

Quick Installation Guide

EAP100 v2.10



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Preface

4ipnet EAP100 is a high-end 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. Its Wireless Distribution System (WDS) feature allows for flexible extension of wireless coverage. The dual-PoE LAN ports, LAN1 and LAN2, can receive Power over Ethernet (PoE) and is capable of providing backups between each other with its failover function. This provides EAP100 with reliable connectivity. Its metal case is IP50 anti-dust compliant, which means that EAP100 is well suited to WLAN deployment in industrial environments.

This Quick Installation Guide provides instructions and reference materials for getting started with 4ipnet EAP100.

Package Contents

- 1. EAP100 x 1
- 2. Quick Installation Guide x 1
- 3. CD-ROM x 1
- 4. Console Cable x 1
- 5. Ethernet Cable x 1
- 6. Power Adapter (DC 12V) x 1
- 7. 5dBi Antenna x 2
- 8. Mounting Kit x 1
- 9. Ground Cable 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

Front Panel

Front Panel



Figure 1 EAP100 Front Panel

POWER SOCKET	Attach the power adapter here.
RESET Button	Press and hold the button for more than 10 seconds but no more than 30
	seconds to restart the system. Hold the button for more than 30 seconds to
	reset the device to factory defaults.
LAN 1 / LAN 2	The LAN ports are for connecting to wired networks.
CONSOLE	Attach the serial cable here. The administrator may also obtain IP address
	information of Ethernet ports from the console port.



Rear Panel



Figure 2 EAP100 Rear Panel

Antenna Connector:	Attach the antennas here. EAP100 supports 1 RF interface and
	2 SMA connectors for antenna connection.

Top Panel – LED



Figure 3 EAP100 Top Panel

Power	Green LED On indicates power on; OFF indicates power off.
LAN 1 / LAN 2	OFF indicates no connection; ON indicates connection; CLINKING indicates
	transmitting data.
WLAN	Green LED ON indicates system ready.



Hardware Installation

Please follow the steps mentioned below to install the hardware of EAP100:

1. Place the EAP100 at a best location.

The best location for EAP100 is usually at the center of your wireless network.

2. Connect EAP100 to your network device.

Connect one end of the **Ethernet cable** to the LAN1 or LAN2 port of EAP100 and the other end of the cable to a switch, a router or a hub. EAP100 is then connected to your existing wired LAN network.

3. There are two ways to supply power over to EAP100.

(a) Connect the **DC power adapter** to the EAP100 power socket.



Please only use the power adapter supplied with the EAP100 package. Using a different power adapter may damage this system.

(b) EAP100 LAN ports are capable of transmitting DC currents via its LAN1 or LAN2 PoE ports. Connect an IEEE 802.3af-compliant PSE device, e.g. a PoE-switch, to the LAN1 or LAN2 port of EAP100 with the Ethernet cable.

Now, the Hardware Installation is completed.



To double verify the wired connection between EAP100 and your switch/router/hub, please check the LED status indication of these network devices.



Getting Started

4ipnet EAP100 supports web-based configuration. Upon the completion of hardware installation, EAP100 can be configured through a PC by using its 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 EAP100 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 LAN1 or LAN2 port of EAP100 via an Ethernet cable. Then, set a static IP address on the same subnet mask as EAP100 in TCP/IP of your PC, such as the following example:

IP Address: 192.168.1.100 Subnet Mask: 255.255.255.0

 Launch the web browser on your PC by entering the IP address of EAP100 (http://192.168.1.1) at the address field, and then press *Enter*.



Figure 4 Example of entering EAP100's default IP Address into a web browser



3. The following Administrator Login Page will then appear. Enter "**admin**" for both the *User name* and *Password* fields, and then click *OK* to log in.

Connect to 192.168.1.1	? 🛛
	GA
The server 192.168.1.1 at EAP100 requipassword. Warning: This server is requesting that y password be sent in an insecure manner without a secure connection).	ires a username and your username and (basic authentication
User name: 🖸 admin	~
Password:	
🔲 Remember my	password
ОК	Cancel

Figure 5 Administrator Login Page

4. After a successful login into EAP100, a **System Overview** page of web management interface will appear, as depicted below.



Quick Installation Guide

EAP100 Enterprise Access Point ENGLISH

4ipnet	Enterpris	se Acces	s Point EAP	100	♠ Home ᢒLogo	ut ?Help
	٠					
System	Wireless		Utilities		SEEUE	
Overview Clients Repeater	Event Log					
Home > Status > System Ov	renview					
	Syst	em Ove	rview			
System		Г 😂 К	adio Statu	S		
System Name	EAP100		MAC Address	00:A3:36:22:33:A	.2	
Firmware Version	2.10.00		Band	802.11b+g		
Build Number	1.39-1.2237		Channel	6		
Location	CA, US		TX Power	highest		
Site	EN-A					
Device Time	2000/01/01 00:00:39					
System Up Time	0 days, 0:00:39					
Subnet Mask Gateway	no:A3:36:22:33:A1 192.168.1.1 255.255.255.0 192.168.1.254	Profile Name VAP-1	P Status — BSSID 20:A3:36:22:33:A2	ESSID EAP100-1	Security Type None	Online Clients 0
	©200	8 All Rights Re	served.			

Figure 6 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.

Message from webpage 🛛
Are you sure to logoff?
OK Cancel

Figure 7 Logout Prompt



Common Settings

Step 1. Change Administrator's Password

4ipnet	Enterprise	Access Point EAP100	♠ Home ⊗Logout ?Help
	<	<i>~</i>	
System	Wireless	unines	Status
Admin Password Home > Utilities > Change Password	e System Upgrade Reboot		
	Change	e Password	
Old	Name : admin Password :		
New Re-enter New	Password : ••••	*up to 32 characters	
•	SAVE	APPLY	
	©2008 All	Rights Reserved.	

