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Convention

If not specifically indicated, the switch, this product or this device mentioned in this Install Guide stands for IP-COM 8GE+2SFP Managed PoE Switch G3210P.

Symbols in this Install Guide:

Symbol	Description
Note	Ignoring this type of note may result in a malfunction or damage to this device.
Tips	This format is used to highlight a procedure that will save time or resources.

Overview of this Install Guide

Chapter	Introduction
Chapter 1 Product Overview	Introduction to this switch's package contents and physical appearance
Chapter 2 Installation	Introduction to this switch's installation considerations and installation procedures
Chapter 3 Login	Introduction to steps of logging in to this switch's web management page

Chapter 1 Product Overview

1.1 Package Contents

Open the package and verify the following items:

- Switch*1
- Power Cord*1
- L-shaped Bracket*2
- Screw*6
- Footpad*4
- Install Guide*1

If any item is missing or damaged, contact the place of purchase immediately.

1.2 Physical Appearance

Front Panel

The following parts are located on the front panel shown as Figure 1-1.

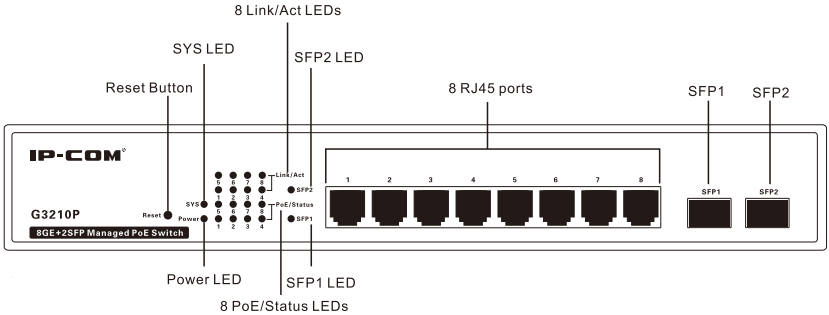


Figure 1-1 Front Panel

Reset Button

With the switch powered on, pressing the Reset button for at least 5 seconds and then releasing it restore the switch to factory default settings. The switch will reboot automatically after reset and this process takes about 45 seconds.

While rebooting, following phenomena will occur: All LEDs light up→SYS LED is off→All LEDs are off except the Power LED→SYS is on and blinking.

LEDs

The following table describes the LED designations.

LED	Status	Description
Power	Solid	Proper connection to power supply
	Off	Improper connection to power supply or malfunction occurs.
SYS	Blinking	The system is functioning properly.
	Solid	The system is functioning improperly.
	Off	The system is still rebooting.
Link/Act	Solid	A valid link is established on the corresponding RJ45 port.
	Blinking	Data transmission is occurring on the corresponding RJ45 port.
	Off	No link is established on the corresponding RJ45 port.
PoE/Status	Solid	The PoE powered device (PD) is connected on the corresponding RJ45 port and the port is supplying power successfully.
	Off	No PoE powered device (PD) connected.
SFP1&SFP2	Solid	A valid link is established or data transmission on the corresponding SFP port.
	Off	No link is established on the corresponding SFP port.

Table 1-1 LED Designations

RJ45 Ports

This switch comes with 8 10/100/1000Mbps auto-negotiation RJ45 ports. Each port has a corresponding Link/Act LED. Speed rates and corresponding working modes of all RJ45 ports are described below in table 1-2.

Speed	Working Mode
10Mbps (auto-negotiation)	Half/Full duplex auto-negotiation
100Mbps (auto-negotiation)	Half/Full duplex auto-negotiation
1000Mbps (auto-negotiation)	Full duplex auto-negotiation

Table1-2 Speed & Working Mode of RJ45 Ports

All RJ45 ports are PoE-capable, and can connect up to 8 IEEE 802.3af-compliant PDs (15.4W for each) or 4 IEEE 802.3at-compliant PDs (30W for each).

