

9-Port 10/100Mbps Desktop Switch with 8-Port PoE

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9口百兆8口PoE非网管型交换机

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**■ Conventions**

If not specifically indicated, the switch, this product or this device mentioned in this Install Guide stands for IP-COM 9-port 10/100Mbps desktop switch with 8-port PoE F1109P.

Symbols in this Install Guide:

Symbol	Meaning
 <b>Note</b>	This symbol is used to highlight information of importance or special interest. Ignoring this type of note may result in a malfunction or damage to this device.
 <b>Tips</b>	This symbol is used to highlight a procedure that will save time or resources.

**■ Overview of This Install Guide**

Chapter	Description
Chapter 1 Product Overview	Introduction to this switch's package contents and physical appearance
Chapter 2 Hardware Installation	Introduction to this switch's hardware installation and installation considerations
Chapter 3 Physical Connection	Introduction to cable connections between this switch and other devices, and connection considerations
Appendix	Introduction to technical specifications of this switch and safety, emission statement

# Chapter 1 Product Overview

## 1.1 Package Contents

Unpack the package and verify that the following items are included:

Item	Number	Description
Switch	1	/
Power Adapter	1	/
Install Guide	1	Used for instructing you how to use this device
Magnet	4	Used for magnet installation
Screw	4	Used for magnet installation
Anti-slip Footpad	4	Used for desktop installation
Expansion Bolt	2	Used for wall-mounting installation
Expansion Screw	2	Used for wall-mounting installation

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

## 1.2 Physical Appearance

### ■ Front Panel

The front panel contains RJ45 ports, VLAN ON/OFF (a hardware switch), and LEDs as shown in **Figure 1-1**.

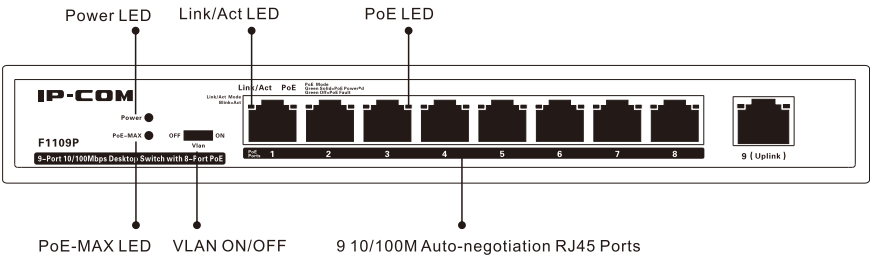


Figure 1-1 Front Panel

## RJ45 Ports

9 10/100M auto-negotiation RJ45 ports: Port 9 is the Uplink port with inductive lightning protection (4KV). Ports 1-8 are 8 PoE, IEEE 802.3af-compliant and IEEE 802.3at-compliant Downlink ports with up to 40W on a single port. And they can connect up to 8 IEEE 802.3af-compliant PDs (powered devices) or 4 IEEE 802.3at-compliant PDs at the same time.

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### Tips

- As pair 1, 2 and pair 3, 6 are delivering PoE power, it is advisable to use cat 5 or higher UTP/STP cables. When cat 5e or cat 6 twisted cables are adopted, the cable length between the switch and the attached device can be as long as 150m.
  - The PoE mode is dynamic, i.e. the switch delivers power for powered devices automatically.
  - The maximum allowed PoE power consumption of this switch reaches 115W. When the total power consumption of all PoE PDs exceeds 115W, the PoE-MAX LED will be flashing. Meanwhile, in terms of the priority order: port 1 > port 2 > port 3 > port 4 > port 5 > port 6 > port 7 > port 8, the PD linked to the port with lower priority will be disconnected.
- 

## VLAN ON/OFF

**VLAN ON:** Port VLAN is enabled on this switch. In this mode, ports 1- 8 are isolated and any two of them cannot intercommunicate. However, all of them can communicate with the Uplink port (port 9). This can prevent broadcast storm and DHCP cheating. As long as the switch is powered on and the VLAN mode is ON, VLAN function will take effect.

**VLAN OFF:** Port VLAN is disabled on this switch. In this mode, all ports can intercommunicate and won't be limited by VLAN. As long as the switch is powered on and the VLAN mode is OFF, VLAN function won't take effect.

## LEDs

You can know the working status of your device according to LED status.

LED	Color	Status	Description
Power	Green	Solid	Proper connection to power supply
		Off	Improper connection to power supply or malfunction occurs
PoE-MAX	Green	Flashing	<p>PoE power consumption reaches the maximum power budget (115W).</p> <p>In terms of the priority order: port 1 &gt; port 2 &gt; port 3 &gt; port 4 &gt; port 5 &gt; port 6 &gt; port 7 &gt; port 8, PDs linked to ports with lower priority will be disconnected automatically one by one until PoE power consumption becomes normal.</p> <p>Note: To make the PoE-MAX LED extinguished (PoE power supply becomes normal), you need to manually cut off PoE power supply of some ports, i.e., unplug Ethernet cables of these ports.</p>
		Off	PoE power consumption is within the maximum power budget. Power can be available for additional PDs.
Link/Act	Orange	Solid	A valid link is established on the corresponding RJ45 port.
		Flashing	Data transmission is occurring on the corresponding RJ45 port.
		Off	No link is established on the corresponding RJ45 port or malfunction occurs.
PoE	Green	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 on the corresponding RJ45 port or the port is not supplying power.

**Table 1 LED Status Description**

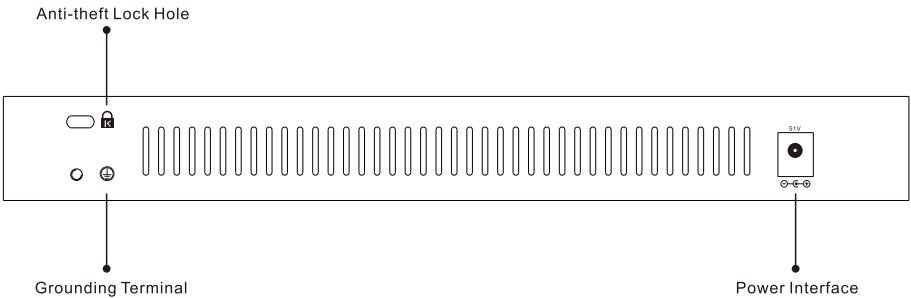
**Note**

LED of port 9 (Uplink port) is for decoration only.

