

Quick Installation Guide

EAP767 V1.00

Enterprise Access Point



Copyright Notice

This document is protected by USA copyright laws and other laws. Besides, the document is the property of 4IPNET, INC. You may not copy, reproduce, distribute, publish, display, perform, or modify any part of this publication in any form or by any means without prior written permission from 4IPNET, INC. You may not alter or remove any copyright or other notice from copies of the content. All other brand and product names are claimed or registered marks of their respective companies or organizations.

All rights reserved.

To download up-to-date version, please visit <u>www.4ipnet.com</u>.



FCC CAUTION

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.

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.

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 transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.



CE CAUTION

Declaration of Conformity with Regard to the 1999/5/EC (R&TTE Directive) for European Community, Switzerland, Norway, Iceland, and Liechtenstein Model: EAP767

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 EAP767 is a high-end, dual radio 802.11 b/g/n + ac MIMO Access Point (AP) with the best 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.

EAP767 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). The EAP767 supports multiple point-to-point wireless links to form wider wireless network coverage.

EAP767 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 EAP767.

Package Contents

- 1. 4ipnet EAP767 x 1
- 2. Quick Installation Guide (QIG) x 1
- 3. Wall Mount Kit x 1
- 4. Ceiling Mount Kit x 1
- 5. DC Extension plug 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



EAP767's Front Panel

EAP767's Rear Panel

1	LED Indicators	An LED indicator is available to show the uplink status			
2	12V 2.5 A	Attach power adaptor here			
3	Uplink (PoE) Port	Offers uplink connection. This port can be used to connect to a controller,			
		gateway, or directly to the Internet. 802.3at PoE is also supported			



Hardware Installation

Please follow the steps mentioned below to install the hardware of EAP767:

1. Place the EAP767 at the best location.

a) The best location for EAP767 is usually at the center of your intended wireless network.

Wall Mounting

- Secure wall-mount bracket on wall



- Attach the Access Point to the dedicated slots on the mounting bracket



- Turn the Access Point clockwise as illustrated to fasten AP





Ceiling Mount

- Secure ceiling-mount bracket on ceiling



- Attach the Access Point to the dedicated slots on the mounting bracket



- Turn the Access Point clockwise as illustrated to fasten AP





2. Connect the EAP767 to your network device.

Connect one end of the Ethernet cable to the Uplink port of EAP767 and the other end of the cable to a switch, a router, or a hub. EAP767 is then connected to your existing wired LAN network.

3. Power on the EAP767.

There are two ways to supply power over to EAP767.

- EAP767 Uplink port is capable of receiving DC currents. Connect an IEEE 802.3at-compliant PSE device (e.g. a PoE-switch) to the Uplink port of EAP767 with the Ethernet cable.
- Connect a 12V/2.5A adaptor (optional) to the DC power jack. If needed, use the DC extension plug included.

Now, the Hardware Installation is complete.

• Using a different power adapter may damage this system.

• To verify the wired connection between EAP767 and you switch / router / hub, please also check the LED status indicator of the respective network devices.



Getting Started

4ipnet EAP767 supports web-based configuration. When hardware installation is complete, EAP767 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 EAP767 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 EAP767 via an Ethernet cable. Then, set a static IP address on the same subnet mask as EAP767 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 EAP767 (https://192.168.1.1) in the address field, and then press *Enter*.



Example of entering EAP767'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 [®]	
	Username: admin Password: ••••• Login

Administrator Login Page

4. After a successful login to EAP767, a **System Overview** page of the Web Management Interface will appear, as depicted below.