Tips

As pair 1, 2 and pair 3, 6 are applying PoE power supply, it is advisable to use cat 5 or higher UTP/STP cables. Note that Ethernet specifications limit the cable length between the switch and the attached device to 100 m (328 ft).

SFP Ports

This switch comes with 2 1000Mbps SFP fiber ports, accommodating a standard SFP fiber module.

SFP (Small Form-factor Pluggable) is a compact, hot-pluggable transceiver mainly used for implementing the switchover between fiber and electricity signals, including fiber rate control, modulation sending, signal detection, IV transformation and amplifier limiting judgment regeneration.

An optical fiber connector terminates the end of an optical fiber. The optical fiber connector (known as union), an indispensable passive device in optical fiber communication, is mainly used for detachable optical fiber connection, which is not only convenient for commissioning test and maintenance of the optical fiber system, but makes this system's switch-over and scheduling more flexible.

G3210P only supports LC optical fiber connector as shown in figure 1-2:

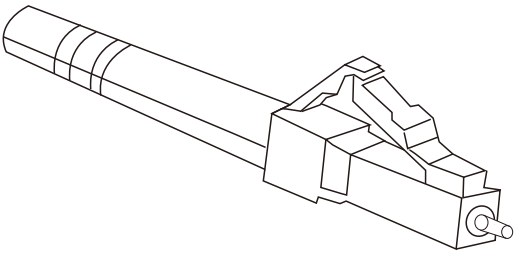


Figure 1-2 LC Optical Fiber Connector

Tips

The optical fiber module or photoelectric converter is not included in the package and you need to prepare it by yourself.

■ Back Panel

The following parts are located on the back panel as shown in Figure 1-3.

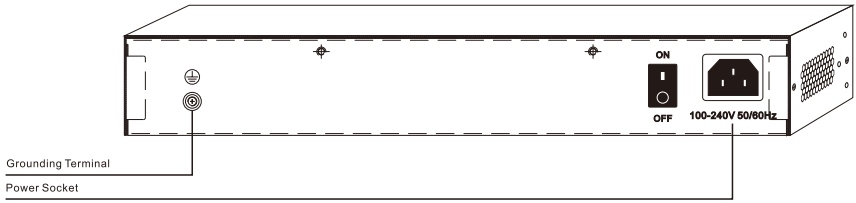


Figure 1-3 Back Panel

Power ON/OFF

Used for controlling power supply of this device.

Grounding Terminal

Used for connecting the protective grounding cable for lightning protection. As for the method of connecting protective grounding cable, please refer to 2.4 Connect to Protective Grounding Cable (Page 8).

Power Socket

Used for connecting the included power cord for power supply.

Chapter 2 Installation

2.1 Installation Considerations

To avoid any equipment damage or bodily injury caused by improper use, read the following safety recommendations before installing the switch. Note that the recommendations do not cover every possible hazardous condition.

■ **Safety Caution**

- Do wear anti-static wrist straps while installing this device and disable the power supply of this device;
- Use the included power cord for power supply;
- Ensure operating power supply accords with rated input standard.
- Ensure ventilation holes of the switch are in good condition;
- Do not open or remove the housing of the switch;
- Do disconnect power supply while cleaning the switch and do not use damp cloth or any liquid to clean the switch;
- It's suggested to ground the switch to avoid strong inductive lightning. Keep the switch away from power lines, electric lights or strong power grid or anywhere the power grid with strong current is reachable, all for better performance.

Note

There is an IP-COM seal on one of the screws. You should keep the seal unbroken before the technical staff maintains your switch. You cannot open the housing of the device unless you get the local reseller's permission, or you have to be responsible for the result that the device cannot be maintained because of unpermitted operation.

■ **Site Requirements**

Temperature & Humidity

Environment	Temperature	Humidity
Operating	-10ºC ~ 45ºC	10% ~ 90%RH (non-condensing)
Storage	-40℃ ~ 70℃	5%~90% RH (non-condensing)

Table 2-1 Temperature & Humidity Requirements

Cleanliness Requirements

In case that static electricity affects this device's normal operation, please observe following guidelines:

- Keep indoor environment clean and do dusting for the switch regularly;
- Keep the switch well-grounded for electrostatic transferring.