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**Back Panel**

The back panel contains the anti-theft lock hole, grounding terminal and power interface as shown in **Figure 1-2**.



**Figure 1-2 Back Panel**

**Anti-theft Lock Hole**

Used for locking this device and an object together with an anti-theft lock (not included) for the purpose of anti-theft.

**Grounding Terminal**

Used for connecting the protective grounding cable for inductive lightning protection. As for the method of connecting protective grounding cable, please refer to 2.3 Connect to Protective Grounding Cable (Page 9).

**Power Interface**

Used for connecting to the included power adapter for power supply.

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**Note**

Please use the included power adapter for power supply. The rated power input voltage is 100-240V AC, 50/60Hz and the rated power output voltage is 51V DC, 2.5A.

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# Chapter 2 Hardware 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 gloves 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 the 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 so that the technical staff can maintain 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.

### ■ Environmental Requirements

#### Temperature & Humidity

Environment	Temperature	Humidity
Operating Environment	-10°C ~ 45°C	10% ~ 90%RH (Non-condensing)
Storage Environment	-40°C ~ 70°C	5% ~ 90% RH (Non-condensing)

**Table 2 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 dust 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

Before installing the switch in a rack or on a flat work bench, please verify:

- The rack or work bench is stable, sturdy enough and well-grounded;
- The switch should be clean and well ventilated. Keep at least 10 centimeters free on all sides for cooling;
- There are no articles, especially heavy articles, on the switch;
- There is more than 1.5 centimeters vertical distance free between devices that stack up.

## 2.2 Installation

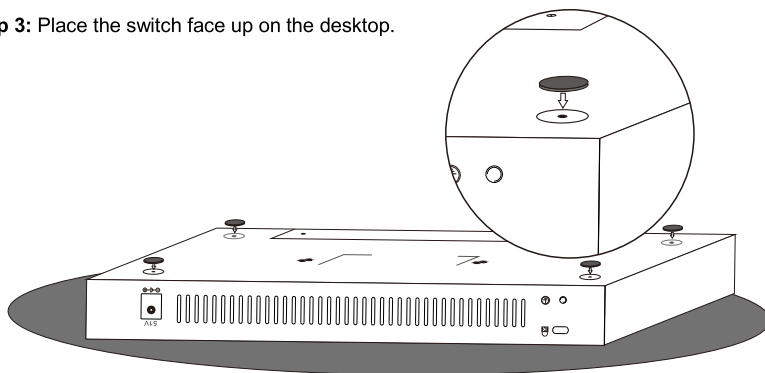
You can choose a suitable installation method as you need.

### A. Desktop Installation

**Step 1:** Place the switch bottom up on a big enough, flat desktop;

**Step 2:** Attach four anti-slip footpads to the corresponding circular grooves on the bottom of the switch as shown in **Figure 2-1**;

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



**Figure 2-1 Mount the Switch on a Desktop**

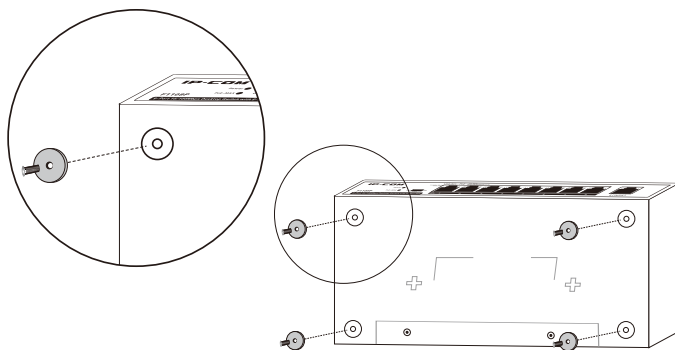
### B. Magnet Installation

**Step 1:** Prepare a phillips screwdriver;



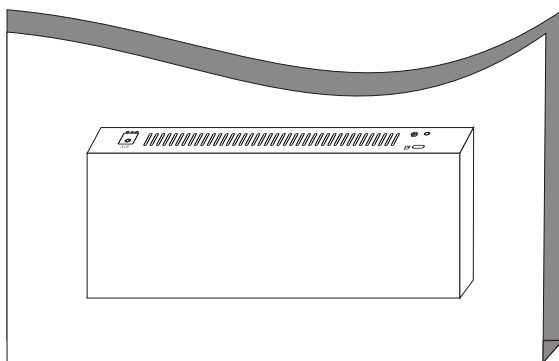
**Step 2:** Attach four magnets to the corresponding circular grooves on the bottom of the switch;

**Step 3:** Use screws to secure the magnets to the switch's housing, shown as **Figure 2-2 (a)**;



**Figure 2-2 Magnet Installation (a)**

**Step 4:** Attach the switch (installed with magnets) tightly onto a stable surface you select, shown as **Figure 2-2 (b)**. When installing, mind your fingers.



**Figure 2-2 Magnet Installation (b)**

### **Note**

- Select the installation surface carefully. If the surface is not proper, the reliability of this installation will be influenced.
- Too high installation position or vibration might cause a fall, leading to switch damage or personal injury.
- When installation is finished, don't move the switch very often to avoid surface coating damage.
- To make the cabling more easily, please place the switch bottom up when you mount it vertically and pay attention to the weight of the installed cables to avoid a fall.
- Keep magnets away from objects such as the floppy disk, magnetic card, computer or monitor, which are easy to be magnetized. Otherwise the device malfunctions may occur.

