

Installation Guide

150W AC Power Supply Module

PSM150-AC

Chapter 1 Introduction

1.1 Overview of the Product

The PSM150-AC is an AC-input and DC-output power supply module. It can convert the input voltage to 12 Volts with the maximum output power of 150 Watts. The power supply module is fully hot swappable, helping to ensure no system interruption during installation or replacement. PSM150-AC is applicable to multiple TP-Link switch models.

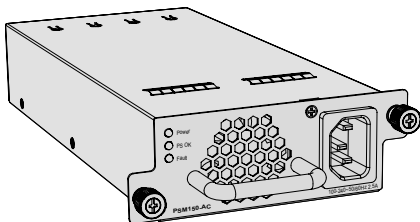


Figure 1-1 Appearance of PSM150-AC

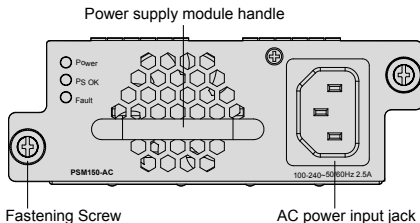


Figure 1-2 Front Panel of PSM150-AC

1.2 Description of LEDs

There are three LEDs on the front panel of PSM150-AC. Described below:

| LED Status | Description |
|------------|---|
| Power On | Power supply module is powered on and running well, but not supplying power to the switch. |
| PS OK Off | |
| Fault Off | |
| Power On | Power supply module is powered on and running well, and supplying power to the switch. |
| PS OK On | |
| Fault Off | |
| Power On | The circuit has faults, such as output over-voltage, output under-voltage, output over-current, output short circuit, hot-swap control failure (note 1) or fan fault. |
| Fault On | |
| PS OK Off | |
| Power Off | AC power off or power supply fault. |
| PS OK Off | |
| Fault Off | |

Table 1-1 LED Status

Note:

- Hot-swap control function will be checked when PSM150-AC is powered on but has not been inserted into the switch. If the Fault LED is on under this condition, please do not insert PSM150-AC into the switch, otherwise the power supply module or the powered devices may be damaged.
- The failure of output over-voltage or over-current may cause the power LED to flash.

1.3 Description of Features

| Feature | Description |
|---------------------|---|
| Protection function | Includes output over-voltage protection, output under-voltage protection, output short circuit protection and output over-current protection. |
| Redundant backup | Supports dual power modules combining in parallel to implement 1+1 redundancy for uninterruptible power supply. |
| Hot Swappable | In the case of 1+1 redundant power supply system, the PSM150-AC can be plugged out or plugged in without shutting down the switch. |

Table 1-2 Features of PSM150-AC

When the power module reverts to the protected state, its recovery characteristics are shown in Table 1-3.

| Protection function | Protective action | Recovery characteristics |
|--|---|---|
| Output over-voltage & under-voltage protection | Power supply module locked and cut-off supply | The power supply can not recover automatically. |
| Output short circuit protection | Power supply module locked and cut-off supply | Power supply module reverts into the auto-retry mode. It can recover automatically when the fault is cleared. |
| Output over-current protection | Power supply module locked and cut-off supply | Power supply module reverts into the auto-retry mode. It can recover automatically when the fault is cleared. |

Table 1-3 Protection Functions of PSM150-AC

Note:

When the power supply module is locked or auto-retry continually, you can try the following steps to restore the device.

1. Disconnect the power cord from the external power supply system.
2. Disconnect the power cord from the power supply module.
3. Remove the power supply module from the switch.
4. Insert the power supply module again.
5. Connect the power cord to the power supply module again.
6. Connect the other end of the power cord to the external supply system.

Chapter 2 Installation

The process of installation and removal of the power supply module is illustrated in Figure 2-1 and Figure 2-2.

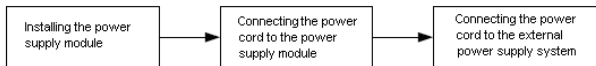


Figure 2-1 The Installation Process

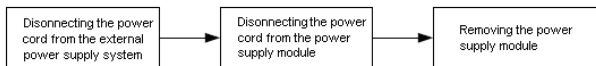


Figure 2-2 The Removal Process

Note:

For safety considerations, the above process are recommended by TP-Link, however, PSM150-AC can also support installation or removal when the AC power supply is on.

2.1 Safety Information

To avoid damage to the power supply module and the equipment and bodily injury, please observe the following notes:

- When you install and remove the power supply module, please wear an ESD-preventive wrist strap, and make sure that it has good skin contact and is well grounded.
- Before installing the power supply module, make sure that the voltage of external power supply system is the same with the voltage marked in the power supply module, and the output voltage of the power supply module is the same with the required voltage of the powered devices in order to prevent damaging the power supply module or the powered devices.
- Do not touch any exposed wires or terminals to avoid bodily injury.
- Do not place the power module in a humid place or let the liquid into the power supply module.
- If there is a failure inside the module, please contact service personnel, instead of opening the housing of the module.

