

# Quick Installation Guide

# EAP750 V1.00

**Enterprise Access Point** 



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### FCC CAUTION

This equipment has been tested and proven to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ---Reorient or relocate the receiving antenna.
- ---Increase the separation between the equipment and receiver.
- ---Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ---Consult the dealer or an experienced radio/TV technician for help.

The device contains a low power transmitter which will send out Radio Frequency (RF) signal when transmitting. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.



### **CE CAUTION**

Declaration of Conformity with Regard to the 1999/5/EC (R&TTE Directive) for European Community, Switzerland, Norway, Iceland, and Liechtenstein

#### Model: EAP750

For 2.4 GHz radios, the device has been tested and passed the requirements of the following standards, and hence fulfills the EMC and safety requirements of R&TTE Directive within the CE marking requirement.

- Radio: EN 300.328:
- EMC: EN 301.489-1, EN 301.489-17,
- EMC: EN 55022 Class B, EN 55024 + A1 + A2 including the followings:
  - EN 61000-3-2, EN 61000-3-3.

EN 61000-4-2, EN 61000-4-3, EN 61000-4-4,

EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

• Safety: EN 60950-1 + A11,

#### Caution:

This declaration is only valid for configurations (combinations of software, firmware, and hardware) provided and supported by 4ipnet Inc. The use of software or firmware not provided and supported by 4ipnet Inc. may result in the equipment no longer being compliant with the regulatory requirements.

European standards dictate maximum radiated transmit power of 100mW EIRP and frequency range 2.400-2.4835 GHz. This equipment is intended to be used in all EU and EFTA countries. Outdoor use may be restricted to certain frequencies and/or may require a license for operation. Contact your local regulatory authority for compliance.

#### **Taiwan NCC Statement**

根據 NCC 低功率電波輻射性電機管理辦法 規定:				
第十二條	經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或 變更原設計之特性及功能。			
第十四條	低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時應立即停用,並改善至 無干擾時方得繼續使用。 前項合法通信,指依電信法規定作業之無線電通信。 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之擾。			



### Preface

4ipnet EAP750 is a high-end, dual radio 802.11 a/b/g/n 2.4GHz/5 GHz MIMO Access Point (AP) with the best price/ performance for business and industrial applications and is compliant with the latest industrial wireless security standards that are required in the tightly secured enterprise network environments.

EAP750 makes the wireless communication fast, secure and easy. It supports business grade security such as 802.1X, and Wi-Fi Protected Access (WPA and WPA2). By pushing a purposely built button, the **4ipWES (Press-n-Connect)** feature makes it easy to bridge wireless links of multiple EAP750s for forming a wider wireless network coverage.

EAP750 also features multiple ESSIDs with VLAN tags and multiple Virtual APs; great for enterprise applications, such as separating traffic from different departments using different ESSIDs. The PoE Uplink port is able to receive power from Power over Ethernet (PoE) sourcing devices.

This Quick Installation Guide provides instructions and reference materials to get you started with 4ipnet EAP750.

### **Package Contents**

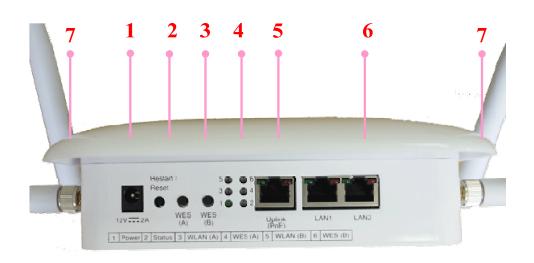
- 1. 4ipnet EAP750 x 1
- 2. Quick Installation Guide (QIG) x 1
- 3. CD-ROM (with User's Manual and QIG) x 1
- 4. Ethernet Cable x 1
- 5. Power Adapter (DC 12V) x 1 (Optional)
- 6. Mounting Kit x 1

*It is recommended to keep the original packing material for possible future shipment when repair or maintenance is required. Any returned product should be packed in its original packaging to prevent damage during delivery.* 



# System Overview

#### Rear Panel



#### EAP750's Rear Panel

1	12V 2 A	Attach the power adapter here.
2	Restart / Reset	Press once to restart the system; Press and hold for more than 5 seconds to
	Button	reset to factory default.
3	WES Button	WDS Easy Setup. Press the button to build up a WDS link with another peer.
4	LED Indicators	6 LED lights are available. What the numbers stand for is listed at the bottom of
		the panel.
5	Uplink (PoE) Port	Offers uplink connection. This port can be used to connect to a controller,
		gateway, or directly to the Internet. PoE is also supported
6	LAN 1- 2 Ports	Attach Ethernet cables here to connect to the wired local network.
7	Antenna	4 detachable antennas, 2 for each radio.



## Hardware Installation

Please follow the steps mentioned below to install the hardware of EAP750:

#### 1. Place the EAP750 at the best location.

a) The best location for EAP750 is usually at the center of your intended wireless network.

b) If admin would like to mount the EAP750 on the wall (on a socket), the figure below indicates how the mounting kit can be used on the back of the device. Screw the panel to the EAP750, and then turn the panel clockwise to fasten it with the AP.

