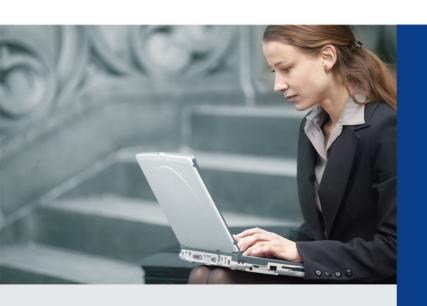


User's Manual

300Mbps 802.11a/n Wireless Outdoor CPE

► WNAP-7325





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Federal Communication Commission Interference Statement

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/her own expense. Any changes or modifications not expressly approved by PLANET could void the user's authority to operate this equipment under the rules and regulations of the FCC.

FCC Caution:

To assure continued compliance, (for example, use only shielded interface cables when connecting to computer or peripheral devices) any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Federal Communication Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.



This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Energy Saving Note of the Device

This power required device does not support Standby mode operation. For energy saving, please remove the DC-plug to disconnect the device from the power circuit. Without removing the DC-plug, the device still consumes power from the power circuit. In view of Saving the Energy, it is strongly suggested to remove the DC-plug for the device if this device is not intended to be active.

R&TTE Compliance Statement

This equipment complies with all the requirements of DIRECTIVE 1999/5/CE OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 9 March 1999 on radio equipment and telecommunication terminal Equipment and the mutual recognition of their conformity (R&TTE). The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) as of April 8, 2000.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

WEEE regulation



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and thus, WEEE has to be collected separately.

Revision

User's Manual of PLANET 802.11a/n Wireless Outdoor CPE

Model: WNAP-7325

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CONTENTS

Cha	napter 1.Product Introduction8				
	1.1	Packa	ge Contents	8	
	1.2	Produ	ct Description	9	
	1.3	Produc	ct Features	.10	
	1.4	Produc	ct Specifications	. 11	
Cha	pter 2	.Hardw	are Installation	.14	
	2.1	Hardw	are Description	.14	
		2.1.1	The Bottom Panel – Port	. 15	
Cha	pter 3	.Conne	cting to the AP	.18	
	3.1	Prepar	ration before Installation	.18	
		3.1.1	Professional Installation Required		
		3.1.2	Safety Precautions		
	3.2	Installa	ation Precautions	.18	
	3.3		ing the AP		
	3.4		ard Pole Mounting		
Cha	-		Installation Guide		
0 11u	4.1		Il Network Setup - TCP/IP Configuration		
	7.1	4.1.1	Configuring the IP Address Manually		
	4.2		g Setup in the Web UI		
Cha			uring the AP		
Ciia	5.1	•	tion Mode		
	5.1	•			
		5.1.1	Access Point		
		5.1.2 5.1.3	WDS AP		
		5.1.4	WDS Client		
		5.1.5	AP Router		
		5.1.6	Wireless ISP		
		5.1.7	Security Setting		
		5.1.8	Advanced Settings		
		5.1.9	Access Control		
		5.1.10	WAN Port Settings	.44	
		5.1.11	Dynamic DNS Settings	.46	
		5.1.12	Remote Management	.51	
		5.1.13	DHCP Server Settings	.52	
		5.1.14	DMZ Settings	. 52	
		5.1.15	Virtual Server Settings	.53	
		5.1.16	IP Filtering Settings	.54	
		5.1.17	Port Filtering Settings	.54	

		5.1.18	MAC Filtering Settings	55
		5.1.19	Bandwidth Control	55
		5.1.20	SNMP	56
	5.2	Syster	n Configuration	58
		5.2.1	Default IP Settings	58
		5.2.2	Time Settings	59
		5.2.3	Password Settings	60
		5.2.4	System Management	60
		5.2.5	Ping Watchdog	61
		5.2.6	Firmware Upgrade	62
		5.2.7	Configuration Save and Restore	63
		5.2.8	Factory Default	63
		5.2.9	Reboot System	64
		5.2.10	Schedule Reboot	64
	5.3	Tools.		66
		5.3.1	Network Ping	66
		5.3.2	Network Traceroute	66
	5.4	Device	Status	68
		5.4.1	Device Information	68
		5.4.2	Wireless Information	70
		5.4.3	LAN Information	70
		5.4.4	Wireless Client Table	71
		5.4.5	System Log	73
	5.5	Logou	t	74
A	Appendix	A: Trou	ubleshooting	75
			Planet Smart Discovery to find AP	
			<u>,</u>)	
,	Q1: How to set up the AP Client Connection78			
			set up the WDS Connectionset up the WDS Connection	
	QZ: I	now to	set up the WDS Connection	86

