

# User Guide



**Access Controller** 



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### **Preface**

Thank you for purchasing IP-COM products! Reading this user guide will be helpful for configuring, managing and maintaining your device.

### **Conventions**

If not specifically indicated, this device, or this (your) AC stands for CW1000. And all steps in this user guide are illustrated on the precondition that this device has been reset to its factory defaults.

#### Typographical conventions in this User Guide:

Item	Presentation	Example
Button	Bold	"Click the OK button" can be simplified as "Click <b>OK</b> ".
Menu	Bold	"The menu Status" can be simplified as <b>Status</b> .
Continuous Menus	>	Click Status >System Status

#### **Symbols in this User Guide:**

Item	Meaning
Note	This format is used to highlight information of importance or special interest. Ignoring this type of note may result in ineffective configurations, loss of data or damage to device.
Tips	This format is used to highlight a procedure that will save time or resources.

### **Overview of this User Guide**

Chapters	Contents
1 Product Overview	Introduction to this AC's physical appearance, package and features
2 Device Installation	Introduction to this AC's installation steps
3 Web Login	Introduction to this AC's web manager, web login and web logout
4 Function Description	Introduction to this AC's advanced functions
5 Appendix	Introduction to this AC's troubleshooting, default settings and safety & emission statement



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### 1 Product Overview

### **Package Contents**

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

➤ Access Controller\* 1 ➤ Power Cord \* 1

Anti-slip Footpad \* 4

If any item is incorrect, missing or damaged, contact the place of purchase with the original package for replacement immediately.

### **About this Product**

IP-COM CW1000 access controller can manage multiple IP-COM APs. Up to 500 APs can be connected to this AC, making it a one-stop solution for hotel networking. With its functions, like automatic AP discovery, AP status check, centralized configurations for APs, centralized upgrading for APs, AP warning, etc., CW1000, a high-capacity, secured wireless controller, is easy to be installed and maintained, intended for small-to-medium-sized enterprises, higher education institutions, and hotels.

### **Main Features**

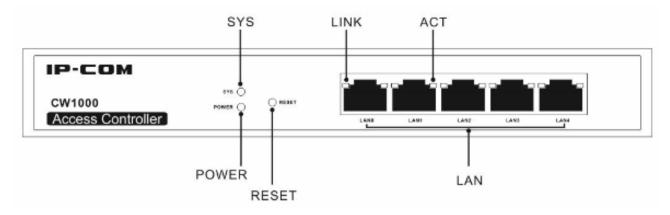
- Support automatic AP discovery and AP connection without any configuration on the AP, i.e. support centralized management for all connected APs
- Support 802.1Q VLAN, which can manage APs among multiple VLANs
- Support AP DHCP server for IP address assignment
- Support LIC authorization, configuring how many APs can be managed
- Support AP clients info display
- Support managed AP list display and AP real-time monitoring
- Support adjustable AP TX power, which can adjust the AP's TX power in accordance with different environmental conditions
- Support batch configuring, rebooting, upgrading and resetting APs
- Support centralized configuration of wireless settings, including WiFi name (SSID), encryption type, belonging VLAN, etc.
- Support manual, regular and automatic AP reboot.
- Support AP LED switch on its web manager, economical and environmental-friendly
- Support email, desktop AP warning so that the network administrator can know the AP's real-time status
- Support system logging for recording AP connection status and warning information
- Support web management, easy and convenient



### **Physical Appearance**

### **Front Panel**

The following parts are contained on the front panel as shown below.



#### **1** LEDs

One POWER LED, one SYS LED and five LINK/ACT LEDs.

LED	Color	Status	Description
POWER	Green	Solid	Proper connection to power supply
		Off	Improper connection to power supply or malfunction occurs
GMG	C	Solid	The system is starting or malfunction occurs.
SYS	Green	Blinking	The system is functioning properly.
LINK		Solid	A valid link has been established on the corresponding port.
	Orange	Off	No link is established on the corresponding LAN port or malfunction occurs.
ACT	Green	Blinking	Data transmission is occurring on the corresponding LAN port.
		Off	Data transmission is not occurring on the corresponding LAN port.

#### **LAN Port**

Five 10/100/1000Mbps auto-negotiation RJ45 ports. Each has a corresponding Link/Act LED.

#### **№** RESET Button

Press it with something like a needle for 7 seconds and then release; about 45 seconds later, this device will be restored to its factory defaults.



### **Back Panel**



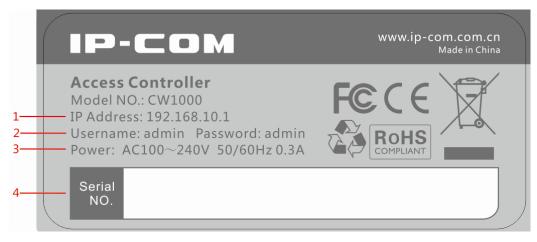
#### **¥** Power Interface

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

#### **№** ON/OFF Button

Press it to turn on/off the power supply of the AC.

### Label



- 1. IP Address: Default login IP address for accessing this AC's web manager.
- 2. Username/Password: Default login username and password for accessing this AC's web manager.
- **3. Power:** Power specification of this AC.
- **4. Serial NO.:** Serial number of this AC. If there goes something wrong with your device and you need to send it to our technical staff for repair, you will need this serial number.



## 2 Device Installation

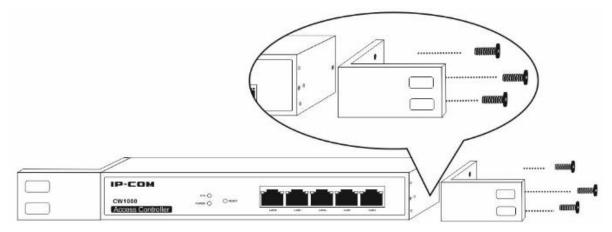
#### Step 1: Install the AC

This device can be installed either in a 19-inch standard rack or on the desktop. You can select the more suitable one according to your actual situation.

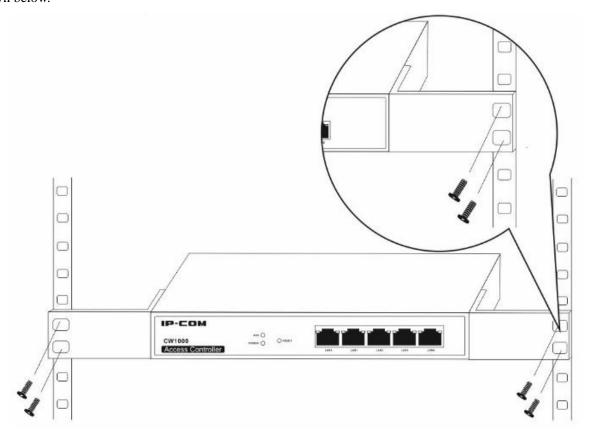
#### **№** Rack Installation

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

- 1 Make sure the rack is well-earthed and stable.
- 2 Fasten the two L-shaped brackets to the two sides of the AC using the screwdriver (not included) and screws.



