

EKI-6331 & EKI-6332 AP & client mode configuration SOP

Revision Date	Revision	Description	Author
April/2018	V1.0	Initial release	ICG AE Jacky.Lin

Abstract

- ❖ **This SOP explains how to configure the EKI-6331 & EKI-6332 in AP & Client mode.**
- ❖ **Related products:**
EKI-6331, EKI-6332
- ❖ **Requirement: Two EKI-6331 or EKI-6332 devices**



Basic configuration

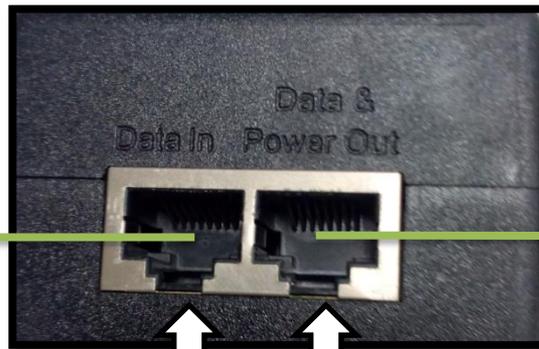
Basic Introduction

- Connect the Ethernet cable as following graph

NB



24V Passive POE Adaptor



EKI-6331/EKI-6332



Connect to LAN
for basic setting
NB IP: 192.168.1.X

Data
in

Power
out

Default setting
IP: 192.168.1.1
Password: password

EKI 6332GN/6331AN - Web GUI

- Log in the configuration page via browser
(Default IP address: 192.168.1.1)
 - You will see the login page as below
 - Type in & Log in

A screenshot of a web page titled "LOGIN". It features three input fields: "Name:" with the text "admin" entered, "Password:" which is empty, and "Language:" with a dropdown menu set to "English". Below the fields are two buttons: "Login" and "Reset". A red arrow points from the "Name" field to a red callout box on the right.

Default ID/ PW:
Name: **admin**
Password: **password**

Overview of Web GUI

ADVANTECH Industrial Wireless EKI-6331AN-BE

Logout



Sub-function

Information

Main Option

This page shows the current status and some basic settings of the device.

System Information

MAC Address:	00:19:70:c1:3d:e7
Firmware Version:	1.2.6.1(AD)4
System Uptime:	1m:55s
Device Name:	apc13de7
Country/Region:	United States

FW version

LAN Settings

IP Address:	192.168.1.1
Subnet Mask:	255.255.255.0
Gateway IP Address:	0.0.0.0

IP and Mask

Wireless Settings

Setting Process

ADVANTECH Industrial Wireless EKI-6331AN-BE

Logout

Status

1 System

2 Wireless

Management

Tools

System setting

Basic Setting

IP Address Setting

Time Settings

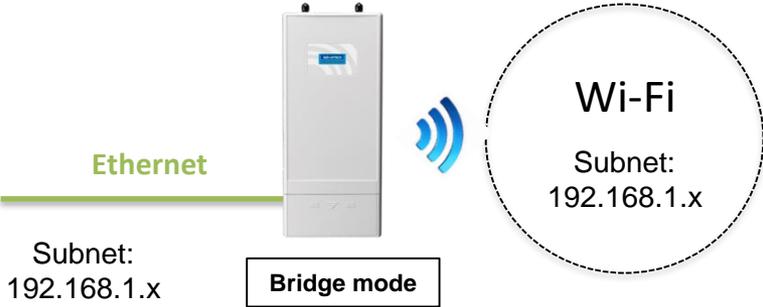
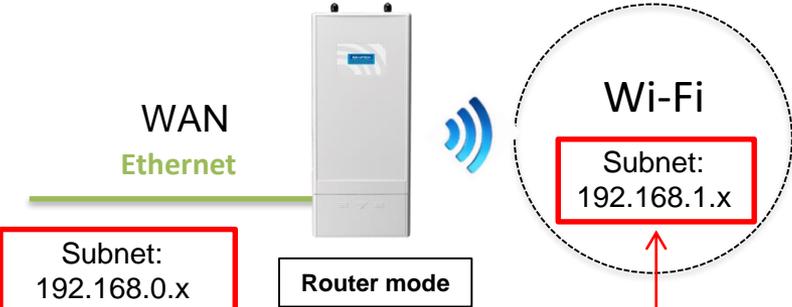
Wireless setting