FIGURES

FIGURE 2-1 THREE-WAY VIEW	14
FIGURE 2-2 LED.	
FIGURE 2-3 BOTTOM PANEL	16
FIGURE 2-4 POE INJECTOR	16
FIGURE 3-1 CONNECT THE ANTENNA	20
FIGURE 3-2 CONNECT THE ETHERNET CABLE	20
FIGURE 3-3 CONNECT THE POE INJECTOR	21
FIGURE 3-4 POLE MOUNTING	21
FIGURE 4-1 TCP/IP SETTING	23
FIGURE 4-2 WINDOWS START MENU	24
FIGURE 4-3 SUCCESSFUL RESULT OF PING COMMAND	24
FIGURE 4-4 FAILED RESULT OF PING COMMAND	25
FIGURE 4-5 LOGIN BY DEFAULT IP ADDRESS	25
FIGURE 4-6 LOGIN WINDOW	26
FIGURE 4-7 WNAP-7325 WEB UI SCREENSHOT	27
FIGURE 4-8 CHOOSE OPERATION MODE	27
FIGURE 4-9 CONFIGURE WIRELESS SETTINGS	27
FIGURE 5-1 MAIN MENU	28
FIGURE 5-2 OPERATION MODES	28
FIGURE 5-3 BASIC SETTINGS - AP	29
FIGURE 5-4 BASIC SETTINGS - CLIENT	30
FIGURE 5-5 BASIC SETTINGS – WDS AP	32
FIGURE 5-6 BASIC SETTINGS – WDS CLIENT	33
FIGURE 5-7 BASIC SETTINGS – AP ROUTER	34
FIGURE 5-8 BASIC SETTINGS – WISP	35
FIGURE 5-9 SECURITY SETTINGS	36
FIGURE 5-10 SECURITY SETTINGS – WEP	37
FIGURE 5-11 SECURITY SETTINGS – WPA PERSONAL	37
FIGURE 5-12 SECURITY SETTINGS – WPA ENTERPRISE	38
FIGURE 5-13 SECURITY SETTINGS – WPA2 PERSONAL	39
FIGURE 5-14 SECURITY SETTINGS – WPA2 ENTERPRISE	39
FIGURE 5-15 SECURITY SETTINGS – WPA-MIXED PERSONAL	40
FIGURE 5-16 SECURITY SETTINGS – WPA-MIXED ENTERPRISE	40
FIGURE 5-17 ADVANCED SETTINGS	41
FIGURE 5-18 WMM CONFIGURATION	42
FIGURE 5-19 ACCESS CONTROL	44
FIGURE 5-20 WAN PORT SETTINGS – DHCP	45
FIGURE 5-21 WAN PORT SETTINGS – STATIC IP	45
FIGURE 5-22 WAN PORT SETTINGS – PPPOE	46
FIGURE 5-23 DYNAMIC DNS SETTINGS	47
FIGURE 5-24 REMOTE MANAGEMENT	51
FIGURE 5-25 DHCP SERVER SETTINGS	52
FIGURE 5-26 DMZ SETTINGS	53

FIGURE 5-27 VIRTUAL SERVER SETTINGS.	53
FIGURE 5-28 IP FILTERING SETTINGS	54
FIGURE 5-29 PORT FILTERING SETTINGS	54
FIGURE 5-30 MAC FILTERING SETTINGS	55
FIGURE 5-31 BANDWIDTH CONTROL SETTINGS	56
FIGURE 5-32 SNMP SETTINGS	57
FIGURE 5-33 SYSTEM CONFIGURATION DEFAULT PAGE	58
FIGURE 5-34 DEFAULT IP SETTINGS	58
FIGURE 5-35 TIME SETTINGS	59
FIGURE 5-36 PASSWORD SETTINGS	60
FIGURE 5-37 SYSTEM MANAGEMENT	61
FIGURE 5-38 PING WATCHDOG	62
FIGURE 5-39 FIRMWARE UPGRADE	62
FIGURE 5-40 CONFIGURATION SAVE AND RESTORE	63
FIGURE 5-41 FACTORY DEFAULT	63
FIGURE 5-42 REBOOT SYSTEM	64
FIGURE 5-43 SCHEDULE REBOOT	64
FIGURE 5-44 SCHEDULE REBOOT - EXAMPLE	65
FIGURE 5-45 NETWORK PING	66
FIGURE 5-46 NETWORK TRACEROUTE	67
FIGURE 5-47 DEVICE STATUS	68
FIGURE 5-48 DEVICE INFORMATION	69
FIGURE 5-49 WIRELESS INFORMATION	70
FIGURE 5-50 LAN INFORMATION	71
FIGURE 5-51 WIRELESS CLIENT TABLE	72
FIGURE 5-52 SYSTEM LOG	73
FIGURE 5-53 LOGOUT	74
FIGURE 5-54 RE-LOGIN	74