2.2 Tools for Installation

- Straight screwdriver
- Philips screwdriver
- ESD-preventive wrist strap

2.3 Installing & Removing the Power Supply Module

• Installing the Power Supply Module

1. Wear an ESD-preventive wrist strap, and make sure that it has good skin contact and is well grounded.
2. Grip the handle of the module with one hand, and hold the bottom of the module using your other hand. Gently push the module in along the slot guide rail until the module is flush with the switch, as shown in Figure 2-3.

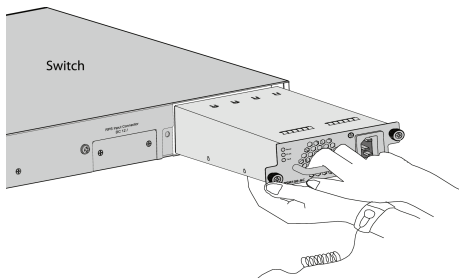


Figure 2-3 Install Power Supply Module

3. Tighten the captive screws with a Phillips screwdriver to fix the power supply module in place.

- **Removing the Power Supply Module**

1. Wear an ESD-preventive wrist strap, and make sure that it has good skin contact and is well grounded.
2. Remove the power cord from the external power supply system and the power module.
3. Use a Phillips screwdriver to loosen the captive screws at both sides of the power supply module until all spring pressure is released.
4. Pull the handle with one hand towards you along the guide rails, and hold the bottom of the module using your other hand, until it completely comes out of the switch chassis.

 **Note:**

When installing or removing a power supply module, pay attention to the following points:

- Make sure that the power supply module is set correctly in the operation of installation.
- Do not use too much force in the installation. If resistance is encountered or positions of the power supply module appear larger during installation, you must first remove the module and then reinstall the module.
- If screws can not be tighten, it may be due to the power supply module is not installed properly. Please check carefully.

- In order to better protect the power supply module during removal, it is recommended that you package it in an antistatic bag.

2.4 Connecting the Power Cord

- **Connecting the Power Cord**

After the power supply module is installed on the switch, please plug the female connector of the provided power cord into the power socket of the device, and the male connector into a power outlet as the following figure shows.

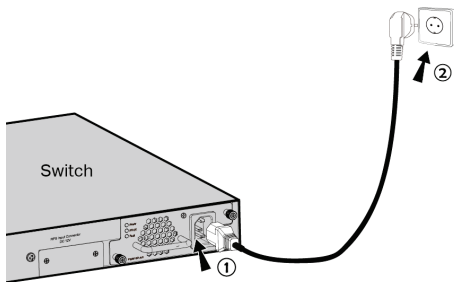


Figure 2-4 Connect the Power Cord

2.5 Verifying the Installation

To verify the installation status of PSM150-AC, firstly, please make sure the two captive screws on PSM150-AC are tightened, then connect the power cord and check the LEDs of PSM150-AC. If the Power LED is on while Fault LED is off, it

indicates that the AC power input is good and the device is working properly, and the installation of PSM150-AC has been successful.

Appendix: Specifications

| Item | Specification |
|----------------|--|
| AC Power Input | 100V-240V~ 50/60Hz |
| Output Voltage | 12VDC |
| Output Current | 12.5A (Maximum) |
| Output Power | 150W (Maximum) |
| Temperature | Operation : 0°C to 40°C (32 to 104°F) |
| | Storage: -40°C to 70°C (-40 to 158°F) |
| Humidity | Operation : 20% to 90% RH Non-condensing |
| | Storage: 10% to 95% RH Non-condensing |

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Industry Canada Statement

CAN ICES-3 (A)/NMB-3(A)

Korea Warning Statements

당해 무선설비는 운용중 전파혼신 가능성이 있음.

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。
- 請不要私自打開機殼，不要嘗試自行維修本產品，請由授權的專業人士進行此項工作。

此為甲類資訊技術設備，于居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某些適當的對策。

限用物質含有情況標示聲明書

| 產品元件名稱 | 限用物質及其化學符號 | | | | | |
|--------|------------|---------|---------|-------------|-------------|---------------|
| | 鉛 Pb | 鎘 Cd | 汞 Hg | 六價鉻 CrVI | 多溴聯苯 PBB | 多溴二苯醚 PBDE |
| PCB | ○ | ○ | ○ | ○ | ○ | ○ |
| 外殼 | ○ | ○ | ○ | ○ | ○ | ○ |

備考 1. "超出 0.1 wt %" 及 "超出 0.01 wt %" 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。



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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.



この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。




VCCI-A

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.

Explanation of the symbols on the product label

| Symbol | Explanation |
|---|--|
|  | AC voltage |
|  | DC voltage |
|  | <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> |

EU declaration of conformity

TP-Link 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 and 2011/65/EU.

The original EU declaration of conformity may be found at <http://www.tp-link.com/en/ce>



For technical support and other information, please visit <http://www.tp-link.com/support>, or simply scan the QR code.