Lightning Protection

In case that strong current does damage to the switch due to inductive lightning, verify that:

- Power socket, rack, work bench and the grounding terminal of the switch are well-grounded;
- The switch is cabled properly. When the switch is cabled outdoors, it is advisable to use it together with the signal lightning arrester.

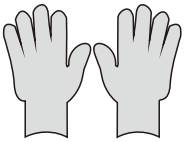
Installation Site Requirements

Whether install the switch in a rack or on a flat work bench, please verify:

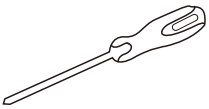
- The rack or work bench is stable and sturdy enough;
- The switch should be clean and well ventilated. Keep at least 10 centimeters free on all sides for cooling;
- Do not place any article, especially heavy articles, on the switch;
- There is more than 1.5 centimeters vertical distance free between devices that stack up.

2.2 Tools

While installing the switch, prepare tools as shown below:



Antistatic Gloves



Phillips Screwdriver

Ethernet Cable

2.3 Installation

The switch can be installed either in a rack or on a desktop. You can choose the more suitable one as you need.

A. Mount the switch in a rack

With the included L-shaped brackets and screws, you can install it in a 19-inch standard rack.

Step 1: Make sure the rack is well-earthed and stable;

Step 2: Attach the included mounting brackets to the two sides of the switch with the included screws;

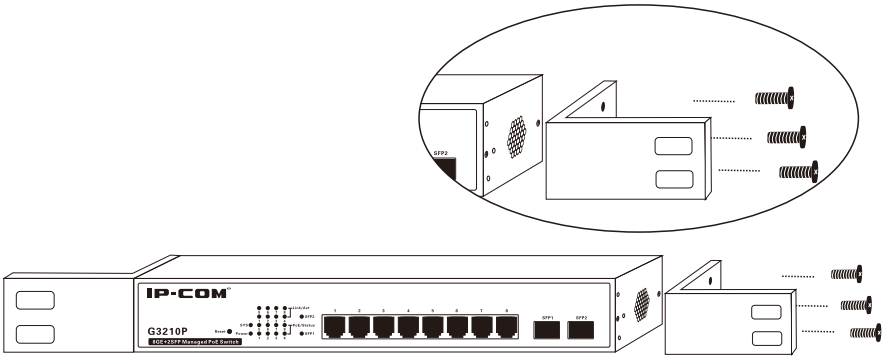


Figure 2-1 Attach L-shaped brackets to the switch

Step 3: Insert screws (prepared by yourself) through each bracket and into the rack to securely fix the switch onto the rack.