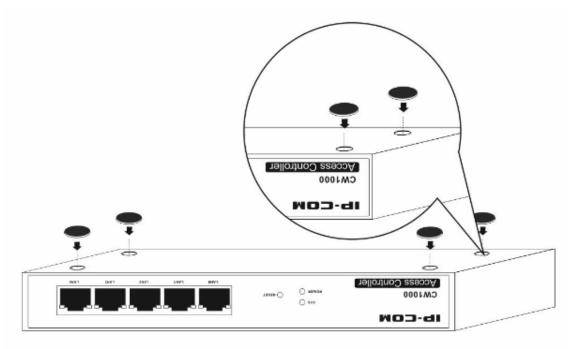
3 Insert screws (not included) through each bracket and into the rack to securely fix the AC onto the rack as shown below.





#### **凶** Desktop Installation

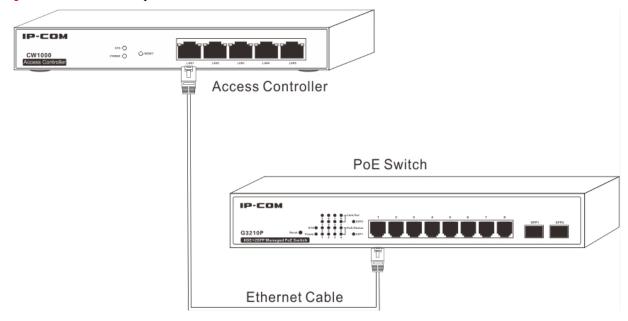
- 1 Place the AC bottom up on a flat desktop.
- 2 Attach four anti-slip footpads to the corresponding circular grooves on the bottom of the AC.



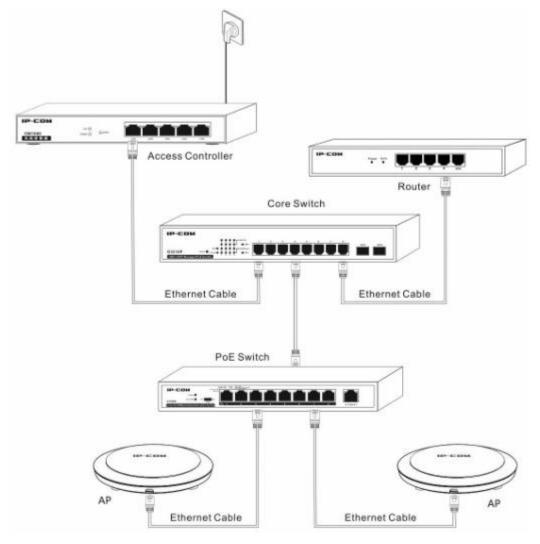
3 Place the switch face up on the desktop.



Step 2: Connect the LAN port of the AC to the remote Ethernet device, such as a switch, router, AP, etc.



**Step 3:** After checking your network topology, connect the included power cord to the AC for power supply.



**Step 4:** After being powered on, it will initialize automatically. Check LEDS and verify that the following phenomena will occur one by one:

- At the very beginning, all LEDs become lighted for a few seconds for self-checking.
- Then the PWR LED keeps on, the SYS LED starts blinking, and other LEDs are off.

After the AC is powered on, the PWR LED will be on, the SYS LED will be blinking, the corresponding connected Link LED(s) will be lighted and corresponding Act LED (s) will be blinking or off.



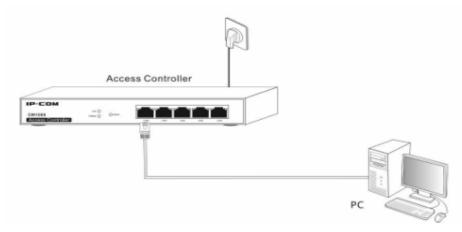
## 3 Web Login

### **Web Login**

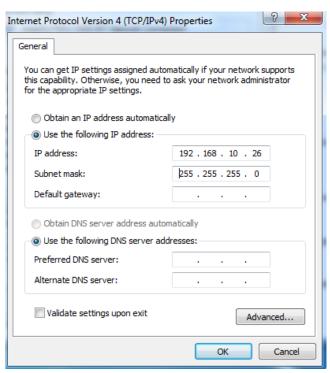
The first time you use this AC or when you reset your device to factory default settings, you can access its web manager with the following default login information:

Login Info	Default Setting
IP Address	192.168.10.1
User Name	admin
Password	admin

① Connect your PC to one of the LAN ports of the AC directly or to the switch which has been connected to the AC.



2 Set your PC with an IP address within the range: **192.168.10.X** (2~254), and with the subnet mask of **255.255.255.0**.

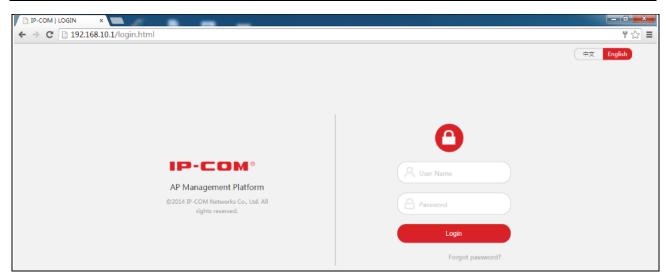




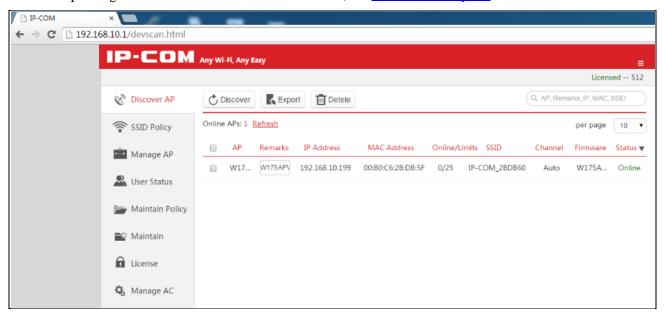
- 3 Launch a web browser, input 192.168.10.1 in the address bar and press Enter.
- 4 Enter the default username and password (admin for both) and then click **Login**.