Choose the operation mode

Channel Selection

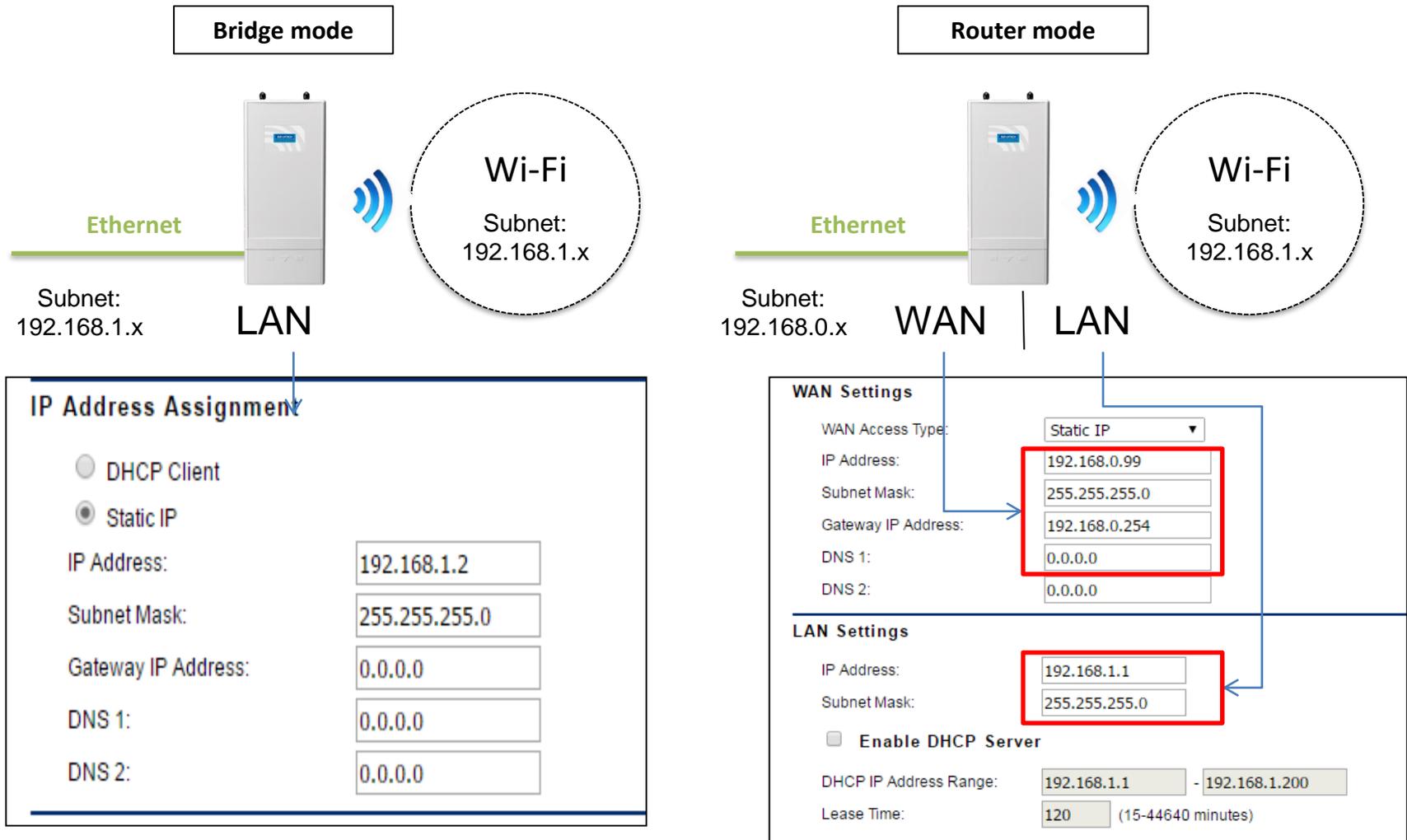
Antenna and Power Adjustment

System Setting - Basic Settings

Bridge mode	Router mode
<h3>Network Settings</h3> <p>This page configures the IP address, subnet mask, DHCP, and other parameters for network that is connected to the LAN port of the device.</p> <hr/> <h4>Basic Settings</h4> <p>Network Mode: Bridge</p> <p>Spanning Tree: <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled</p> <p>STP Forward Delay: <input type="text" value="1"/> (1~30 seconds)</p> <p><input type="checkbox"/> Enable 802.1Q VLAN</p> <p>Management VLAN ID: <input type="text" value="0"/> (0~4094)</p>	<h3>Network Settings</h3> <p>This page configures the IP address, subnet mask, DHCP, and other parameters for network that is connected to the LAN port of the device.</p> <hr/> <h4>Basic Settings</h4> <p>Network Mode: Router</p> <p>Spanning Tree: <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled</p> <p>STP Forward Delay: <input type="text" value="1"/> (1~30 seconds)</p> <hr/> <h4>WAN Settings</h4> <p>WAN Access Type: Static IP</p>
 <p>Bridge mode</p>	 <p>Router mode</p> <p>Different subnet</p>