Figure 8 Change Password Screen

- > Click on the **Utilities** button, and then select the **Admin Password** tab.
- Enter 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.

On each and every configuration page, you may

- (a) Click *Apply* to allow the changes you made on the current page to take effect immediately (Sometimes the system may require a restart after clicking *Apply*. When a restart message appears, the system must be restarted for the settings to take effect.); or
- Note: (b) Click Save to save the changes, but you must reboot the system upon the completion of all configuration settings for the changes to take effect. When clicking Save, the following message will appear: "Some modifications have been saved and will take effect after Reboot."



Step 2. Configure AP (Access Point) Settings

4ipnet	Enterprise Ac	cess Point EAP100	A Home ⊗Logout ?Help
System	Wireless	Utilities	Status
VAP Overview General VAP Config Home > Wireless > General	Security Repeater Advanced A	access Control Site Survey	
Sho Max Tra Trar	Band : 802.11b+802 rt Preamble : Disable © Enal Channel : 6 v ansmit Rate : Auto v Samit Power : Auto v	Settings 11g 🕶	
	SAVE APP	LY CLEAR	
	©2008 All Rig	hts Reserved.	

Figure 9 AP General Settings

- > Click on the **Wireless** button, 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 802.11b+802.11g for the band and Auto for the channel.



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

4ipnet	Enterprise Ac	cess Point EAP100	♠ Home ৩ Logout ? Help
		\sim	
System	Wireless	Utilities	Status
VAP Overview General VAP Config	Security Repeater Advanced A	ccess Control Site Survey	
Home > Wireless > VAP Config			
F	VAP Conf Profile Name Canable VAP : O Disable O Enable VAP-1 ESSID : EAP100-1 VLAN ID : O Disable O Enable VLAN ID : O Disable O Enable	guration : VAP-1 He Dle *(1 - 4094)	
	SAVE	YCLEAR	
	©2008 All Righ	ts Reserved.	

Figure 10 VAP Configuration Screen

EAP100 supports up to 8 virtual APs (VAPs). By default, only 1 VAP is enabled.

- ► Configure VAP profile settings :
 - (a) Select the **VAP Config** tab to configure the settings for each VAP.
 - (b) An administrator can enable or disable specific VAP from the drop-down list box of *Profile Name*.
- Check VAP status :

After finishing the above settings, the status of enabled Virtual APs shall be reflected on the **Virtual AP Overview** page.



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

System		Wireless	Utilities		Status
ew \General \\	/AP Config \Secur	ity Repeater Advanced Acces	s Control 🔧 Site Surv	vey	
Wireless > Repe	ater Config				
		Repeater S	ettings		
		Repeater Type : WDS	1	-	
	Security	type : None 💌			
		MAC Address	Add		
	2010				
	Item	MAC Address	Enable	Delete	
	1	00:11:00:F0:90:21			
	2				
	2				

Figure 11 WDS Link Settings Page

To extend its wireless coverage, EAP100's Repeater capability is capable of creating WDS links for connecting to other WDS-capable APs (peer APs). EAP100 supports up to 4 WDS links. By default, all WDS profiles are disabled.

- Click on the Wireless button.
- > Select the **Repeater** tab.
- > Choose "WDS" as its *Repeater Type*:
 - a) Select preferred Security Type
 - b) Enter MAC Address of Remote AP (peer AP) and then Click Add
- To configure peer AP(s):

After completing the WDS settings at this EAP100 (functioning as a "primary WDS station"), you must also configure the settings of its peer AP(s).

If you use another EAP100 as the pear AP, simply repeat the above-mentioned steps <u>with the MAC Address</u> of the primary WDS station for setting WDS Link parameters of the peer AP(s).



Step 4 (Cont). Check WDS Link Status

4ipnet	Enterprise	e Aco	cess Point EAF	100		A Home 🔇	DLogout ?Help
	٠		~			E	\rangle
System	Wireless		Utilities			জন	06
Overview Clients Repeater Event Log							
Home > Status > Repeater Information							
	Repeat	er In	formation				
r 🌀 Repeater Statu	Repeat	er In	formation WDS Link S	tatus	;		
Status Enabled	Repeat	er In	formation WDS Link S MAC Address	tatus RSSI	TX Rate	TX Count	TX Error
Status Enabled	Repeate	er In	formation WDS Link S MAC Address 00:11:00:F0:90:21	tatus RSSI 0	TX Rate 54 M	TX Count 96	TX Error 96
Status Enabled Mode WDS	Repeate	er In	formation WDS Link S MAC Address 00:11:00:F0:90:21	tatus RSSI 0 N/A	TX Rate 54 M N/A	TX Count 96 N/A	TX Error 96 N/A
Status Enabled Mode WDS Encryption None	Repeate	er In	formation WDS Link S MAC Address 00:11:00:F0:90:21	RSSI 0 N/A N/A	TX Rate 54 M N/A N/A	TX Count 96 N/A N/A	TX Error 96 N/A N/A

Figure 12 WDS Link Status Page

- > Click on the **Status** button.
- Select the **Repeater** tab.
- Check the signal strength of WDS link(s) :

Upon the completion of Step 4, there shall be *RSSI* displayed on the **Repeater Information** page. If the RSSI is shown as N/A, check if the wiring is properly connected and please ensure the accurate execution of Step 4 procedure as described above.

Congratulation!

Now, 4ipnet EAP100 is installed and configured successfully.



After EAP100'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 the configuration settings.
For further configuration and backup information, please refer to the User's Manual.