This AC's web manager supports Chinese/English auto-switch. You can choose the language as you like. In this user guide, we take English for example.



**5** After successful login, you can click navigation bars on the left side of the page to view or configure corresponding functions. For more advanced functions, see <u>Function Description</u>.



### Web Logout

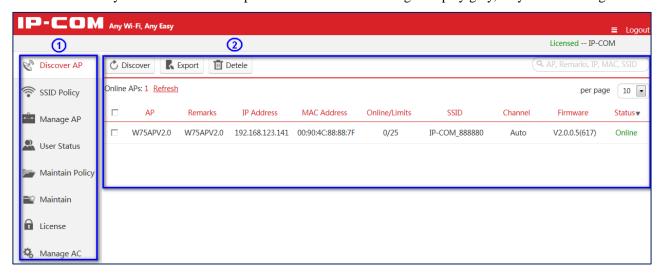
Directly closing your web browser exits this AC's web page. Configurations won't be saved automatically while web manager logs out. Thus it is advisable to save your configurations manually before logout. Note: The webpage won't log out automatically if you just close the web browser tab.



### **Web Layout**

### **Web Layout**

The Web manager can be divided into two parts: navigation bar and configuration section. Only web administration features that the AC supports will be displayed on navigation bars. Specifically, please refer to the actual software of your AC. If features or parameters on the web manager display grey, they are not configurable.



SN	Name	Description
1	Navigation Bar	The navigation bar presents web administration functions to you in the form of navigation tree. This section allows you to select function menus here.
2	Configuration Section	This section allows you to configure and view settings here.

### **Commonly Used Buttons**

Button/Menu	Description		
Refresh	To update displayed info, click <b>Refresh</b> on the top left corner of this page.		
Select	To select a certain entry, check the box before the corresponding entry. <b>Note:</b> To select all entries displayed on each page, check the top box. If 10 is selected from the <b>per page</b> drop-down menu, checking the top box will select 10 entries displayed on the page.		
Display	To configure how many entries displayed on each page, select an item from the <b>per page</b> drop-down menu on the top right corner. Four options are available: 10, 30, 50 and 100.		
Edit	To edit a certain entry, click the icon behind the corresponding entry.		

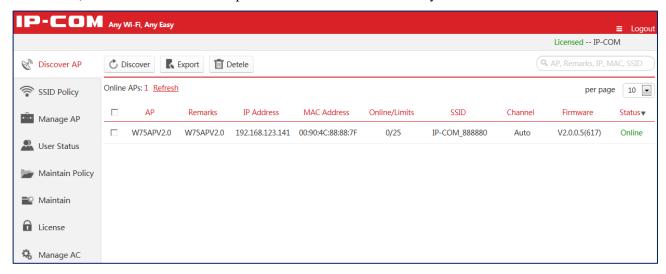


## **4 Function Description**

### **Discover AP**

### What you will see

After successful login, here comes the Discover AP page, where it displays connected APs' info (online and offline APs') this device has scanned. Up to 500 entries can be saved totally.



#### **Authentication Status**

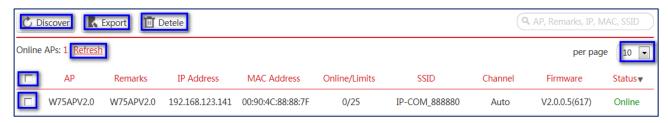
On the top right corner of this page, it displays this device's authentication status. As shown on the picture above, **Licensed** has been displayed, indicating this device has been authenticated and it can work normally.

#### **Y** Parameter Description

Parameter	Description		
AP	AP model		
Remarks	AP's remarks info for its identification		
IP Address	The IP address the AP has obtained		
MAC Address	AP's MAC address		
Online/Limits	Online: Wireless clients currently connected to the AP Limits: Maximum wireless clients can be connected to the AP.		
SSID	AP's primary SSID		
Channel	AP's channel		
Firmware	AP's current software version		
Status	<ul> <li>AP's current networking status, including online and offline.</li> <li>Online: A valid link has been established between the AP and the AC. At this time, the AC can configure the AP.</li> <li>Offline: No valid link has been established between the AP and the AC. In this case, the AC can't configure the AP. When the AP is offline, all previous configurations are still saved. As long as the AP stays online, you can enjoy its WiFi if you do not reset your AP.</li> </ul>		



### What you can do



#### **Discover**

To scan connected APs, click **Discover** on the top left corner of this page.

#### **Export**

To export APs' info, click Export.

#### **Delete**

To delete offline APs' info, select corresponding entries and then click **Delete**. **Note:** Only offline APs' info can be deleted.

### **SSID Policy**

### What you will see

Click **SSID Policy** to configure SSID settings. Up to 40 SSID entries can be added in total.

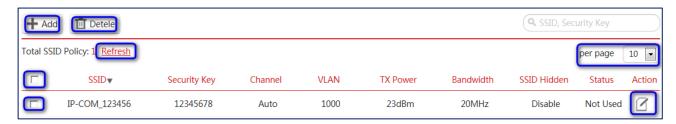


In the configuration section, configured SSID info will be displayed. Specific parameters are described below:

Parameter	Description
SSID	WiFi name
Security Key	The password of your WiFi
Channel	Working channel of your WiFi (default: Auto)
VLAN	Belonging VLAN of your WiFi
TX Power	TX power of your WiFi
Bandwidth	Bandwidth of your wireless channel
SSID Hidden	Once this function is enabled, this SSID will not be displayed in available network list.
Status	Display whether this SSID is used by the AP or not
Action	This option lets you configure wireless info for your SSID.



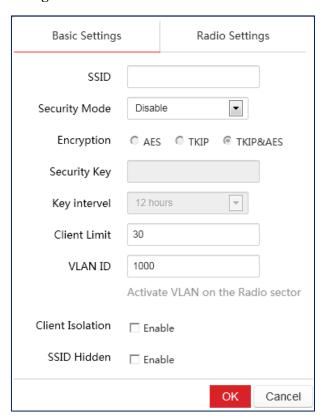
### What you can do



#### Add a new SSID

To add a new SSID, click **Add**. On the appearing dialogue box, you can configure basic settings and radio settings for your SSID.