C. Wall-mounting Installation

Step 1: Prepare the following tools;

 Level	 Ladder	 Phillips Screwdriver
 Rubber Hammer	 Marker Pen	 Hammer Drill

Step 2: Use the hammer drill to punch 2 holes with a diameter of 6mm on the wall. The distance between the 2 holes is 110mm, and the line through them should be horizontal;

Step 3: Insert expansion bolts into holes you've drilled and knock the expansion bolts with the rubber hammer into the wall until they are on the same horizontal line of the wall surface;

Step 4: Use the Phillips screwdriver to fix the expansion screws into the expansion bolts. Distance between the inside surface of the screw header and the edge of the conductor pipe should not be less than 2.5mm, to make sure that the device can be hung on the bolt tightly;

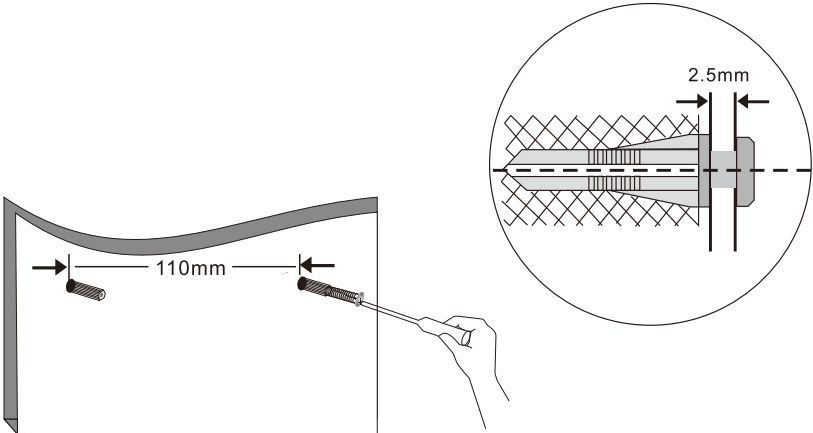
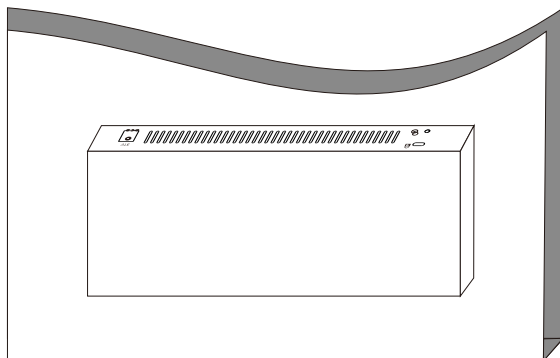


Figure 2-3 Wall-mounting Installation

Step 5: Maneuver the switch until the two wall - type holes on the bottom of the device fit in the expansion screws to hang the switch.



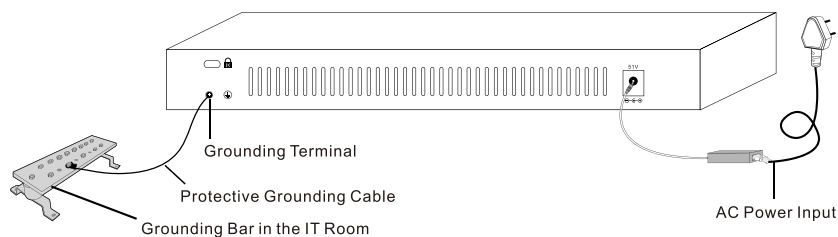
## 2.3 Connect to Protective Grounding Cable

Proper connection of protective grounding cable is not only important for inductive 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 grounding terminal;

**Step 2:** Connect the other end of the protective grounding cable to the binding post on the grounding bar and fix the screw.



**Figure 2-4 Installation with Grounding Bar**

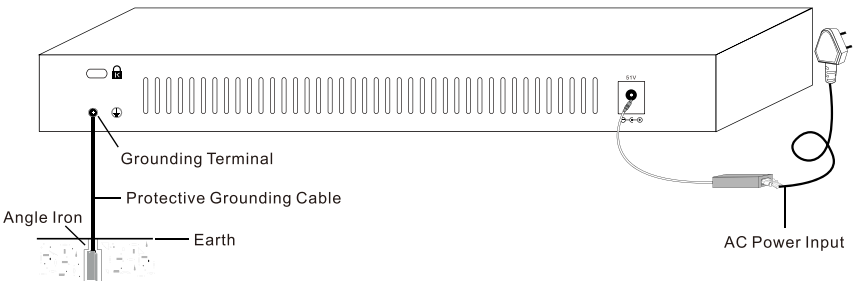
### Note

Firefighting hoses and building lightning rods are not the proper options for grounding bar. The grounding cable on the switch should be connected to the grounding bar in the IT room.

**B. Without grounding bar**

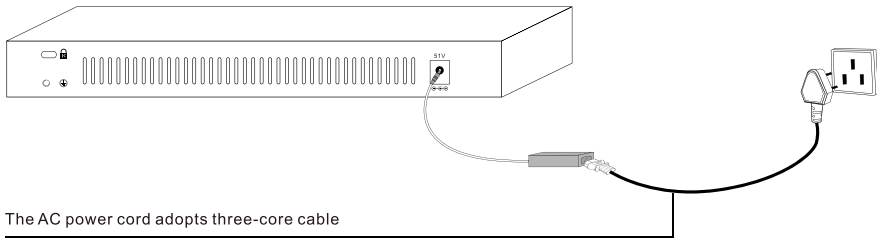
With mud land nearby and allowed to bury grounding bar, follow below steps:

- Step 1:** Bury an angle iron or steel pipe ( $\geq 0.5\text{m}$ ) 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.



**Figure 2-5 Installation with buried grounding bar**

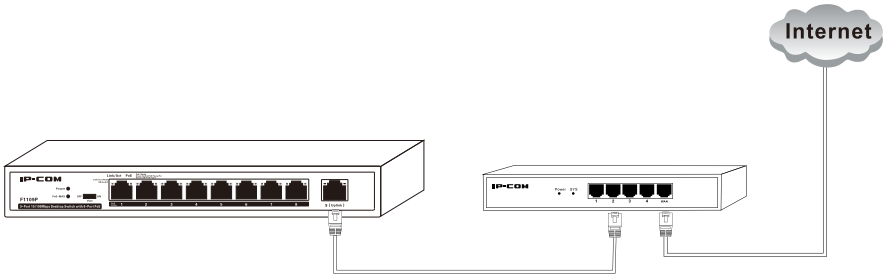
If not allowed to bury the grounding bar, you can connect it to ground through the three-core PE cable of the AC power socket on the precondition that the PE cable in the switchgear room or beside the AC power supply transformer is well-grounded.