Note : The Firewall will be activated automatically in router mode to protect the LAN. (No firewall in bridge mode)

System Setting - IP setting



Note : For EKI-633x, only router mode support DHCP server.

System Setting - Time Settings

Make sure you set the system time

- It may help you to identify the connecting status when checking the [syslog](#)

The screenshot shows the 'System' tab selected in the top navigation bar. On the left, a sidebar contains menu items: 'Basic Settings', 'Network Settings', 'Time Settings' (highlighted with a double asterisk), and 'RADIUS Settings'. The main content area is titled 'Time Settings' and includes the instruction: 'You can synchronize System Log's time stamp with a public time server over the Internet.' Below this, a red-bordered box highlights the time configuration fields: 'Current Time' (2015 Yr, 12 Mon, 9 Day, 20 Hr, 46 Min, 56 Sec) and 'Time Zone' (a dropdown menu showing '(GMT)Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London').

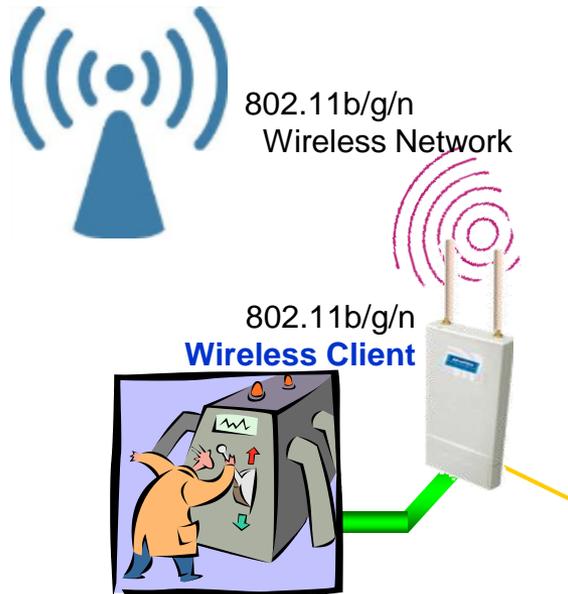
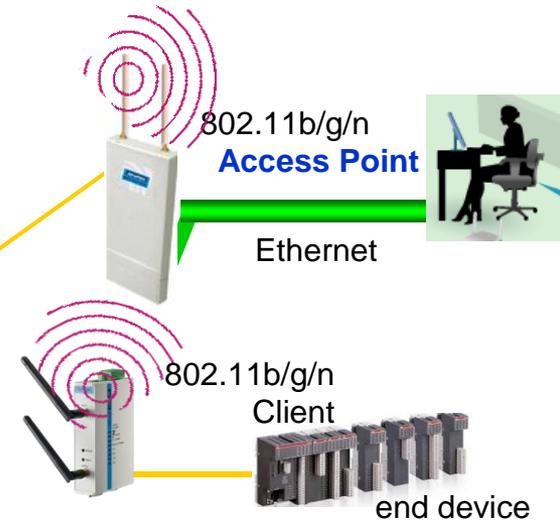
The screenshot shows the 'Tools' tab selected in the top navigation bar. On the left, a sidebar contains menu items: 'System Log' (highlighted with a red box and double asterisk), 'Ping Watchdog', and 'Ping Test'. The main content area displays a table of system logs with buttons for 'Apply', 'Cancel', 'Clear', and 'Crash Log' above it. The table has columns for '#', 'Time', 'Priority', 'Source', and 'Message'. A red-bordered box highlights the first two rows of the table, which show log entries from 2016-10-15.

#	Time	Priority	Source	Message
3	2016-10-15 01:47:52	notice	00:D0:C9:F7:89:29	Station authenticated.
4	2016-10-15 01:47:52	notice	00:D0:C9:F7:89:29	Station associated.
5	2016-10-15 02:59:32	notice	192.168.1.132	WEB: User "admin" logout.
6	2016-10-15 02:59:34	notice	192.168.1.132	WEB: Authorized user "admin".