System Overview								
🛛 🎓 System		n r 😂 -	Rac	dio Status				
System Name	Enterprise Access Point - EA	RF Car	rd	MAC Address	Band	Channe		X wer
Firmware Version	1.00.00	RF Car	rd A	00:03:7F:48:89:	FD 802.11g+	n 6	25	dBm
Build Number	1.55-1.7137	RF Car	rd B	00:03:7F:00:25:	10 802.11a	c 36	17	dBm
Location								
Site	EN-A							
Device Time	2000/01/01 01:58:52							
System Up Time	0 days, 1:59:39							
CPU/RAM Usage	3.92% / 22.60% Plot							
CPU/RAM Usage	3.92% / 22.60% Plot	J						
				Chatura				
CPU/RAM Usage			AP	Status —				
S LAN Inte]	AP :		no - PE Card A	•		
🛞 LAN Inte	o0:03:7F:11:20:05]	AP		ne : RF Card A	. •		
MAC Address	00:03:7F:11:20:05 10.8.50.76	Profile	AP		ne : RF Card A	Security	Online	e Tun
MAC Address	00:03:7F:11:20:05 10.8.50.76 255.255.0.0			RF Card Nar	L		Online Client	^e sTun S
MAC Address IP Address Subnet Mask	00:03:7F:11:20:05 10.8.50.76 255.255.0.0	Profile Name		RF Card Nar BSSID	ESSID	Security Type		
MAC Address IP Address Subnet Mask Gateway	00:03:7F:11:20:05 10.8.50.76 255.255.0.0 10.8.1.1	Profile Name VAP-1	00:0	RF Card Nar BSSID 03:7F:48:89:FD	ESSID	Security Type		
MAC Address IP Address Subnet Mask	00:03:7F:11:20:05 10.8.50.76 255.255.0.0 10.8.1.1	Profile Name	00:0	RF Card Nar BSSID 03:7F:48:89:FD	ESSID	Security Type		
Subnet Mac Address IP Address Subnet Mask Gateway	00:03:7F:11:20:05 10.8.50.76 255.255.0.0 10.8.1.1	Profile Name VAP-1	00:0	RF Card Nar BSSID 03:7F:48:89:FD	ESSID 4ipnetAP-A1	Security Type		

The Web Management Interface - System Overview Page

5. 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

Common and Common an	٠			
System	Wireless	Firewall	Unimes	Status
Change Password Backup	& Restore System Upgrad	e Reboot Upload Certific	ate Channel Analysis Back	kground Scan
Home > Utilities > Change	e Password			
	(Change Passwo	rd	
	Name : ad	min		
	New Password :	*up to 32	characters	
Re-en	ter New Password :			
	Name : US	er		
	New Password :	*up to 32	characters	
Re-en	ter New Password :			

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

System	Wireless	Firewall	Utilities	Status
VAP Overview General VA	AP Config Security R	epeater Advanced Access Con	trol	
Home > Wireless > Gener	al			
		General Settings	S	
		RF Card Name : RF Card A	•	
	Band :	802.11g+802.11n 🔻 🔲 Pure 11	n	
		Disable 🖲 Enable		
Sh	ort Guard Interval :	🔍 Disable 💿 Enable		
	Channel Width :	20 MHz 🔻		
	Channel :	6 🔻		
N	Max Transmit Rate :	Auto 🔻		
	Transmit Power :	Level 1 🔻		
	ACK Timeout :	• (0 - 255, 0:Auto, Unit:4	micro seconds)	
	Beacon Interval :	100 millisecond(s) *(100 - 5	00)	
	Airtime Fairness :	Disable 🖲 Fair Access 🔘 Pref	Ferred Access	
Pack	et Delay Threshold:	1000 millisecond(s) *(100 - 3	5000, 0:Disable)	
I				

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. For a detailed guide to configuration, please refer to the EAP767 User Manual.

 Admin should be aware of Dynamic Frequency Selection (DFS) mandated on some channels of the 5GHz band. When an EAP767 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