**Figure 2-6 Connect to ground through the PE cable of the AC power socket**

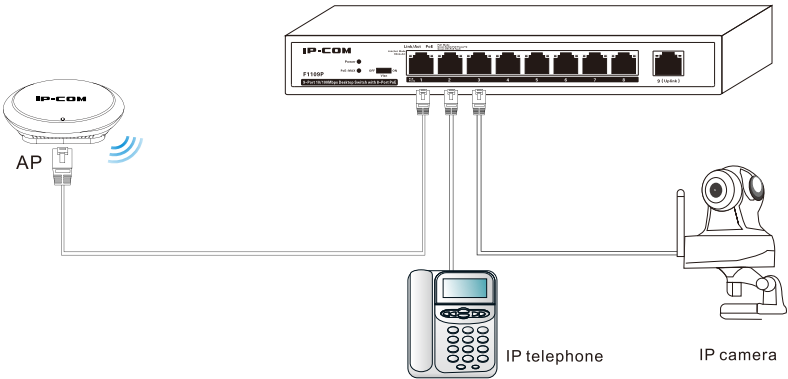
# Chapter 3 Physical Connection

**Step 1:** Connect the Uplink port (port 9) of this switch to the remote Ethernet device (switch, router, etc.) with an Ethernet cable as shown below:



**Figure 3-1 Connect to the Remote Ethernet Device**

**Step 2:** Connect Downlink ports (ports 1-8) to Ethernet PDs, like APs, IP telephones, IP cameras, etc. with Ethernet cables as shown below:

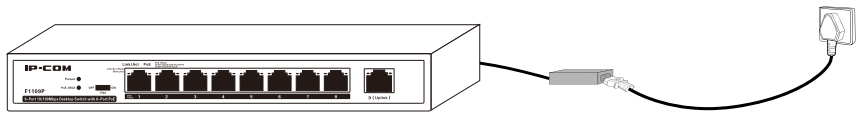


**Figure 3-2 Connect to PDs**

**! Note**

If cabling outside, please equip corresponding RJ45 ports with lightning arrestors.

**Step 3:** Use the included power adapter for power supply.



**Figure 3-3 Connect to Power Supply**

**Step 4:** After powered on, the switch will be initialized automatically. Check LEDs' status, and verify that:

- All LEDs (except LED of port 9) will light up and extinguish immediately, which indicates the system has been restored to factory defaults;
- The Power LED lights up.



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■ 约定

本手册中，所提到的“本交换机”、“本设备”、“交换机”、“设备”、“产品”等名词，如无特别说明，均指 IP-COM 9 口百兆 8 口 PoE 非网管型交换机 F1109P。

本手册中，采用的标识和含义如下：

标识	含义
 注意	提醒用户操作中应注意的事项，如果操作错误可能导致设备损坏等不良后果。
 说明	对操作内容的描述进行必要的补充和说明。

■ 安装手册简介

章节	说明
第 1 章 产品介绍	介绍交换机包装及外观。
第 2 章 设备安装	介绍交换机的硬件安装方法及其注意事项。
第 3 章 物理连线	介绍交换机与其它设备之间的连接和注意事项。
附录	介绍交换机技术规格参数、保修卡。

第1章 产品介绍

1.1 包装清单

打开包装，检查包装盒内应有以下配件：

物品	数量	说明
交换机	1	/
电源适配器	1	/
安装手册	1	用于指导用户使用本交换机
吸铁石	4	用于磁吸安装
螺钉	4	用于磁吸安装
防滑脚垫	4	用于桌面安装
膨胀螺管	2	用于挂壁安装
膨胀螺钉	2	用于挂壁安装

如果发现配件有损坏或短缺，请持原包装与经销商联系更换。

1.2 产品外观

■ 前面板

前面板主要由 RJ45 端口、VLAN 硬件拨动开关、指示灯组成。如图 1-1 所示。

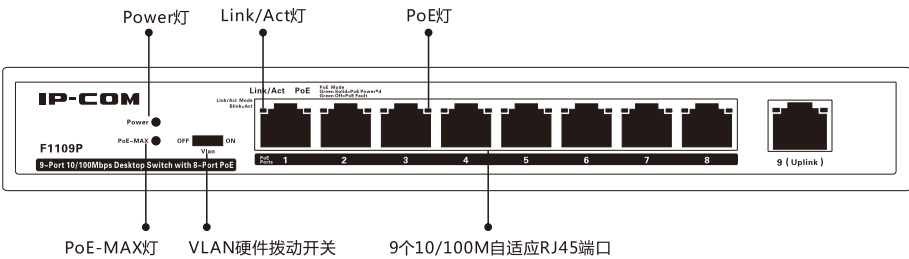


图 1-1 前面板

RJ45 端口

9 个 10/100M 自适应 RJ45 端口，第 9 口为上联口，端口防雷 4KV。1-8 口为下联口，均带有 PoE 功能，兼容 IEEE 802.3af 和 IEEE 802.3at，单个端口供电高达 40W，最多同时接入 8 个 IEEE 802.3af 或 4 个 IEEE 802.3at 标准的受电设备。





说明

- PoE 采用网线的 1、2、3、6 数据线对供电，网线建议采用 5 类或 5 类以上 UTP/STP。采用超五类、6 类双绞线时，PoE 供电距离最长可达 150 米。
- PoE 供电模式为动态供电。即交换机自动给受电设备提供所需功率的 PoE 电源。
- 本交换机支持的最大 PoE 功耗为 115W。当 PoE 受电设备消耗的总功率达到 115W 时，交换机的 PoE-MAX 灯闪烁，同时，交换机根据端口 1>2>3>4>5>6>7>8 的优先级顺序，对已进行 PoE 供电的端口重新进行供电处理（将优先级最低的端口的供电切断）。

VLAN 硬件拨动开关

VLAN 模式切换到 ON :表示交换机端口 VLAN 开启。此时，交换机前 1-8 口相互隔离，两两不能通讯，但都可以与 Uplink 端口通讯，有效防止广播风暴和 DHCP 欺骗。只要通电状态下，VLAN 模式为 ON，VLAN 功能都生效。

VLAN 模式切换到 OFF :表示交换机端口 VLAN 关闭。此时，交换机所有端口均可相互通讯，无 VLAN 限制。只要通电状态下，VLAN 模式为 OFF，VLAN 功能都不生效。