Operation mode AP/client

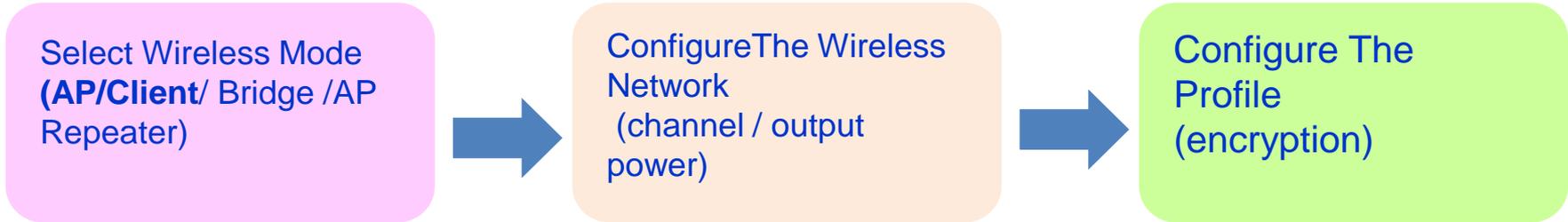
Flexible Operating Mode (1)

- **Scenario 1:** The end devices & wireless client have already deployed on the field. Need to provide the wireless coverage to connect these devices.
 - It is the default mode, **Access Point (AP)**.



- **Scenario 2:** A wireless network is in place already, but need to provide wireless connectivity on wired devices (End device support **Ethernet protocol**).
 - By setting as a **Wireless Client** mode, it is similar to attach a wireless network adapter on wired device.
 - Some people refer it as **CPE** (customer premise equipment) mode.

Wireless setting in Three Steps



Status | **System** | **Wireless** | **Management**

Basic Settings ✕

- Profile Settings
- Advanced Settings
- Traffic Shaping
- Access Control
- WDS Settings

Basic Settings

Use this page to change the wireless mode as well as configure any associated parameters.

Disable Wireless LAN Interface

Operation Mode: **AP** (dropdown menu open showing: AP Repeater, AP, Wireless Client, Bridge, AP Repeater)

SSID: _____

Broadcast SSID:

802.11 Mode: _____

Channel Mode: 20 MHz

Channel: 5745MHz (149)

Extension Channel: None

Data Rate: Auto

HT Protect: Enabled Disabled

Site Survey (more...)

Which mode I should use?

Wireless Network Settings - AP Mode (1/5)



AP_192.168.1.1

Client_192.168.1.2

AP_192.168.1.1

Status

System

Wireless

Management

Tools

Basic Settings

Profile Settings

Advanced Settings

Traffic Shaping

Access Control

WDS Settings

Basic Settings

Use this page to change the wireless mode as well as configure any associated wireless network parameters.

Disable Wireless LAN Interface

Operation Mode: AP

SSID: Wirelesstesting

Broadcast SSID: Enabled Disabled

802.11 Mode: 802.11A/N

Channel Mode: 20 MHz

Channel: 5745MHz (149)

Extension Channel: Auto

Data Rate: 5180MHz (36)

HT Protect: 5200MHz (40)

5220MHz (44)

5240MHz (48)

5260MHz (52)

5280MHz (56)

5300MHz (60)

5320MHz (64)

5500MHz (100)

5520MHz (104)

5540MHz (108)

5560MHz (112)

5580MHz (116)

5660MHz (132)

5680MHz (136)

5700MHz (140)

5745MHz (149)

led

el

0 dBi

23 dBm

1. Choose AP mode
2. Fill in the WLAN name(SSID) for this AP
e.g. **Wirelesstesting**

- Select the channel
- The channel is better to be non-overlapping with other server set
 - **Tips: InSSIDer**

Wireless Network Settings - AP Mode (2/5)

AP_192.168.1.1

Status

System

Wireless

Management

Tools

Basic Settings ✖

Profile Settings

Advanced Settings

Traffic Shaping

Access Control

WDS Settings

Basic Settings

Use this page to change the wireless mode as well as configure any associated wireless network parameters.