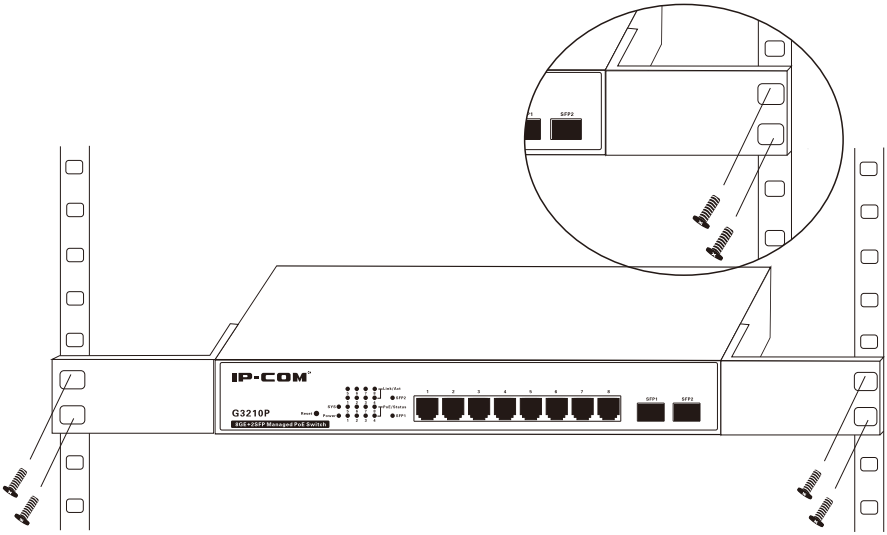


Figure 2-2 Mount the switch in a Rack

B. Mount the switch on a desktop

Without a 19-inch standard rack, you can install the switch on a desktop.

Step 1: Place the switch bottom up on a flat desktop;

Step 2: Attach four footpads to the corresponding circular grooves on the bottom of the switch;

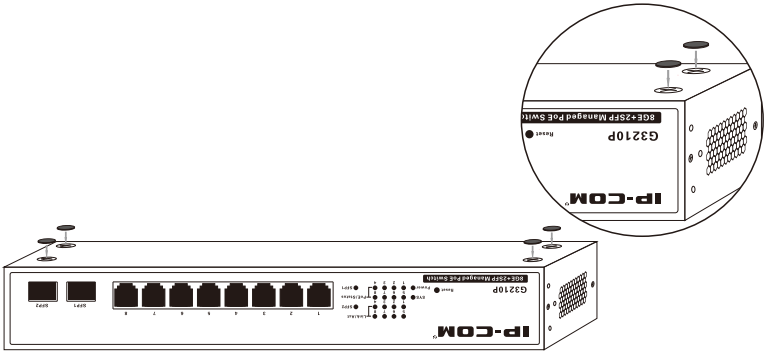


Figure 2-3 Mount the switch on a desktop

Step 3: Place the switch face up on the desktop.

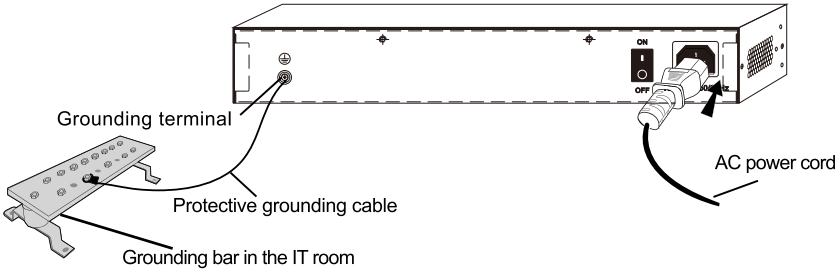
2.4 Connect to Protective Grounding Cable

Proper connection of protective grounding cable is not only important for lightning protection and anti-interference, but for your own personal safety. Please select the most suitable method to connect protective grounding cable according to your installation environment.

A. With grounding bar

Step 1: Connect one end of the protective grounding cable to the binding post on the grounding bar.

Step 2: Connect the other end of the protective grounding cable to the grounding terminal and fix the screws.



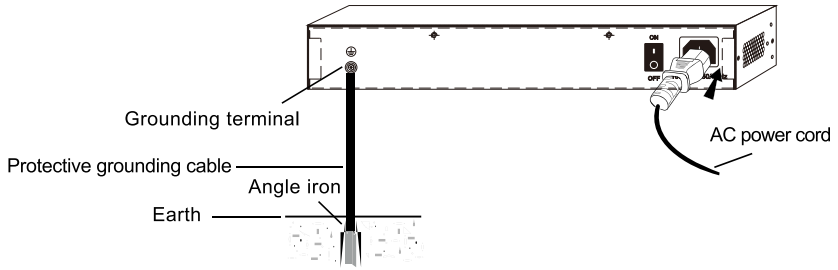
B. Without grounding bar

With mud land nearby and allowed to bury grounding bar, follow below steps:

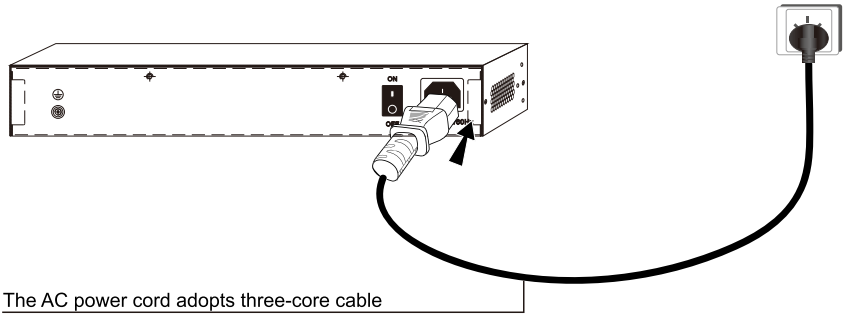
Step 1: Bury an angle iron or steel pipe (≥0.5m) into the mud land;

Step 2: Weld one end of the protective grounding cable to the angle iron or steel pipe and embalm the welding point;

Step 3: Connect the other end of the protective grounding cable to the grounding terminal.



If not allowed to bury the grounding bar, you can connect it to ground through the three-core PE cable of the AC power socket on the precondition that the PE cable in the switchgear room or beside the AC power supply transformer is well-grounded.



2.5 Connect to Power Supply

Please use the included power cord for power supply.

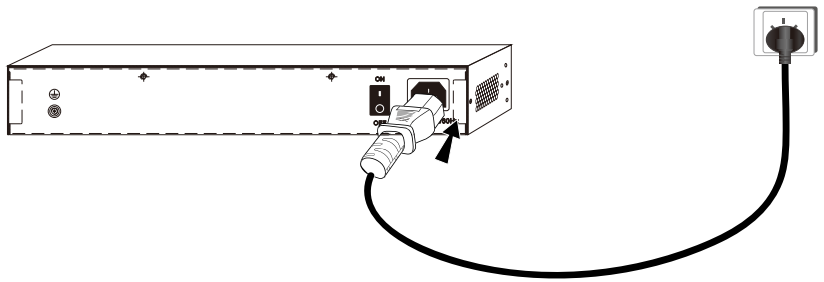


Figure 2-4 Connect to Power Supply

2.6 Cable Connection

2.6.1 Connect to RJ45 Ports

Connect the switch to remote Ethernet devices with Ethernet cables.

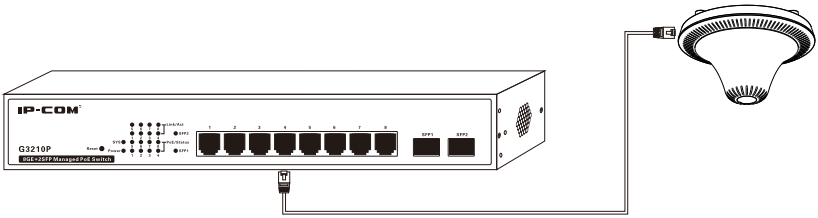


Figure 2-5 Connect to RJ45 Ports

Tips

All RJ45 ports of the switch are Auto MDI/MDIX-capable, which allows you to attach devices using twisted pair category 5 or higher, either straight-through or crossover cables.

2.6.2 Connect to SFP Fiber Ports

Step 1: Insert the SFP module into the SFP module bay.