System Wireless Firewall Utilities Status VAP Overview General VAP Config Security Repeater Advanced Access Control Home > Wireless > VAP Config VAP : O Disable @ Enable VLAN ID : ""(1 - 4094)		4			
Home > Wireless > VAP Config VAP Configuration Profile Name : RF Card A : VAP-1 VAP : O Disable O Enable Profile Name : VAP-1 ESSID : 4ipnetAP-A1 VLAN ID : O Disable O Enable VLAN ID : *(1 - 4094)	System	Wireless	Firewall	Utilities	Status
VAP Configuration Profile Name : RF Card A : VAP-1 • VAP : O Disable Enable Profile Name : VAP-1 ESSID : VAP-1 4ipnetAP-A1 O Disable Enable VLAN ID : *(1 - 4094)	AP Overview General VAP	Config Security Repeater	Advanced Access Control		
VAP Configuration Profile Name : RF Card A : VAP-1 VAP : O Disable Enable VAP-1 ESSID : VAP-1 VLAN ID : O Disable Enable VLAN ID : (1 - 4094)					
VAP : Image: Disable VAP : Image: Disable Profile Name : VAP-1 VAP-1 Image: Disable ESSID : 4ipnetAP-A1 VLAN ID : Image: Disable VLAN ID : Image: March 1 (1 - 4094 (1))	Home > WIFeless > VAP Cor	fig			
VAP : O Disable Profile Name : RF Card A : VAP-1 VAP : O Disable Profile Name : VAP-1 ESSID : 4ipnetAP-A1 VLAN ID : Image: State of the sta					
VAP : Isable Enable Profile Name : VAP-1 ESSID : 4ipnetAP-A1 VLAN ID : Isable Enable VLAN ID : *(1 - 4094)		V	AP Configuratio	n	
VAP : Image: Disable imable imable Profile Name : VAP-1 ESSID : 4ipnetAP-A1 VLAN ID : Image: Disable imable imable VLAN ID : Image: Market imarket image: Market imarket image: Market imarket image: Market ima					
Profile Name : VAP-1 ESSID : 4ipnetAP-A1 VLAN ID : © Disable VLAN ID : *(1 - 4094)		Profi	RF Card A : VA	P-1 ▼	
ESSID : 4ipnetAP-A1 VLAN ID : Disable Enable VLAN ID : *(1 - 4094) 		VAP : O D	isable 🖲 Enable		
VLAN ID : Disable Enable VLAN ID : *(1 - 4094)		Profile Name : VAP-	1		
VLAN ID : *(1 - 4094)		ESSID : 4ipne	etAP-A1		
		VLAN ID : O	isable 🔘 Enable		
		VLAN	ID: *(1-4094)		
CAPWAP Tunnel Interface :	CAPWAP	Tunnel Interface :			

VAP Configuration Page (VAP-1 shown)

- > EAP767 supports up to 16 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

EAP767 Enterprise Access Point ENGLISH

System	Wireless	Firewall	Utilities	Status

Home > Wireless > VAP Overview

VAP Overview

	RF Card A					
VAP No.	ESSID	State	Security Type	MAC ACL	Advanced Settings	
1	4ipnetAP-A1	Enabled	Open	Disabled	Edit	
2	4ipnetAP-A2	Disabled	Open	Disabled	Edit	
3	4ipnetAP-A3	Disabled	Open	Disabled	Edit	
4	4ipnetAP-A4	Disabled	Open	Disabled	Edit	
5	4ipnetAP-A5	Disabled	Open	Disabled	Edit	
6	4ipnetAP-A6	Disabled	Open	Disabled	Edit	
7	4ipnetAP-A7	Disabled	Open	Disabled	Edit	
8	4ipnetAP-A8	Disabled	Open	Disabled	Edit	
9	4ipnetAP-A9	Disabled	Open	Disabled	Edit	
10	4ipnetAP-A10	Disabled	Open	Disabled	Edit	
11	4ipnetAP-A11	Disabled	Open	Disabled	Edit	

Virtual AP Overview Page



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

Common Common	4							
System	Wireless	Firewall	Utilities	Status				
VAP Overview General V	AP Overview General VAP Config Security Repeater Advanced Access Control							
Home > Wireless > Repea	ter Config							
	Repeater Settings Repeater Type : WDS •							
	WDS P	rofile : RF Card A : WDS	Link 1 🔻					
	WDS : Dis	able 🔻						
,	WDS Link Address : 0A:0	3:7F:48:89:FD *Pleas	e use it as the peer's Remote A	AP MAC Address				
Remote	e AP MAC Address :							
	Security type : Nor	ne 🔻						
CAPWAR	P Tunnel Interface :							
	I							

To extend the wireless coverage, EAP767 supports up to 8 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 EAP767 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 EAP767 is installed and configured successfully.





After EAP767'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.

P/N: V10020150318