- Do not use any other chargers than those recommended.
- Adapter shall be installed near the equipment and shall be easily accessible.
- The POE output cannot be used to charge lithium batteries or devices with lithium batteries.

For MS110GMP only:

- The socket-outlet shall be near the equipment and shall be easily accessible.
- Plug the product into the wall outlets with earthing connection through the power supply cord.

CE Mark Warning

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

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

The POE output cannot be used to charge lithium batteries or devices with lithium batteries.

BSMI Notice

安全諮詢及注意事項

- 請使用原裝電源供應器或只能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拔掉電源線。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。

警告：為避免電磁干擾，本產品不應安裝或使用於住宅環境。

限用物質含有情況標示聲明書

單元 Unit	限用物質及其化學符號					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
PCB	○	○	○	○	○	○
外殼	○	○	○	○	○	○
電源供應器	-	○	○	○	○	○
其他及其配件	-	○	○	○	○	○

備考1.〝超出0.1 wt %〞及〝超出0.01 wt %〞係指限用物質之百分比含量超出百分比含量基準值
Note 1: "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.
備考2.〝○〞係指該項限用物質之百分比含量未超出百分比含量基準值。
Note 2: "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.
備考3.〝—〞係指該項限用物質為排除項目。
Note 3: The "—" indicates that the restricted substance corresponds to the exemption.

Wall Mounting Specifications

Model	Screw Standard of ANSI B1.1	Minimum Length of Screw	Screw-Head-to-Wall Minimum Distance	Wall-Mounting-Holes Distance
MS106LP	4#, (5#), 6#, 8#	7mm	1.5mm	39mm
MS106P	4#, (5#), 6#, 8#	7mm	1.5mm	39mm
MS110GMP	4#, (5#), 6#	7mm	1.5mm	150mm

Explanation of the symbols on the product label

Symbols may vary from products. The label is at the bottom of the product.

Symbol	Explanation
	Class II equipment
	Class II equipment with functional earthing
	Alternating current
	Direct current
	Polarity of d.c. power connector
	For indoor use only
	Dangerous voltage
	Caution, risk of electric shock
VI	Energy efficiency Marking
	Protective earth
	Earth
	Frame or chassis
	Functional earthing
	Caution, hot surface
	Caution
	Operator's manual
	Stand-by
	"ON"/"OFF" (push-push)
	Fuse
N	Fuse is used in neutral N
	RECYCLING 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. 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.
	Caution, avoid listening at high volume levels for long periods
	Disconnection, all power plugs
m	Switch of mini-gap construction
μ	Switch of micro- gap construction (for US version) Switch of micro-gap /micro-disconnection construction (for other versions except US)
ε	Switch without contact gap (Semiconductor switching device)