Chapter 1. Product Introduction

1.1 Package Contents

Thank you for choosing PLANET WNAP-7325. Before installing the AP, please verify the contents inside the package box.





If there is any item missing or damaged, please contact the seller immediately.

1.2 Product Description



PLANET WNAP-7325 Wireless Outdoor Access Point provides a higher transmission speed, higher power and better performance designed for outdoor wireless application.

Faster Speed and longer Distance

Adopting the IEEE 802.11n advanced 2T2R MIMO technology, the WNAP-7325 provides high speed, reliable wireless network coverage, and incredible improvement in the wireless performance. As an IEEE 802.11a/n compliant wireless device, the WNAP-7325 is able to give stable and efficient wireless performance for long distance application. Thus, it delivers a data rate of up to 300Mbps three times faster than the normal 802.11a wireless device. With its adjustable output power up to 500mW, it can extend the coverage of an outdoor area.

Multiple Operation and Wireless Modes

The WNAP-7325 supports multiple wireless communication connectivities (AP, Client CPE, WDS PtP, WDS PtMP and WISP), meeting user's application requirements. It also helps user to easily extend the existing wireless network.

Advanced Wireless Security

In aspect of security, besides 64/128- bit WEP encryption, the WNAP-7325 is integrated with WPA / WPA2, WPA-PSK / WPA2-PSK and 802.1x authority to secure and protect your wireless LAN. The wireless MAC filtering and SSID broadcast help to consolidate the wireless network security and prevent unauthorized wireless connection.

Perfect Solution for Outdoor Environment

The WNAP-7325 is perfectly suitable to be installed in outdoor environments. With its IP55 casing protection, the WNAP-7325 can perform normally under rigorous weather conditions including heavy rain and wind. With the passive Power over Ethernet (PoE) design, the WNAP-7325 can be easily installed in the areas where power outlets are not available. Thus, the WNAP-7325 is ideal for outdoor wireless access applications between buildings on campuses, and in business and rural areas.

Easy Installation and Management

With user-friendly Web UI and step by step Setup Wizard, user can set up a wireless network without any difficulty.

1.3 Product Features

Industrial Compliant Wireless LAN & LAN

- Compliant with the IEEE 802.11n wireless technology (with data rate of up to 300Mbps)
- Backward compatible with 802.11a standard
- Equipped with 10/100Mbps RJ45 ports for LAN & WAN; auto MDI/ MDI-X supported

Fixed-network Broadband Router

- Supported connection types: Dynamic IP, Static IP, PPPoE
- Supports Virtual Server, DMZ for various networking applications
- Supports DHCP Server, UPnP, Dynamic DNS

RF Interface Characteristics

- Built-in 14dBi Dual-Polarization Antenna
- High Output Power Up to 500mW with multiple adjustable transmit power control

Outdoor Environmental Characteristics

- IP55 enclosure
- Passive Power over Ethernet design
- Operating temperature: -20~70°C

Multiple Operation and Wireless Modes

- Multiple operation modes: Bridge, WISP
- Multiple wireless modes: AP, Client CPE(WISP), WDS PtP, WDS PtMP
- Supports multiple SSIDs to allow users to access different networks through a single AP
- Supports WMM (Wi-Fi multimedia)

Secure Network Connection

- Supports software Wi-Fi Protected Setup (WPS)
- Advanced security: 64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK(TKIP/AES) and 802.1x authentication
- Supports IP / Protocol-based access control and MAC filtering

Easy Installation and Management

- Web-based UI and quick Setup Wizard for easy configuration
- SNMP-based management interface
- System status monitoring includes DHCP Client, System Log