指示灯

您可通过指示灯，查看交换机的工作状态。指示灯说明参见表 1-1。

指示灯名称	颜色	状态	说明
Power	绿色	常亮	交换机供电正常。
		不亮	交换机未通电或供电异常。
PoE-MAX	绿色	闪烁	PoE 功耗达到预警功耗（115W）。 交换机将根据端口优先级顺序(端口号小的优先级大)，依次自动切断优先级最低的端口的供电，直到 PoE 功耗正常。 注意：PoE-MAX 灯闪烁后，您只能通过手动方式切断部分端口的 PoE 供电（拔出网线），使其熄灭（PoE 功耗恢复正常）。
		不亮	PoE 功耗正常。
Link/Act (RJ45 带灯)	橙色	常亮	对应的 RJ45 口连接正常。
		闪烁	对应的 RJ45 口正在传输数据。
		不亮	对应的 RJ45 口未连接或连接异常。
PoE (RJ45带灯)	绿色	常亮	有受电设备与对应的 RJ45 口连通，并供电正常。
		不亮	无受电设备与对应的 RJ45 口连通或无供电。

表 1-1 指示灯工作状态描述



**注意**

第 9 口（Uplink 口）的绿色灯无意义，将永远保持不亮。

■ 后面板

后面板主要由防盗锁孔、接地端子和电源接口组成。如图 1-2 所示。

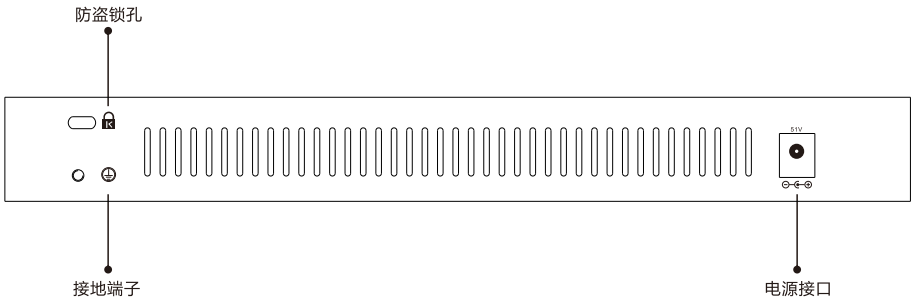


图 1-2 后面板

**防盗锁孔**

使用防盗锁（需用户自备）将设备与固定物体锁定，起到一定防盗作用。

**接地端子**

请使用导线接地，以防雷击。连接保护地线的方法请参考 2.3 连接保护地线（第 21 页）。

**电源接口**

用于连接电源适配器，给设备供电。



**注意**

请使用原装电源。设备电源输入为：100-240V AC，50/60Hz，输出为：51V DC，2.5A。

## 第2章 设备安装

### 2.1 安装注意事项

为避免使用不当造成设备损坏及人身伤害，请遵从以下注意事项。

#### ■ 安全措施

- 安装过程中，需佩戴防静电手套，且交换机电源应保持为关闭状态；
- 使用产品包装盒内的电源给交换机供电；
- 确保输入电压范围与电源适配器上标明的输入电压范围相符；
- 确保交换机散热孔通风良好；
- 不要打开或拆卸交换机机壳；
- 清洁交换机时，请切断电源。请勿使用任何液体擦洗交换机；
- 交换机远离电力线、电灯、电网附近或任何有可能接触强电电网的地方。



#### 注意

交换机机壳的一个安装螺钉上封有 IP-COM 公司的防拆封条，代理商对交换机进行维护时，要求所维护交换机的封条保持完好。如果用户需要打开交换机机壳，请先与本地代理商联系，获得允许；否则，由于擅自操作导致交换机无法维护，将由用户本人负责。

#### ■ 安装环境要求

##### 温/湿度要求

交换机对温度和湿度的要求见下表 2-1。

环境描述	温度	湿度
工作环境	-10°C ~ 45°C	10% ~ 90%RH (无凝结)
存储环境	-40°C ~ 70°C	5% ~ 90% RH (无凝结)

表 2-1 温度和湿度要求

##### 洁净度要求

为避免静电影响交换机正常工作，请注意：

- 保持室内空气清洁，交换机需要定期除尘；

- 交换机接地良好，确保静电顺利转移。

## 防雷要求

为避免雷电产生的强大瞬间电流破坏交换机，请采取以下防雷措施：

- 确认电源插座、工作台和交换机接地端子均与大地接触良好；
- 合理布线，避免内部感应雷；需要室外布线时，建议使用信号防雷器。

## 安装台要求

无论交换机采取何种安装方式，请注意以下事项：

- 确认工作台牢固并接地良好；
- 保持良好的通风，交换机四周留出 10cm 的散热空间；
- 不要在交换机上放置重物；
- 需要叠放使用时，设备之间的垂直距离不能小于 1.5cm。

## 2.2 安装交换机

请根据您的安装环境，选择最合适的安装方式。

### A、桌面安装方式

- 步骤 1：**将交换机底部朝上放置于足够大且平稳的桌面上；
- 步骤 2：**将 4 个脚垫粘贴在机壳底部四角对应的圆形凹槽中，如图 2-1 所示；
- 步骤 3：**翻转交换机，让其正面朝上放置于桌面即可。

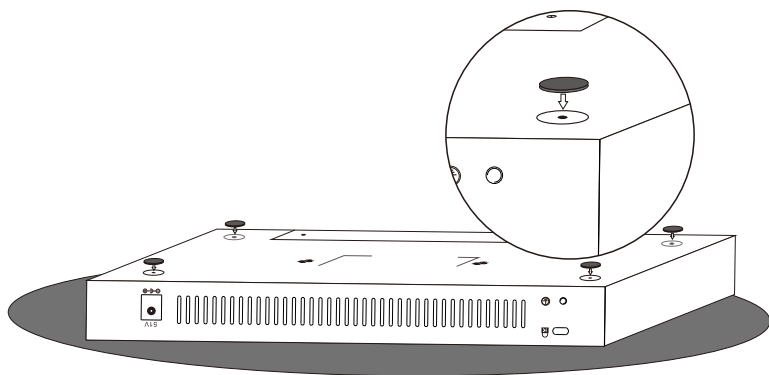


图 2-1 桌面安装示意图

### B、磁吸安装方式

- 步骤 1：**准备一把十字螺丝刀；
- 步骤 2：**将 4 颗吸铁石吸在机壳底部四角对应的圆形凹槽区域；
- 步骤 3：**使用螺钉将吸铁石和机壳拧紧在一起，如图 2-2 (a) 所示；