#### **№** Parameters for Basic Settings

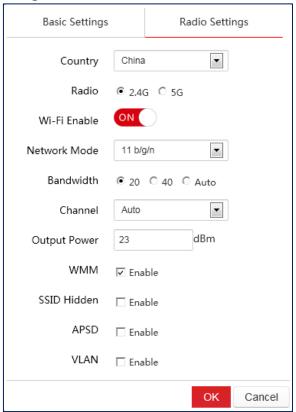


Parameter	Description
SSID	WiFi name
Security Mode	Select the security mode for your WiFi
Encryption	Select the encryption protocol for your WiFi. By default, it is TKIP & AES.
Security Key	WiFi password for connecting to your WiFi
Key Interval	Update interval of your security key (WiFi password)



Client Limit	Maximum number of connected wireless clients for the SSID. Valid range: 0~60. When configurations are issued to the AP, the supportable range of the AP should also be taken into consideration.
VLAN ID	Belonging VLAN of the SSID. To activate this item, you need to enable the VLAN function first. Input range: 2~4094.
Client Isolation	Enable/Disable the client isolation function  Enable: Wireless clients connected to the SSID can't intercommunicate with each other.  Disable: Wireless clients connected to the SSID can intercommunicate with each other.
SSID Hidden	Enable: The AP will not broadcast its SSID, i.e. its SSID will not be displayed in available wireless network lists. If you want your client to connect to it, you need to enter it manually.  Disable: The AP will broadcast its SSID, i.e. its SSID will be displayed in available network lists.

#### **№** Parameters for Radio Settings



Parameter	Description	
Country	Select a country for the SSID	
Radio	Select the frequency band for the SSID: 2.4GHz or 5GHz	
WiFi Enable	Enable/Disable WiFi for the SSID	
Network Mode	Select the network mode for the SSID	
Bandwidth	Select the wireless band for the SSID	
Channel	Select the wireless channel for the SSID	



Output Power	Set the TX power for the SSID. Range: 17~23dBm. When the AP does not support this value, the supportable TX power range of the AP will be taken into consideration.		
WMM	Wi-Fi Multimedia (WMM) is a Wi-Fi Alliance interoperability certification, based on the IEEE 802.11e standard. It provides basic Quality of service (QoS) features to IEEE 802.11 networks. WMM prioritizes traffic according to four Access Categories (AC) - voice, video, best effort, and background. It is disabled by default.		
SSID Hidden	Enable/Disable the SSID hidden function  Enable: The AP will not broadcast its SSID, i.e. its SSID will not be displayed in available wireless network lists. If you want your client to connect to it, you need to enter it manually.  Disable: The AP will broadcast its SSID, i.e. its SSID will be displayed in available network lists. It is disabled by default.		
APSD (Automatic Power Save Delivery) is an efficient power management method, le to lower power consumption. By default, it is disabled by default.			
VLAN	Enable/Disable the VLAN function for the SSID. It is disabled by default.		

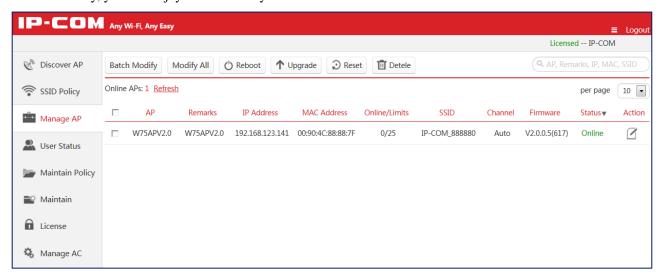
#### **Delete**

To delete a certain SSID entry, select the entry you wish to delete and then click **Delete**. **Note:** Only SSIDs not used can be deleted.

### **Manage AP**

### What you will see

Only online APs can be managed by the AC. When the AP is in its offline status, the newly configured information won't be issued to the AP. But previous configurations are still saved on the AP. As long as the AP works normally, you can enjoy its WiFi freely.



For specific parameter description of the page as shown above, see <u>Parameter Description on Discover AP</u>.

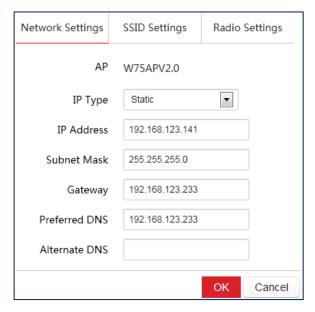


### What you can do

#### **Edit**

To edit network settings, SSID settings and radio settings for a certain AP, click the action icon behind the corresponding entry.

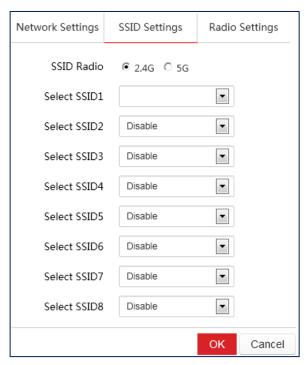
#### **№** Network Settings

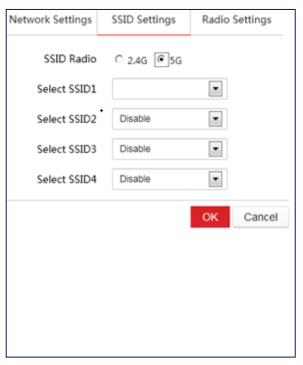


Parameter	Description		
AP	AP's model		
	Internet setup type for your :		
	<b>Dynamic IP:</b> The AP will obtain an IP address from		
IP Type	this device's DHCP server.		
	Static: You need to assign IP addresses to APs		
	manually.		
IP Information	Including IP Address, Subnet Mask, Gateway, Preferred DNS, Alternate DNS. In dynamic IP mode, no IP configuration needed. In static IP mode, you need to manually enter the correct IP information.		

#### **¥** SSID Settings

Configure different frequency bands' SSIDs for your AP.





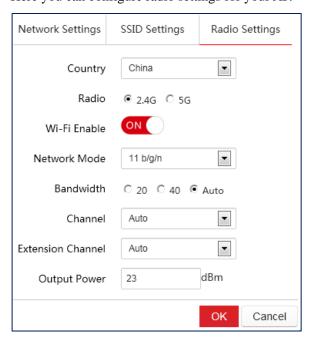
Note:

The SSID's frequency band depends on the AP. If the AP does not support 5GHz, 5GHz will not be available. And configurable number of SSIDs also depends on the AP itself.



#### **¥** Radio Settings

Here you can configure radio settings for your AP.



Parameter	Description	
Country	Select your country	
Radio	Select the frequency band for your AP	
WiFi Enable	Enable/Disable the WiFi of the AP	
Network Mode	Select network mode for your AP	
Bandwidth	Configure bandwidth for your AP: 20, 40, auto.	
Channel	Configure wireless channel for your AP	
Extension Channel	Configure extension channel for your AP	
Output Power	Adjust wireless power for your AP	

#### **Batch Modify**

To batch modify settings for your APs, select APs you wish to modify and click **Batch Modify**. Up to 100 entries can be displayed on each page, thus, you can batch manage 100 APs at most at a time. **Note:** The Batch Modify action can only be applied to configure SSID settings for your APs.