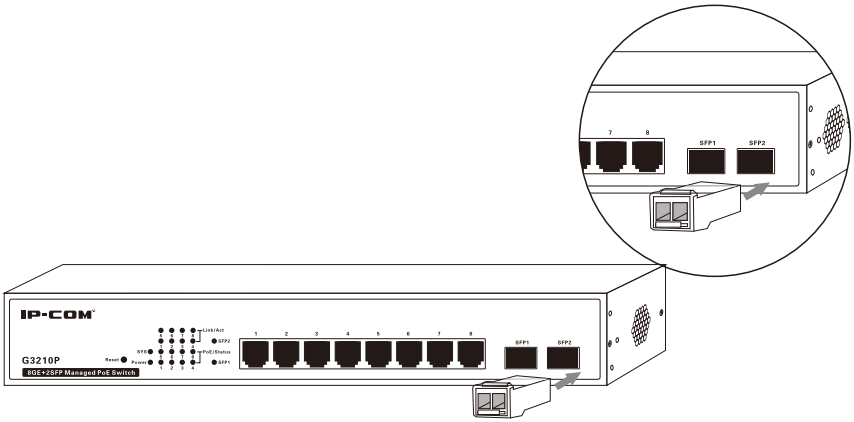


Figure 2-6 Insert the SFP module

Step 2: Insert the LC optical fiber connector of the fiber into the SFP module

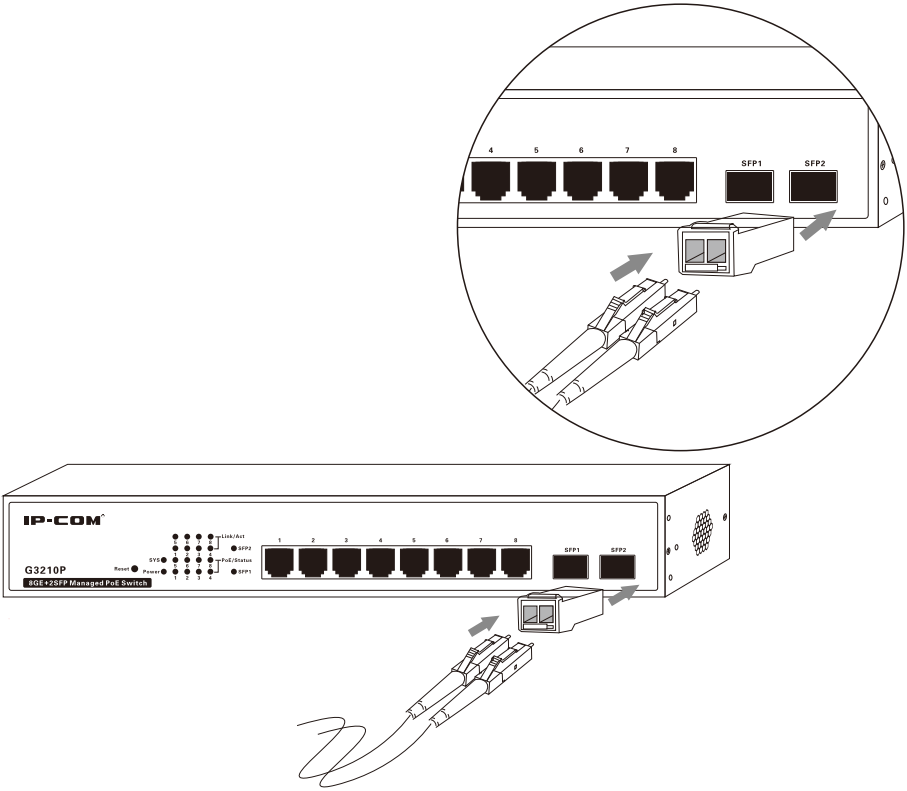


Figure 2-7 Insert the LC Optical Fiber Connector

2.6.3 Connect to PDs

The PoE power supply feature on all RJ45 ports is enabled by default. You can connect IEEE 802.3at-/802.3af-compliant APs, IP telephones, IP cameras or other powered devices to the switch.