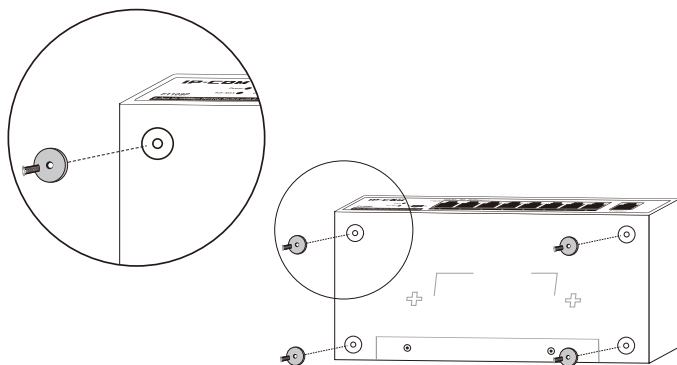


图 2-2 磁吸安装示意图 (a)

**步骤 4：**将安装了吸铁石的交换机吸附在您选定的稳定安装位置即可，如图 2-2 (b) 所示。（注意不要夹到手指）

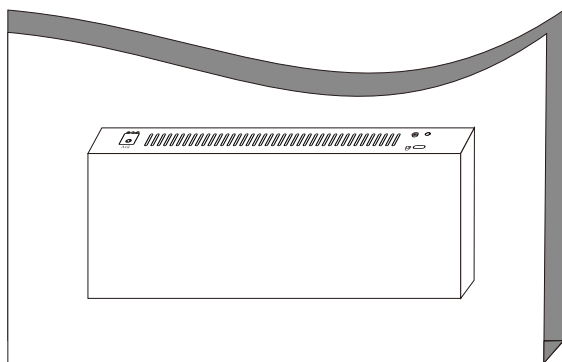


图 2-2 磁吸安装示意图 (b)



### 注意

- 请慎重选择安装表面，如果安装表面状态不佳，可能影响磁吸安装的可靠性。
- 避免安装位置过高或存在震动、冲击及不稳定造成交换机脱落，以致人身伤害或交换机损坏。
- 安装完成后，请勿人为来回推动交换机，以免交换机表面涂层损坏。
- 垂直安装时，请将交换机前面板朝下以方便走线，并注意线缆的重量，避免设备脱落。
- 请勿将吸铁石接近软盘、磁卡、计算机、显示器等易受磁场影响的物体，否则可能造成该物体故障。

C、挂壁安装方式

步骤 1：准备以下安装工具；

		
水平尺	梯子	十字螺丝刀
		
橡胶锤	记号笔	冲击钻

步骤 2：使用冲击钻在墙上打 2 个直径 6mm 左右的孔，两孔连线保持水平，孔间间距为 110mm；

步骤 3：将膨胀螺管插入到墙面上的钻孔中，然后用橡胶锤敲打膨胀螺管，直到膨胀螺管与墙面齐平；

步骤 4：使用十字螺丝刀将膨胀螺钉拧进膨胀螺管，螺钉头内侧与螺管外沿距离不得小于 2.5mm，  
以确保交换机能够稳固的挂在螺钉上；

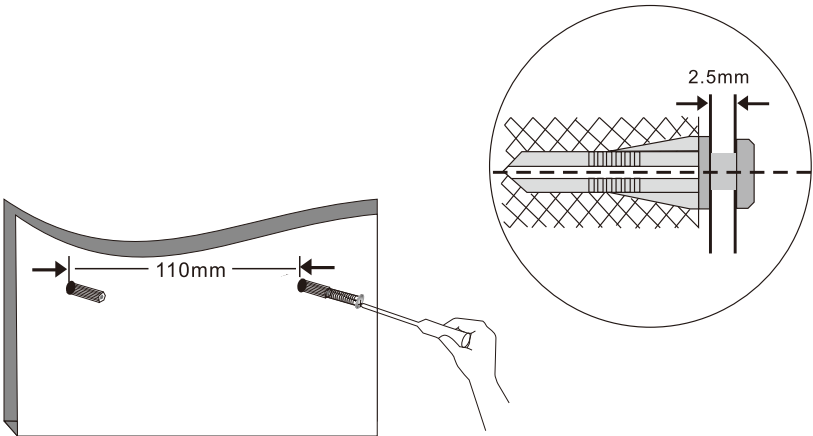
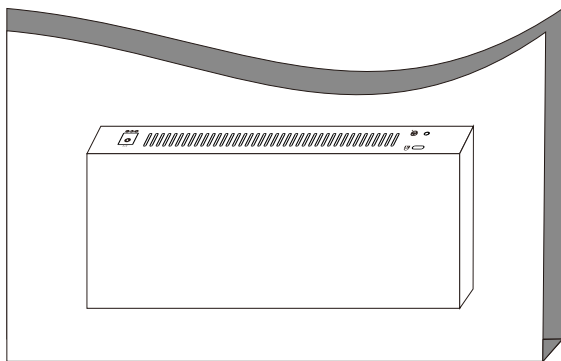


图 2-3 挂壁安装示意图

**步骤 5：**将交换机底部的 2 个挂壁孔对准膨胀螺钉后，挂上。



## 2.3 连接保护地线

连接保护地线不仅是为了尽快释放掉设备因雷击而感应的过电压和过电流，也是保障人身安全的必要措施。请根据您的安装环境，选择最合适的连接保护地线方式。

### A、安装环境中有接地排

**步骤1：**将接地线的一端接到机房工程接地排的接线柱；

**步骤2：**将接地线的另一端接到交换机接地端子，拧紧固定螺母。

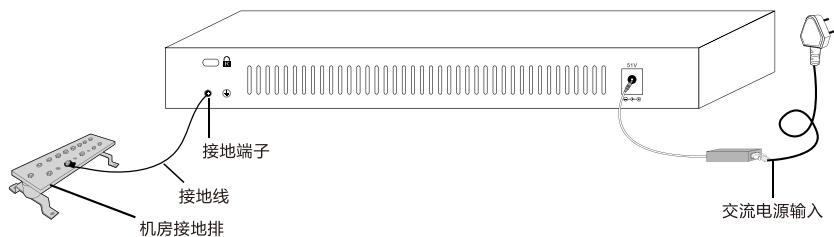


图2-4 机房有接地排时接地安装简图



**注意**

设备的接地线应连接到机房的工程接地，消防水管和大楼的避雷针接地都不是正确的接地。

B、安装环境中无接地排

如果附近有泥地并且允许埋设接地体，可按以下步骤进行接地安装：

- 步骤1：将长度不小于0.5m的角钢（或钢管）打入地下；
- 步骤2：采用电焊连接地线的一端和角钢(或钢管),并将焊接点做防腐处理；
- 步骤3：将接地线的另外一端接到交换机的接地端子。