#### **Modify All**

To modify all information for your APs, click **Modify All**. **Note:** The Modify All action can only be applied to configure SSID settings for your APs.

#### Reboot

To reboot an AP, select the AP you wish to reboot and click **Reboot**. Up to 100 entries can be displayed on each page, thus, you can reboot 100 APs at most at a time.

#### **Upgrade**

To upgrade the AP that is connected to the AC, select the AP and click **Upgrade**. If you want to perform the batch upgrading action, all connected APs must be of the same model. Up to 100 entries can be displayed on each page, thus, you can upgrade 100 APs at most at a time.

#### Reset

To reset an AP, select the AP you wish to reset and click **Reset**.

#### **Delete**

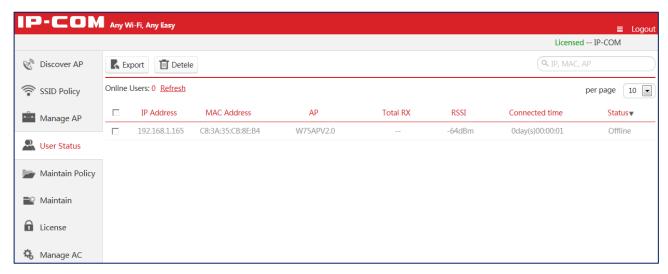
To delete offline APs information, select the AP you wish to delete and click **Delete**. In case that offline APs take up too much space which will affect AP management, it is advisable to delete some offline APs.



### **User Status**

### What you will see

Click **User Status** to enter the User Status page, where you can view wireless clients information, export all wireless clients' information and delete offline wireless clients information.



#### **2** Parameter Description

Parameter	Description	
IP Address	The IP address that the wireless client has obtained	
MAC Address	MAC address of the connected wireless client	
AP	The AP that wireless clients are connecting to	
Total RX	Total RX of wireless clients	
RSSI (Received Signal Strength Indicator) reflects wireless clients' receiving signal strength from the AP. In this way, you will know the WiFi quality and know whether you need enhance your WiFi signal strength.		
Connected Time	How long wireless clients have been connecting to your WiFi	
Status	Current wireless clients' connection status	

### What you can do



#### **Export**

To export connected wireless clients information, click **Export** and then follow onscreen instructions.

#### **Delete**

To delete offline wireless clients information, select the wireless client you wish to delete and click **Delete**.



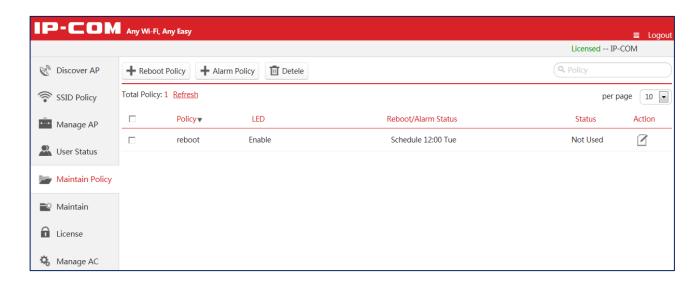
### **Maintain Policy**

### What you will see

Click **Maintain Policy** to enter the Maintain Policy page, where you can configure AP reboot policies and AP alarm policies, and delete policies you wish to delete. Up to 20 reboot policies and 20 alarm policies can be configured on this device.



This section is only used for configuring relevant policy rules for your APs. To activate these rules, you need to go to the **Maintain** section.



#### **2** Parameter Description

Parameter	Description	
Policy	Function description for the policy	
LED	AP's LED status	
Reboot/Alarm Status	Reboot/Alarm details	
Status	Whether this policy is being used or not	
Action	Used for modifying your policy	

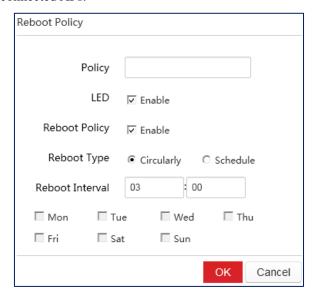
### What you can do





#### **Reboot Policy**

To configure reboot policies and issue them to APs, click **Reboot Policy**. On the appearing dialogue box, you can configure reboot settings for connected APs.

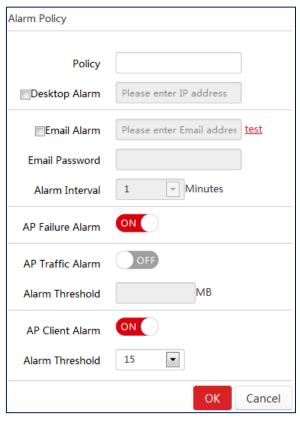


#### **Yarameter Description**

Parameter	Description	
Policy	Function description for this policy	
LED	Check/Uncheck this box to enable/disable LEDs of the AP	
Reboot Policy	Check/Uncheck the box to enable/disable the reboot function	
	Configure reboot type for your AP	
Reboot Type	Circularly: Every day, the AP will reboot at the set time.	
	Schedule: The AP will only reboot at the set time.	
Reboot Interval	Configure the reboot time	
Mon, Tue, Wed, Thu, Fri, Sat, Sun	Configure on which day (s) the AP will reboot	

#### **Alarm Policy**

When there goes something wrong with the AP, or the set traffic value has been reached, or the number of connected wireless clients has reached its maximum, Alarm Policy enables the AP to inform you of the real-time situation. Click **Alarm Policy** to enter page below:



Parameter	Description	
Policy	Description of this policy	
Desktop Alarm	Check/Uncheck it to enable/disable the desktop alarm function. When it is enabled, enter the host IP address of the desktop alarm.	
Email Alarm	Check/Uncheck it to enable/disable the email alarm function. When it is enabled, enter the email address which will receive the alarm.	
Email Password	Password of the email box	
Alarm Interval	Time interval among alarms	
AP Failure Alarm	Enable/Disable the AP failure alarm function. When it is enabled and AP failure occurs, AP failure alarm will be sent out.	
AP Traffic Alarm	Enable/Disable the AP traffic alarm function.  When it is enabled and the set value has been reached. AP traffic alarm will be sent out.	
Alarm Threshold	AP traffic alarm threshold When the alarm threshold has reached its limit, the AP will send out traffic alarm.	
AP Client Alarm  Enable/Disable the AP client alarm function.  When it is enabled and the number of connected wireless clients has reached its limit, client alarm will be sent out.		
Alarm Threshold	Clients alarm threshold When this alarm threshold has reached its limit, the AP will send out client alarms.	