Disable Wireless LAN Interface

Operation Mode:

SSID: [\(more...\)](#)

Broadcast SSID: Enabled Disabled

802.11 Mode:

Channel Mode:

Channel:

Extension Channel:

Data Rate:

HT Protect: Enabled Disabled

Antenna Gain: dBi

Output Power: dBm

Adjust the value as same as your Antenna gain (default antennas 5dBi)

Adjust the output power

Apply

Cancel

Wireless Network Settings - AP Mode (3/5)

AP_192.168.1.1

Status

System

Wireless

Management

Tools

Basic Settings

Profile Settings ✖

Advanced Settings

Traffic Shaping

Access Control

WDS Settings

Profile Settings

Define each VAP's attribute.

#	Enabled	Profile Name	SSID	Security	VLAN ID
1	<input checked="" type="checkbox"/>	Profile1	Wirelesstesting	Open System	0
2	<input type="checkbox"/>	Profile2	Wireless	Open System	0
3	<input type="checkbox"/>	Profile3	Wireless	Open System	0
4	<input type="checkbox"/>	Profile4	Wireless	Open System	0
5	<input type="checkbox"/>	Profile5	Wireless	Open System	0
6	<input type="checkbox"/>	Profile6	Wireless	Open System	0
7	<input type="checkbox"/>	Profile7	Wireless	Open System	0
8	<input type="checkbox"/>	Profile8	Wireless	Open System	0

Click Profile1 to make a detailed configuration of service set **Wirelesstesting**

Apply

Reset

Wireless Network Settings - AP Mode (4/5)

- Configure the wireless security and set the passphrase

AP_192.168.1.1

VAP1 Profile Settings

Define the VAP's basic settings and security settings.

Basic Settings

Profile Name:

SSID:

Broadcast SSID: Enabled Disabled

Wireless Separation: Enabled Disabled

WMM Support: Enabled Disabled

IGMP Snooping: Enabled Disabled

Max. Station Num: (1-32)

Kick STA RSSI: (1~96)

Security Settings

Network Authentication:

Data Encryption:

WPA-PSK & WPA2-PSK

Most of the wireless client support WPA/WPA2. We'd suggest you to choose "WPA-PSK & WPA2-PSK"

VAP1 Profile Settings

Define the VAP's basic settings and security settings.

Basic Settings

Profile Name:

SSID:

Broadcast SSID: Enabled Disabled

Wireless Separation: Enabled Disabled

WMM Support: Enabled Disabled

IGMP Snooping: Enabled Disabled

Max. Station Num: (1-32)

Kick STA RSSI: (1~96)

Security Settings

Network Authentication:

Data Encryption:

WPA Passphrase:

Back Apply Cancel

Key the passphrase

Wireless Network Settings - AP Mode (5/5)

AP_192.168.1.1

Status

System

Wireless

Management

Tools

Password Settings

Firmware Upgrade

Configuration File

User Certificates

Remote Services

SNMP Settings

Configuration File

This page allows you to save current settings to a file or load the settings from the file which was saved previously. You may also reset the current configuration to factory default or reboot the device.

Save Settings to File:

Save...

Load Settings from File:

選擇檔案 未選擇任何檔案

Reset Settings to Default:

Reset

Reboot The Device:

Reboot

Reboot the device and wait for starting the WiFi service

Youtube 登入 Google 地圖 Facebook ICIBA Adv... ch AD employee AD mail Yahoo 奇摩 Agile Product Lifec...

This device has been reboot, you have to login again.
Please wait for 36 seconds before attempting to access the device again...

Wireless Network Settings Client Mode (1/3)

client_192.168.1.2

Status

System

Wireless

Management

Tools

Basic Settings ✖

Security Settings

Advanced Settings

Traffic Shaping

Access Control

WDS Settings

Basic Settings

Use this page to change the wireless mode as well as configure any associated wireless network parameters.

Disable Wireless LAN Interface

Operation Mode:

Wireless Client

SSID:

*

Locked AP MAC:

802.11 Mode:

802.11B/G/N

Data Rate:

Auto

Antenna Gain:

0 8

12 20

0 dBi

20 d

1. Choose **Wireless Client** mode

2. Chik "Apply" to enter the Client mode

Change settings successfully!

OK

Apply

Wireless Network Settings - Client Mode 2/3

client_192.168.1.2

Basic Settings ✖

Profile Settings

Advanced Settings

Traffic Shaping

Access Control

WDS Settings

Basic Settings

Use this page to change the wireless mode as well as configure any associated parameters.