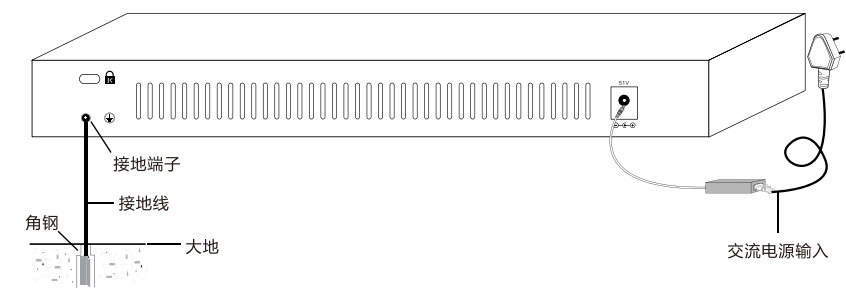


图2-5 机房附近允许埋设接地体时接地安装简图

如果不允许埋设接地体，可直接通过电源线进行接地。但前提是：交换机的电源线采用带保护地线的三芯电缆，且交流电源的保护地线已在配电室或交流供电变压器侧良好接地。

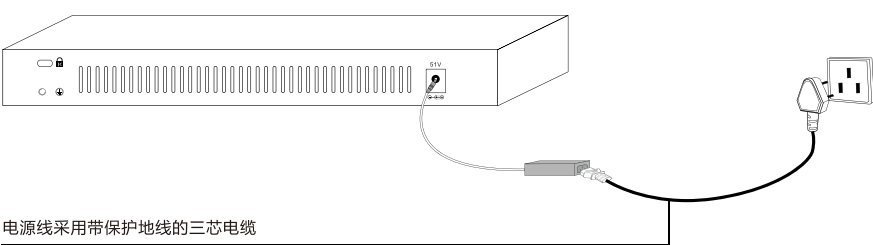


图2-6 利用已接地的电源线进行接地保护



## 第3章 物理连线

**步骤 1：**用网线连接交换机的 9 ( Uplink ) 端口和上级网络设备 ( 交换机、路由器等 )，如图 3-1 所示。

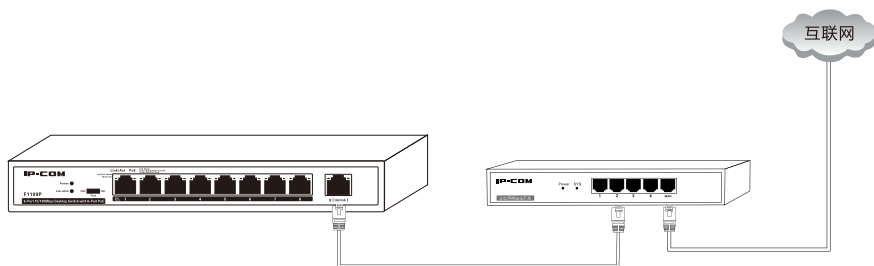


图 3-1 连接上级网络设备

**步骤 2：**用网线连接交换机的下联口与下级网络设备，如 AP、IP 电话和网络摄像头等受电设备，如图 3-2 所示。

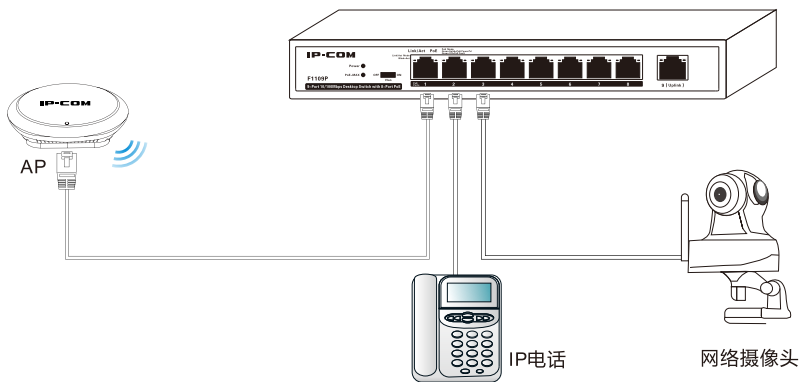


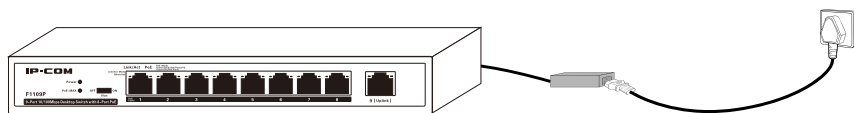
图 3-2 连接标准受电设备



**注意**

如果接口线缆有室外走线的情况，请进行网口防雷器连接。

**步骤 3：**使用产品包装盒内的电源适配器给设备供电。如图 3-3 所示。



**图 3-3 连接电源**

**步骤 4：**上电后，交换机将自动进行初始化，检查指示灯，应出现下列情况：

- 所有有意义的指示灯全亮一下后熄灭，表示系统已经复位；
- Power 指示灯点亮。

## Appendix/附录

### A Technical Specifications

General Features	
Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3at, IEEE 802.3af
Packets Transmission Rate	Ethernet: 10Mbps (half duplex) /20Mbps (full duplex)
	Fast Ethernet: 100Mbps (half duplex) /200Mbps (full duplex)
Ethernet Cables	Recommended: cat 5 UTP/STP (≤100m) or higher (≤150m)
Ports	9 10/100Mbps auto-negotiation RJ45 ports and ports 1-8 are PoE-capable
LEDs	Link/Act, PoE, Power, PoE-MAX
Dimension	235mm*103mm*27mm
Port Features	Implemented via the VLAN ON/OFF switch on the front panel VLAN ON: Ports 1-8 are isolated, but they can communicate with port 9; VLAN OFF: Ports 1-9 can intercommunicate.
MTBF	≥100,000h
Performance	
Forwarding Mechanism	Store-and-Forward
MAC Address Table	4K
Packets	10BASE-T: 14881pps/port
Filter/Forwarding Rate	100BASE-TX: 148810pps/port
Backplane Bandwidth	1.8Gbps
Physical and Environmental Features	
Input Voltage	51V DC, 2.5A (external power supply)
Total PoE Power	115W
PoE Cable Core	Pair 1, 2 (positive pole) and pair 3, 6 (negative pole)
Power Consumption	When PoE power is not delivered, and the 9 ports are in full load, the maximum value can be 4W. When PoE power reaches 115W and the 9 ports are in full load, the maximum value can be 120W.
Operating   Storage Temperature	-10°C~45°C   -40°C~70°C
Operating   Storage Humidity	10%~90% RH (non-condensing)   5%~90% RH (non-condensing)

A 技术规格参数

一般特性	
标准	IEEE 802.3、IEEE 802.3u、IEEE 802.3x、IEEE 802.3at、IEEE 802.3af
数据传输速率	以太网：10Mbps（半双工）/20Mbps（全双工）
	快速以太网：100Mbps（半双工）/200Mbps（全双工）
网络介质	建议 5 类（≤100m）或 5 类以上（≤150m）UTP/STP
端口数量	9 个 10/100Mbps 自适应 RJ45 端口，1-8 口支持 PoE 供电功能