#### **Delete**

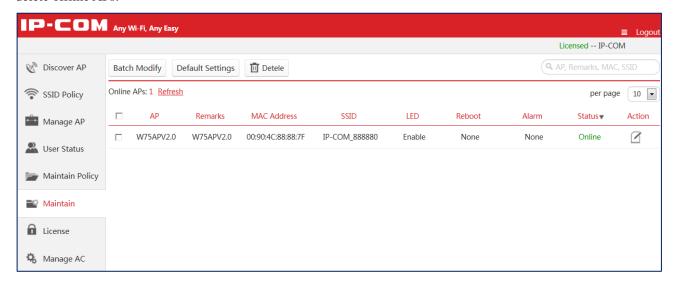
To delete a certain policy, select the entry you wish to delete and click Delete.



### **Maintain**

### What you will see

Click **Maintain** to enter page below, where you can modify reboot/alarm policy for your APs, reset your APs and delete offline APs.



#### **2** Parameter Description

Parameter	Description	
AP	Connected AP's model	
Remarks	Location description of the AP	
MAC Address	AP's MAC address	
SSID	AP's primary SSID	
LED	AP's LED status	
Reboot	Reboot policy of the AP	
Alarm	Alarm policy of the AP	
Status	Connection status between the AP and the AC: online and offline	
Action	Used for modifying AP policy	

### What you can do

#### **Batch Modify**

To batch issue reboot policy and alarm policy settings to some APs, select APs you wish to modify and click **Batch Modify**.



Parameter	Description	
Reboot Policy	Select an entry from configured reboot policies and issue this rule to the AP	
Alarm Policy	Select an entry from configured alarm policies and issue this rule to the AP	

#### **Edit**

To issue reboot policy and alarm policy settings to a certain AP, select the AP you wish to modify and click the action icon .

#### **Default Settings**

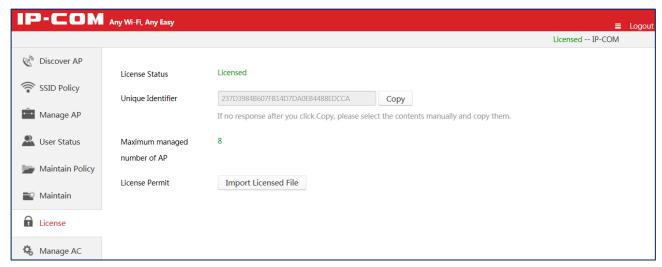
If you want to cancel all the reboot policy and alarm policy settings for your APs, select APs you wish to cancel and click **Default Settings**.

#### **Delete**

To delete some offline APs' information, select APs you wish to delete and click **Delete**.

### License

Only when the AC has been licensed can it work normally. As for this AC's authorized authentication, contact our IP-COM technical staff. Click **License** to enter page below:



- **Y** Configuration steps for importing the license file
- 1 Contact our IP-COM technical staff for the licensed file and save it to the local PC.
- 2 Click Import Licensed File.
- 3 Locate, select the file you've saved, and then follow onscreen instructions to authenticate it.



### **Manage AC**

In this section, the following actions can be performed:

**System Status** View port status, system status and device status.

**Network Setting** Configure LAN settings and VLAN settings.

**DHCP Setting** Configure start IP, end IP and lease time for the DHCP server.

**<u>Device Maintenance</u>** Upgrade, reboot, backup, restore and reset your device.

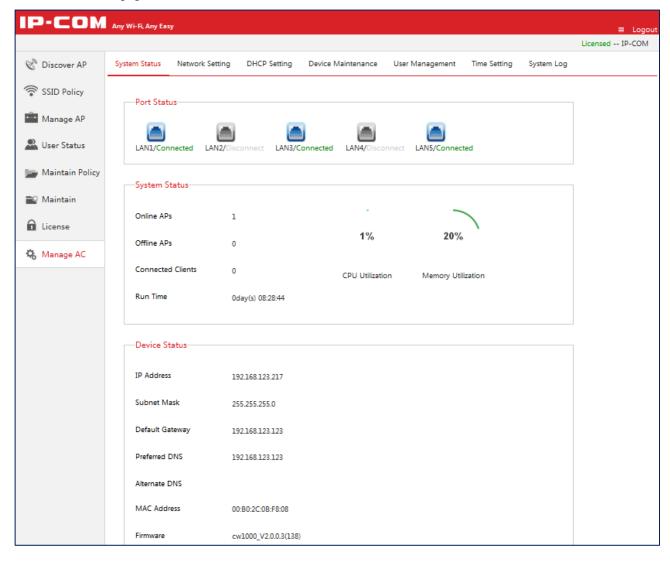
<u>User Management</u> Configure this AC's username and password.

<u>Time Setting</u> Configure system time for this AC.

**System Log** View, export and clear system logs.

### **System Status**

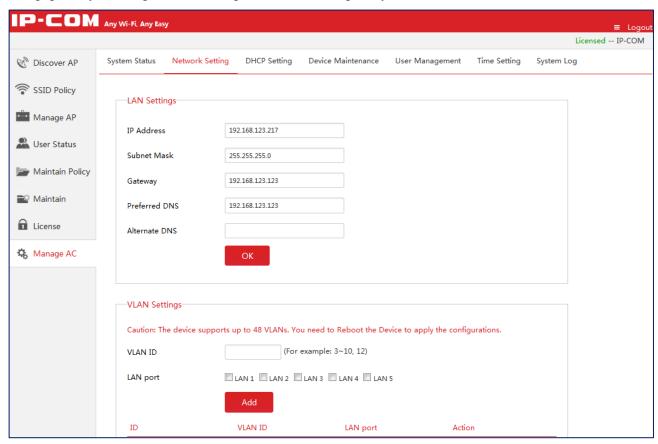
This page gives you an overview of port status, system status and device status. Click **Manage AC > System Status** to enter the page below:





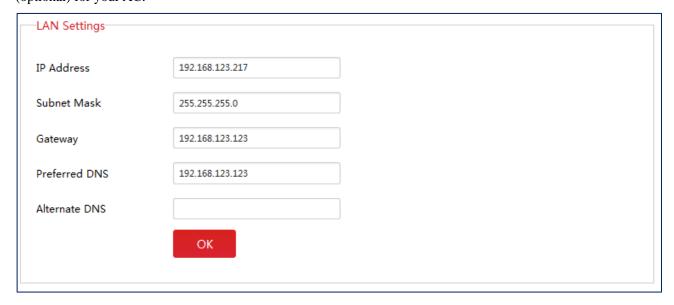
### **Network Setting**

This page lets you configure LAN settings and VLAN settings for your AC.