### 2. Connect the EAP750 to your network device.

Connect one end of the Ethernet cable to the Uplink port of EAP750 and the other end of the cable to a switch, a router, or a hub. EAP750 is then connected to your existing wired LAN network. There are two ways to supply power over to EAP750.

#### 3. Connect the DC power adapter to the EAP750 power socket.

EAP750 Uplink port is capable of receiving DC currents. Connect an IEEE 802.3af-compliant PSE device (e.g. a PoE-switch) to the Uplink port of EAP750 with the Ethernet cable.

Now, the Hardware Installation is complete. For more information on installing the wall and ceiling mount kit,

please refer to the Mounting Kit Installation Guide provided.



• Using a different power adapter may damage this system.

• To verify the wired connection between EAP750 and you switch / router / hub, please also check the LED status indicator of the respective network devices.



## **Getting Started**

4ipnet EAP750 supports web-based configuration. When hardware installation is complete, EAP750 can be configured through a PC by using a web browser such as Mozilla Firefox 2.0 or Internet Explorer version 6.0 and above.

The default values of LAN IP address and subnet mask of EAP750 are:

IP Address: 192.168.1.1 Subnet Mask: 255.255.255.0

#### Steps:

 To access the Web Management Interface, connect the administrator PC to the Uplink port of EAP750 via an Ethernet cable. Then, set a static IP address on the same subnet mask as EAP750 in TCP/IP of your PC, such as the following example:

IP Address: 192.168.1.100 Subnet Mask: 255.255.255.0

2. Launch the web browser on your PC by entering the IP address of EAP750 (https://192.168.1.1) in the address field, and then press *Enter*.



#### Example of entering EAP750's default IP Address via a web browser

3. The following Admin Login Page will appear. Enter "**admin**" for both the *Username* and *Password* fields, and then click *Login*.



4ipnet <sup>®</sup>	
	Username: admin Password: ••••• Login

#### Administrator Login Page

4. After a successful login to EAP750, a **System Overview** page of the Web Management Interface will appear, as depicted below.

Home > Status > System Overview System Overview Radio Status -System ТХ System Name Enterprise Access Point RF Card MAC Address Band Channel Power Firmware Versi... 1.00.00 RF Card... 00:C0:CA:5F:8... 802.11g... Highest 6 Build Number 1.3-1.5190 RF Card... 00:C0:CA:5F:8... 802.11a... 36 Highest Location Site EN-A Device Time 2000/01/01 09:59:04 System Up Time 0 days, 1:59:17 LAN Interface -AP Status – MAC Address 00:1F:D4:01:F4:CD RF Card Name : RF Card A 👻 IP Address 192.168.1.1 Subnet Mask 255.255.255.0 Security Online Profile ESSID BSSID Tun Name Туре Clients Gateway 192.168.1.254 VAP-1 00:C0:CA:5F:... 4ipnetAP-... None 0 69 CAPWAP -🖌 IPv6 —— Status Disabled Status Disabled

#### The Web Management Interface - System Overview Page

 To logout, simply click on the *Logout* button at the upper right hand corner of the interface to return to the Administrator Login Page. Click *OK* to logout.



# **Common Settings**

#### Step 1. Change Administrator's Password

Committee a	٠			
System	Wireless	Firewall	Confines	Status
hange Password Backup &	Restore System Upgrade Rel	boot Upload Certificate		
Home > Utilities > Change	Password			
	C	hange Passwor	d	
	and the second	hange Passwor	d	
	Name : adm		d	
	and the second			

#### Change Password Page

- > Click on the **Utilities** icon on the main menu, and select the **Change Password** tab.
- Enter the old password and then a new password with a length of up to 32 characters, and retype it in the Re-enter New Password field.
- > Click **SAVE** to save the changes.



#### Step 2. Configure General AP (Access Point) Settings

Canada and	<u></u>			
System	Winalase	Firewall	Utilities	Status
P Overview General V	AP Config Security Rep	eater Advanced Access Cor	ntrol	
tome > Wireless > Gene	ral			
		General Setting	gs	
			-	
		RF Card Name : RF Card	Α 🗸	
	Band :	802.11g+802.11n 👻 🗏 Pur	re 11n	
	Short Preamble :	Disable 🖲 Enable		
Sh	ort Guard Interval :	🕽 Disable 💿 Enable		
	Channel Width :	20 MHz 👻		
	Channel :			
	Max Transmit Rate :			
	Transmit Power:			
	ACK Timeout :		t:4 micro seconds)	
	Beacon Interval :	.00 *(100 - 500ms )		

Wireless General Settings Page

- > Click on the **Wireless** icon on the main menu, and then select the **General** tab.
- > Determine the **Band** and **Channel** settings:

Select your preferred Band and Channel for you wireless connection. For example, select

802.11g+802.11n for the band and 6 for the channel.