指示灯	Link/Act 灯，PoE 灯，Power 灯，PoE-MAX 灯
外形尺寸	235mm*103mm*27mm
端口特性	通过前面板的硬件拨动开关来控制 VLAN 开启时，交换机 1-8 口隔离，与 9 口互通； VLAN 关闭时，交换机 1-9 端口之间互通；
平均无故障时间	≥10 万小时
性能	
转发机制	存储转发
MAC 地址表	4K
数据包过滤/转发速率	10BASE-T：14881pps/port
	100BASE-TX：148810pps/port
背板带宽	1.8Gbps
物理及环境特性	
输入电源	外置电源 51V DC，2.5A
PoE 总功率	115W
PoE 供电线芯	1、2、3、6 线对（1、2 为正极，3、6 为负极）
电源功耗	最大 4W（不进行 PoE 供电，9 个端口满载工作时）
	最大 120W（PoE 供电 115W，9 个端口满载工作时）
工作 存储温度	-10°C~45°C   -40°C~70°C
工作 存储湿度	10%~90% RH（无凝结）   5%~90% RH（无凝结）

## B Safety and Emission Statement



### 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.

**NOTE:** (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.



### 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.

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

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, and (2) this device must accept any interference received, including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

**NOTE:** (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

**B 产品保修卡**

感谢您购买 IP-COM 产品，您在使用 IP-COM 产品时将享有如下服务。

**一、保换、保修承诺：**

**保修条款**

产品类型	承诺政策	服务方式
主机	一年保换，两年保修	客户送修
电源	半年保换，一年保修	客户送修

**说明：**

- 1、“一年保换，两年保修”是指产品售出后如果出现故障，第一年可以免费更换，第二年可以免费维修；
- 2、如果此产品停产，将更换性能相当的产品；
- 3、保换、保修的产品为良品；
- 4、经 IP-COM 保换、保修过的产品，保换、保修期仍然以原产品为准。

**二、保换、保修内容：**

保换、保修的范围仅限于产品主机和电源。其它配件不在保换保修范围内，若在购机后一周内附件有问题，可无偿保换。

若产品购买后的 15 天内出现设备性能问题，且外观无划伤，可直接在购买处更换新产品。产品在安装或使用中出现的问题，可先与 IP-COM 售后服务中心取得联系，由工程师在电话里指导解决。通过沟通，确认是产品性能问题的，客户可到购买处更换同一型号或与该产品性能相当的良品。如客户无法联系到经销商时，可联系 IP-COM 售后服务中心获得保换、保修服务。但经 IP-COM 检测，确认产品无故障的，将不予保换、保修。

如返修的电源有明显的硬物损伤、裂痕、断脚、严重变形，电源线有破损、断线、裸芯等现象则不予保修，用户可另行购买。

**符合保修规定的产品，我公司将免费予以维修。**

IP-COM 产品实行全国范围联保。您在中华人民共和国境内（不包括港、澳、台地区）任何地方购买的产品，如果在使用过程中出现保修范围内的硬件故障，均可凭本产品的购机发票到 IP-COM 售后服务中心获得保换、保修服务。对不能提供购机发票的，按产品出厂日期向后顺延两个月作为保换、保修的起始日期。

**三、有下列情况之一的，不属于保换、保修范围：**

- 1、超过保换、保修期的；
- 2、封口标破损、私自涂改或无封口标的；

- 3、客户私自拆装或维修过的；
- 4、人为损坏，外壳有明显划痕，受损变形的；
- 5、在高温、高压、潮湿等不正常环境下安装使用造成故障的；
- 6、雷击、水灾、地震等自然灾害造成损坏的。

**四、凡不在保换保修范围内的产品，我公司可以提供有偿维修服务。有偿维修后的产品，同一性能问题将享受自修复之日起三个月内的免费保修期。**

**五、其它：**

上述服务承诺仅适用于我公司在中国大陆地区售出的产品。对于产品在售出时另行约定了售后服务条款的，以深圳市和为顺网络技术有限公司确认的合同为准。

**本承诺的解释权、修改权属深圳市和为顺网络技术有限公司**

**六、维修记录表**

维修日期	维修编号	维修记录	维修员签字

**七、用户存根**

为了维护您的权益，请您认真填写，并妥善保管，送修时请出示此存根。

产品信息	产 品 型 号	
	序 列 号	
代理信息	经销商名称	
	联 系 电 话	
	销 售 日 期	
用户信息	用 户 姓 名	
	通 讯 地 址	
	联 系 电 话	
	E - m a i l	