#### **LAN Setting**

In this section, you can configure LAN IP address, subnet mask, gateway, preferred DNS and alternate DNS (optional) for your AC.





#### **VLAN Settings**

This section lets you add or delete VLAN settings. Up to 48 QVLANs can be configured.

VLAN Settings				
Caution: The device	supports up to 48 VLANs. You	need to Reboot the Device to a	pply the configurations.	
VLAN ID	(For example: 3~10, 12)			
LAN port	□LAN1 □LAN2 □	LAN 3 LAN 4 LAN 5		
	Add			
ID	VLAN ID	LAN port	Action	

- Y To add a VLAN
- 1 VLAN ID: Enter the VLAN ID you wish to set.
- **2 LAN port:** Check ports you wish to add into the VLAN.
- 3 Click **Add** to complete your settings.



Tips:

Hyphens between different VLAN IDs indicate continuous VLANs and different VLANs can be separated with commas. For example, "3-10, 12" indicates "from VLAN 3, VLAN 4, VLAN 5, VLAN 6, VLAN 7, VLAN 8, VLAN 9, VLAN 10 and VLAN 12 (In total: 9 VLANs)".

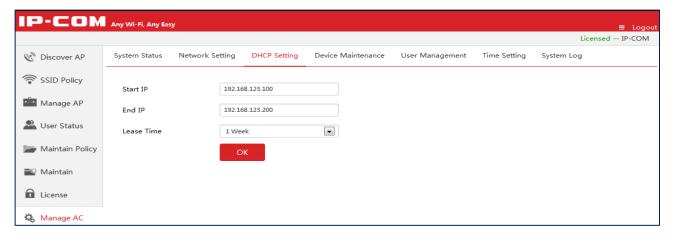
To delete a VLAN, click the icon behind the corresponding VLAN entry.

ID	VLAN IC	LAN port	Action
1	5	2,3	面

### **DHCP Setting**

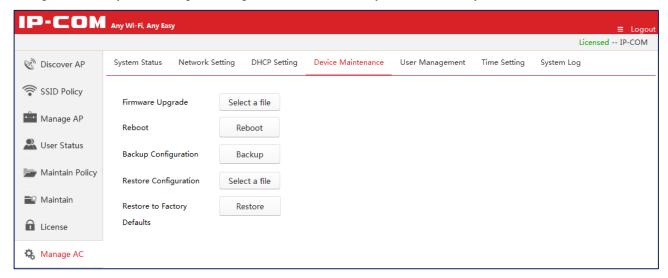
Click **Manage AC > DHCP Setting** to configure start IP, end IP and lease time for the DHCP server, which will assign IP addresses automatically to connected APs. Note that the start IP, end IP and the management IP of the AC must be on the same network segment.





#### **Device Maintenance**

Click **Manage AC > Device Maintenance** to enter page below, where you can upgrade, reboot the AC, backup configurations for your AC, import configuration files to restore your AC and rest your AC.



#### Firmware Upgrade

If you want your AC to manage more AP models or if there goes something wrong with your AC, you can log in to our website <a href="www.ip-com.com.cn">www.ip-com.com.cn</a> to search and download the corresponding firmware which may be a solution to your problem.



While upgrading, do not disconnect power supply of your AC, otherwise damage may be done to your AC. If sudden power interruption occurs, please re-upgrade the AC; if you are unable to log in to its web manager after power interruption, please contact our maintenance staff.

- **2** Configuration Steps
- 1 Log in to the official website <u>www.ip-com.com.cn</u>to download the corresponding software to the local PC.
- 2 Log in to the AC's web manager, click **Manage AC > Device Maintenance**, click **Select a file** behind the **Firmware Upgrade** option.
- 3 Select the software you've downloaded just now and follow onscreen guidelines to upload the software.
- Click Upgrade.



Wait for a few minutes until the upgrade completes.

When the upgrade completes, click **Manage AC > System Status** to check Firmware Version, to see whether the AC was successfully upgraded into the version you need.

#### Reboot

Reboot can release part of cashes, so as to obtain higher performance for the AC. In some cases, it also helps to solve some problems, such as "dead lock", "login failure to the AC's management web page", etc. Click **Manage** AC > System Status to enter the web manager and click **Reboot**.

#### **Backup**

If you have configured many settings on this device, which will make this device work in good status and suitable environment, it is suggested to backup settings for this device, which will be convenient for troubleshooting and saving time for next time configuration. Click **Backup** and then follow onscreen instructions.

#### Restore

If you happen to do some configurations, only to find that reduces the AC's performance, in this case, you can restore the device to its previous configurations. Click **Select a file**, select and upload your previous configuration files to the AC, and then follow onscreen instructions.

#### Reset

If you need to log in to the AC's management webpage, but forget the login username or login IP; or you have some trouble in surfing the Internet but unable to find where the problem is, it is advisable to restore this device to factory default settings.

Here are two methods to restore the AC to factory default settings:

**Method 1:** Restore to factory default by pressing the RESET button for 7 seconds and then wait for another 45 seconds

Method 2: Restore to factory default by clicking Restore on the Manage AC >Device Maintenance page.



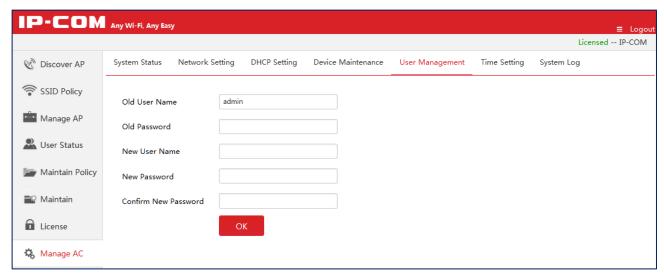
#### Tips:

After restoring this device to factory default, you need to use the default IP address (192.168.10.1) and login username and password (admin, admin) to re-log in to the web manager. For other default settings, see <u>Default Settings</u>.

### **User Management**

This page lets you customize the user name and password for your AC. Click **Manage AC > User Management** to enter page below:





After your login username and password are modified, it will automatically skip to the login page and you need to use the new username and password to re-access its web manager.