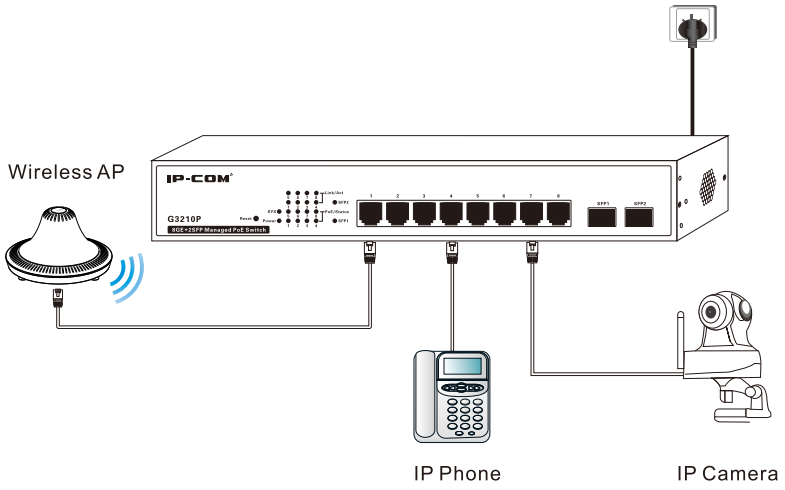


Figure 2-8 Connect to PDs

Tips

The PoE power supply mode is dynamic, i.e. the switch accommodates power supply for powered devices automatically.

2.7 Power Up the Device

Check the device thoroughly before powering up the device.

2.7.1 Check the Device

Before applying power supply, perform the following:

- The operating power supply should accord with rated input standard;
- The power cord and grounding cable is correctly connected;
- All cable connections (RJ45 ports, SFP ports) are correct.
- If cabling outside, ensure the Ethernet port lightning arrester and AC power source lightning arrester are connected.

2.7.2 Power Up the Device

Step 1: Turn on the power switch (Power ON/OFF) on the back panel to power up the switch.

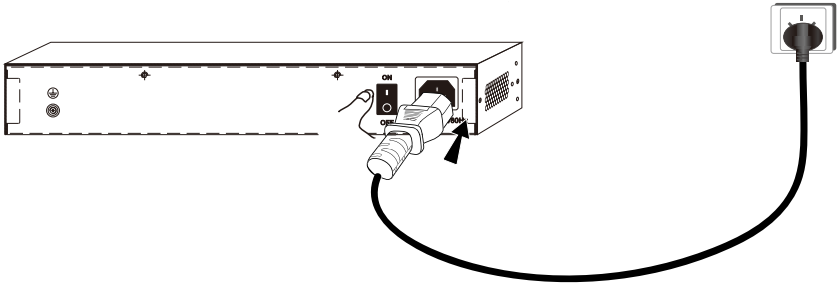


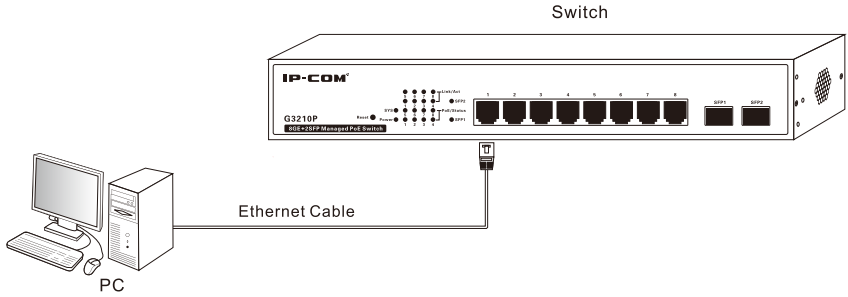
Figure 2-9 Power Up the Switch

Step 2: After being powered on, the switch will be initialized automatically. Please ensure that following phenomena will occur to LEDs one by one:

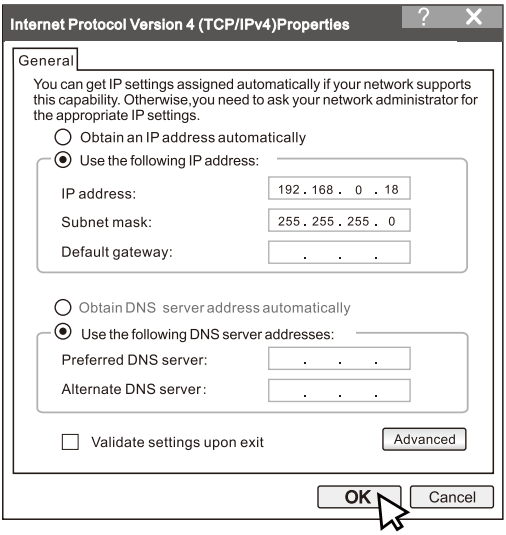
- All LEDs (Power, SYS, PoE/Status, Link/Act, SFP1, SFP2) will light up for self-checking.
- SYS LED is off.
- All LEDs are off except the Power LED.
- After restarting, the Power LED lights up, SYS LED is blinking, corresponding Link/Act LED or SFP1/SFP2 LED is on or blinking and corresponding PoE/Status LED lights up.

Chapter 3 Login

Step 1: Connect the PC to an RJ45 port of the switch using an Ethernet cable;

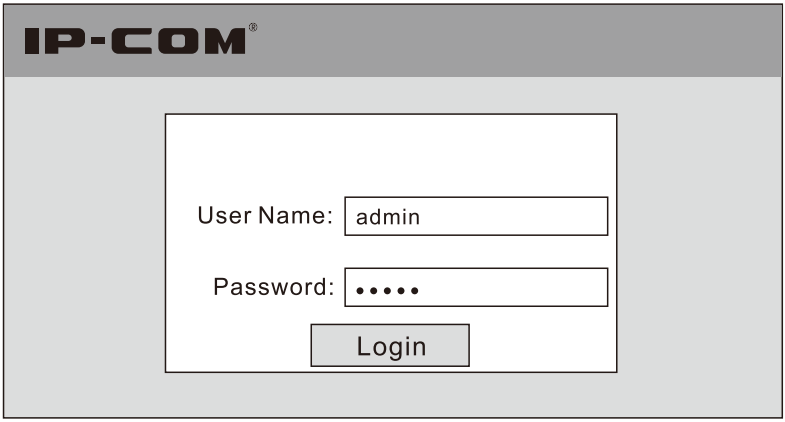
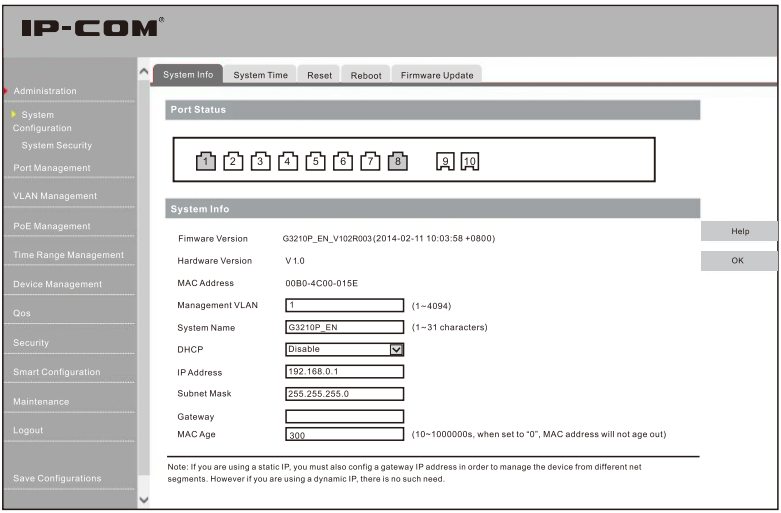


Step 2: Configure your PC's IP, which should be in the same network segment but be different from the switch's management IP. The default management IP of the switch is 192.168.0.1, so you can set your PC's IP to **Use the following IP address**: IP address: 192.168.0.X (where X can be any number between 2 and 254); subnet mask: 255.255.255.0.



Step 3: Launch a web browser, input 192.168.0.1 in the address bar and press **Enter.**

Step 4: Enter the default username admin and default password admin, and click **Login.**



Step 5: Then you can go to the web management page to view or modify the switch's configuration info.