Admin should be aware of Dynamic Frequency Selection (DFS) mandated on some channels of the 5GHz band. When an EAP750 detects interference, this mechanism will limit the ability to broadcast the SSID on one of the channels listed below: Note: 1) Country Code: 840 (US)

DFS Channels: 52 56 60 64 100 104 108 112 116 120 124 128 132 136 140 2) Country Code: 250 (EU) DFS Channels: 52 56 60 64



#### Step 3. Configure VAP (Virtual Access Point) Profile Settings

-			Frank Co.	
System	Wireless	Firewall	Utilities	Status
AP Overview General VAP Co	onfig Security Repeater A	dvanced Access Control		
Home > Wireless > VAP Confi	g			
	VA	AP Configuratio	n	
	Drofile	e Name : RF Card A : VAP	2-1	
		sable  Enable		
	Profile Name : VAP-1		]	
	ESSID : 4ipnet	tAP-A1	]	
		sable 🔘 Enable		
	VLAN	ID: *(1-4094)		
CAPWAP	Tunnel Interface :			

#### VAP Configuration Page (VAP-1 shown)

- > EAP750 supports up to 8 virtual APs (VAPs) per RF Card.
- Configure VAP profile settings :
  - (a) Select the **VAP Configuration** tab to configure the settings of the desired VAP.

(b) Enable a specific VAP from the drop-down menu of **Profile Name** and configure related settings below.

Check VAP status :

After finishing VAP configuration, the status of enabled Virtual APs shall be reflected on the VAP Overview page.



**Quick Installation Guide** 

#### EAP750 Enterprise Access Point ENGLISH



Home > Wireless > VAP Overview

### VAP Overview

VAP No.	ESSID	State	Security Type	MAC ACL	Advanced Settings
1	4ipnetAP-A1	Enabled	None	Disabled	Edit
2	4ipnetAP-A2	Disabled	None	Disabled	Edit
3	4ipnetAP-A3	Disabled	None	Disabled	Edit
4	4ipnetAP-A4	Disabled	None	Disabled	Edit
5	4ipnetAP-A5	Disabled	None	Disabled	Edit
6	4ipnetAP-A6	Disabled	None	Disabled	Edit
7	4ipnetAP-A7	Disabled	None	Disabled	Edit
8	4ipnetAP-A8	Disabled	None	Disabled	Edit

RF Card B						
VAP No.	ESSID	State	Security Type	MAC ACL	Advanced Settings	
1	4ipnetAP-B1	Enabled	None	Disabled	Edit	
2	4ipnetAP-B2	Disabled	None	Disabled	Edit	
3	4ipnetAP-B3	Disabled	None	Disabled	Edit	
4	4ipnetAP-B4	Disabled	None	Disabled	Edit	
5	4ipnetAP-B5	Disabled	None	Disabled	Edit	
6	4ipnetAP-B6	Disabled	None	Disabled	Edit	
7	4ipnetAP-B7	Disabled	None	Disabled	Edit	
8	4ipnetAP-B8	Disabled	None	Disabled	Edit	

Virtual AP Overview Page



#### Step 4. Configure WDS (Wireless Distribution System) Settings (Optional)

	٠			
System	Wireless	Firewall	Utilities	Status
VAP Overview General VA	P Config Security Repeater A	dvanced Access Control		
Home > Wireless > Repea	ter Config			
	5			
	Re	epeater Setting	js	
	Repe	ater Type : WDS 💌		
	WDS Pro	ofile : RF Card A : WDS L	ink 1 💌	
	WDS : Disabl	le 🔻		
	MAC Address :			
0025222	Security type : None	•		
CAPWA	NP Tunnel Interface :			

To extend the wireless coverage, EAP750 supports up to 4 WDS links for connecting wirelessly to other WDS-capable APs (peer APs). By default, all WDS profiles are disabled.

- > Click on the **Wireless** button on the main menu.
- > Select the **Repeater Settings** tab.
- > Choose **WDS** as the **Repeater Type**.
- > Choose the desired WDS profile:
  - (a) Enable **WDS**.
  - (b) Enter the **MAC Address** (peer AP) and then Click **SAVE**.

If you are using another EAP750 as the peer AP, simply repeat the above-mentioned steps to configure another peer AP(s).

▶ Note:

On each and every configuration page, you may click *SAVE* to save the changes of your configured settings, but you must reboot the system for the changes to take effect. After clicking *SAVE*, the following message will appear: "Some modifications have been saved and will take effect after **Reboot.**"

### **Congratulations!**

Now, 4ipnet EAP750 is installed and configured successfully.





After EAP750's network configuration is completed, please remember to change the IP Address of your PC Connection Properties back to its original settings in order to ensure that your PC functions properly in its real network environments.

It is strongly recommended to make a backup copy of your configuration settings.

• For further configuration and backup information, please refer to the User's Manual.

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