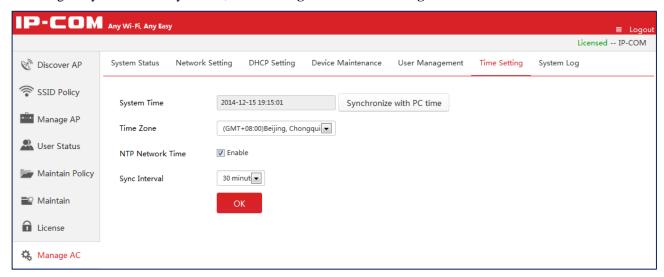


#### Tips:

The default login timeout for this AC is 5 minutes (not configurable). When time is up, you need to type in the username and password to re-access its web manager.

### **Time Setting**

To configure system time for your AC, click Manage AC > Time Setting.

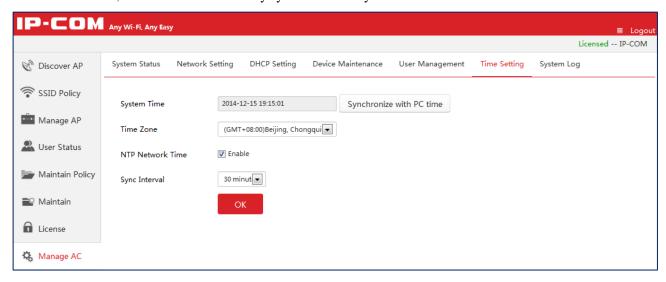


Two timing methods are available: NTP Network Timing (default) and Manual Setting.



#### **NTP Network Timing**

As for this method, the AC will automatically synchronize its system time from the time server on the Internet.



- Configuration Steps
- **1 Time Zone:** Select your time zone.
- 2 NTP Network Time: Check the Enable box.
- **3 Sync Interval:** Select the sync interval (recommend: 30 minutes).
- 4 Click **OK**.



To use the NTP Network Timing, you need to verify that the AC is connected to the Internet.

The way for the AC to access the Internet: click **Manage AC>Network Setting** to configure its IP address, subnet mask, gateway and DNS server.

#### **Manual Setting**

- **2** Configuration Steps
- **11** NTP Network Time: Uncheck the Enable box.
- 2 Click **Synchronize with PC time** to copy time to the AC (You need to verify that your PC time is correct.).
- 3 Click **OK**.



#### Tips:

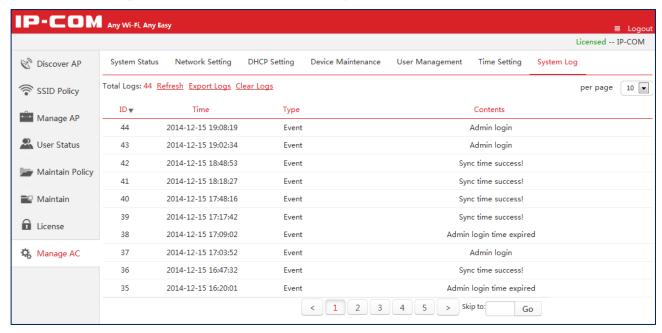
When the AC is disconnected from power supply, time info will be lost.

When NTP Network Timing enabled, the AC will connect to the Internet to synchronize with the Internet time. Only when the AC's system time is correct, can log and AP warning recording time be correct.



### **System Log**

This function helps you record and clarify connected AP information, which is helpful for monitoring network status and troubleshooting network problems. Up to 3000 entries can be recorded on this device. If the number of logs exceeds the value "3000", the most previous ones will be replaced by the latest ones. Click **Manage AC** > **System Log** to enter page below, where you can refresh, export and clear logs.



For the convenience of monitoring real-time network status and troubleshooting networking problems, you'd better verify that the AC acquires the correct time (Click **Manage AC > Time Setting**).



- 1. Restarting the AC will lose recorded log information.
- 2. Actions, like re-powering up the device after disconnecting its power supply, modifying its LAN IP address, backuping/restoring settings, restoring to factory default, upgrading this device, etc. will restart the device itself.



## 5 Appendix

### **FAQs**

## Q: I enter the device's LAN IP address in the web browser but cannot access this device's web manager. What should I do?

- a. Check the TCP/IP settings on your PC and verify that IP address is 192.168.10.X (2~254);
- b. Ensure the management IP 192.168.10.1 is not used by other devices in the LAN;
- c. Restart your PC or disable your PC's firewall, anti-virus and security software;
- d. Clear the browser cache or try another web browser;
- e. Restore the device to factory default settings and follow this User Guide to configure all settings again.

#### Q: I forgot the login username and password. What should I do?

Try to access this AC's web manager with the default username and password (admin for both). If you are still unable to log in, restore your device to factory default settings (For specific steps, see <u>Reset</u>) and then use the default login IP address (default: 192.168.10.1), username and password to try again.

#### Q: How to restore my device to factory default settings when I can't access this AC's web manager?

When the AC is functioning properly, press it with something like a needle for 7 seconds and then release it; about 45 seconds later, this device will be restored to factory default settings.



After restoring this device to factory default settings, all your current configurations will be lost and you need to re-configure your device.

## Q: Wireless clients can't connect to the managed AP or it displays "Limited" or "No Internet Access", and my PC's IP address is shown as 169.254.X.X. What should I do?

The AP DHCP server on this AC only assigns IP addresses to its managed APs. Thus, if you want wireless clients (connected to these APs) to get Internet access by obtaining IP addresses automatically, you have to set up a DHCP server in the LAN to assign IP addresses to these wireless clients.

### **Technical Support**

Website: http://www.ip-com.com.cn

Tel: (86 755) 2765 3089 Email: <u>info@ip-com.com.cn</u>

Skype: IP-COM.Support



## **Default Settings**

Parameter		Default Setting
Login Info	Login Method	HTTP (web manager)
	Login IP	192.168.10.1
	Login Username/Password	admin/admin
	Web login Timeout	5 minutes (immutable)
LAN Setup	IP Address	192.168.10.1
	Subnet Mask	255.255.255.0
	Gateway	192.168.10.254
	Primary DNS Server	192.168.10.254
	Alternate DNS Server	
DHCP Server	Status	Enable (immutable)
	Start IP	192.168.10.100
	End IP	192.168.10.200
	Lease Time	One Week
Time Setting	NTP Network Time	Enable
	Interval	30 minutes
	Time Zone	(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi



### **Safety and Emission Statement**

## $\epsilon$

#### **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 o

For Pluggable Equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

WARNING: The main plug is used as disconnect device, the disconnect device shall remain readily operable.

The Product is designed for IT Power Distribution System.

**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.