Disable Wireless LAN Interface

Operation Mode:

Wireless Client

Site Survey

SSID:

Wirelesstesting

Locked AP MAC:

Select Site survey to choose the Source AP or type in SSID directly

Wireless Site Survey

This page provides a tool to scan the wireless network.

Selected	SSID	Channel	MAC Address	802.11 Mode	Signal Strength	Security
<input checked="" type="radio"/>	Wirelesstesting	5745MHz (149)	00:d0:c9:f7:89:28	802.11A/N	-32	
<input type="radio"/>	Advantecher	5745MHz (149)	00:1e:f7:eb:99:c6	802.11A	-34	
<input type="radio"/>	Cell Phone	5745MHz (149)	00:1e:f7:eb:99:c7	802.11A	-35	
<input type="radio"/>	Signage	5745MHz (149)	00:1e:f7:eb:99:c8	802.11A	-36	NONE
<input type="radio"/>	Advantech-Guest	5745MHz (149)	00:1e:f7:eb:99:cc	802.11A	-36	NONE
<input type="radio"/>		5745MHz (149)	00:1e:f7:eb:99:ca	802.11A	-36	WPA
<input type="radio"/>		5745MHz (149)	00:1e:f7:eb:99:c9	802.11A	-37	WPA
<input type="radio"/>	WiFi Phone	5745MHz (149)	00:1e:f7:eb:99:cd	802.11A	-37	NONE

Select Wirelesstesting Apply it and connect to it

Wireless Network Settings - Client Mode 3/3

- Set the Authentication type and Passphrase as same as the AP

client_192.168.1.2

VAP1 Profile Settings

Define the VAP's basic settings and security settings.

Basic Settings

Profile Name:

SSID:

Broadcast SSID: Enabled Disabled

Wireless Separation: Enabled Disabled

WMM Support: Enabled Disabled

IGMP Snooping: Enabled Disabled

Max. Station Num: (1-32)

Kick STA RSSI: (1~96)

Security Settings

Network Authentication:

Data Encryption:

WPA Passphrase:



VAP1 Profile Settings

Define the VAP's basic settings and security settings.

Basic Settings

Profile Name:

SSID:

Broadcast SSID: Enabled Disabled

Wireless Separation: Enabled Disabled

WMM Support: Enabled Disabled

IGMP Snooping: Enabled Disabled

Max. Station Num: (1-32)

Kick STA RSSI: (1~96)

Security Settings

Network Authentication:

Data Encryption:

WPA Passphrase:

Check the Connection status



Information

Connections ⇄

Statistics

ARP Table

Bridge Table

Association List

This table shows the MAC Address,802.11 Mode,Signal Strength and Connected Time for each associated device(s).

#	Interface	MAC Address	802.11 Mode	Signal Strength	Connected Time	Action
1	VAP1	00:d0:c9:f7:89:29	802.11A/N	-25 dBm	4m:16s	Kick



Information

Connections ⇄

Statistics

ARP Table

Bridge Table

Association List

This table shows the MAC Address,802.11 Mode,Signal Strength and Connected Time for each associated device(s).

MAC Address	802.11 Mode	Signal Strength	Connected Time
00:d0:c9:f7:89:28	802.11A/N	-26 dBm	6s

Note: The association list will show the connected device information once wireless connection established.

Check the Connection status

- You could use the ping tool to double check the wireless connection

The screenshot displays a network management interface with a top navigation bar containing 'Status', 'System', 'Wireless', 'Management', and 'Tools'. A left sidebar lists 'System Log', 'Ping Watchdog', and 'Ping Test'. The main content area is titled 'Ping Test' and includes the instruction 'Use this page to test the ping.' Below this is a 'Ping Address' input field and a 'Start' button. A red box highlights the 'Ping Test' menu item in the sidebar and the 'Ping Result' section. The 'Ping Result' section shows the following output:

```
PING 192.168.1.2 (192.168.1.2): 56 data bytes
64 bytes from 192.168.1.2: seq=0 ttl=128 time=0.898 ms
64 bytes from 192.168.1.2: seq=1 ttl=128 time=0.738 ms
64 bytes from 192.168.1.2: seq=2 ttl=128 time=0.627 ms
64 bytes from 192.168.1.2: seq=3 ttl=128 time=0.838 ms

--- 192.168.1.2 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.627/0.775/0.898 ms
```



Enabling an Intelligent Planet

Enabling an Intelligent Planet

ADVANTECH