1.4 Product Specifications

Product	WNAP-7325			
1104401	300Mbps 802.11a/n Wireless Outdoor CPE			
Hardware				
Standard Support	IEEE802.11a/n IEEE 802.3 IEEE 802.3u IEEE 802.3x			
Chipset	Atheros AR9344			
Memory	64 Mbytes DDR SDRAM 16 Mbytes Flash			
PoE	Passive PoE			
Interface	Wireless IEEE802.11a/n, 2T2R PoE LAN (LAN 1): 1 x 10/100BASE-TX, auto-MDI/MDIX, passive PoE LAN 2: 1 x 10/100BASE-TX, auto-MDI/MDIX, passive PoE out pass-through			
Antenna	Built-in 14dBi Dual-Polarization Antenna - Horizontal: 30 degrees - Vertical: 20 degrees			
Data Rate	IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps IEEE 802.11n (20MHz): up to 150Mbps IEEE 802.11n (40MHz): up to 300Mbp			
Media Access Control	CSMA/CA			
Modulation	Transmission/Emission type: OFDM Data modulation type: OFDM with BPSK, QPSK, 16-QAM, 64-QAM			
Frequency Band	5.180GHz ~ 5.825GHz			
	5.180GHz	CH36	5.580GHz	CH116
	5.200GHz	CH40	5.600GHz	CH120
	5.220GHz	CH44	5.620GHz	CH124
	5.240GHz	CH48	5.640GHz	CH128
	5.260GHz	CH52	5.660GHz	CH132
	5.280GHz	CH56	5.680GHz	CH136
Operating Channel	5.300GHz	CH60	5.700GHz	CH140
	5.320GHz	CH64	5.745GHz	CH149
	5.500GHz	CH100	5.765GHz	CH153
	5.520GHz	CH104	5.785GHz	CH157
	5.540GHz	CH108	5.805GHz	CH161
	5.560GHz	CH112	5.825GHz	CH165
		•	•	al application will vary
	pased on the regu	liation in different re	egions and countries	

RF Output Power (dBm)	802.11a: up to 26 ± 1			
	802.11n: up to 25 ± 1			
Receiver Sensitivity	802.11a: -94dBm			
(dBm)	802.11n: -93dBm			
Output Power Control	12~27dBm			
Power Consumption	12W			
	LAN	24VDC, 1A/ Passive PoE		
Power Requirements		Pin 4,5 VDC+		
1 owor requirements		Pin 7,8 VDC-		
		Pin 3 Reset		
Environment & Certificati	on			
Operating Temperature	-20~70°c			
Operating Humidity	10~95% non-cond	lensing		
IP Level	IP55			
Regulatory	CE, FCC, RoHS			
Software				
LAN	Built-in DHCP server supporting static IP address distribution			
LAN	Support 802.1d STP (Spanning Tree)			
	■ Static IP			
WAN	■ Dynamic IP			
	■ PPPoE			
Operation Modes	■ Bridge			
•	■ WISP			
Etassa II		SPI (Stateful Packet Inspection)		
Firewall		r supporting Virtual Server, and DMZ		
		h Port/ IP address/ MAC/ URL filtering		
	■ AP			
Wireless Modes	■ Client■ WDS PTP			
Wileless Modes	■ WDS PTP ■ WDS PTMP			
	■ WISP			
Channel Width	20MHz / 40MHz			
	Enable it to isolate each connected wireless client so that they cannot access			
Wireless Isolation	mutually.			
Encryption Type	64/128-bit WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, 802.1X			
	Provides wireless LAN ACL (Access Control List) filtering			
Wireless Security	Wireless MAC address filtering			
	Enable/Disable SSID Broadcast			
Max. Wireless Clients	25			
Max. WDS Peers	8			
Max. Wired Clients	60			

WMM	Supports Wi-Fi multimedia
QoS	Supports Quality of Service for bandwidth control
NTP	Network Time Management
Self Healing	Supports Schedule Reboot
Management	Web UI, DHCP Client, Configuration Backup & Restore, Dynamic DNS, SNMP
Diagnostic Tool	System Log, Ping Watchdog

Chapter 2. Hardware Installation

Please follow the instructions below to connect the WNAP-7325 to the existing network devices and your computers.

2.1 Hardware Description

■ **Dimensions**: 127 x 63 x 254 mm (W x D x H)

Appearance



Figure 2-1 Three-way View

Rear Panel - LED

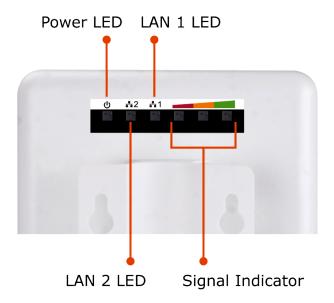


Figure 2-2 LED

LED Definition

LED	State	Meaning	
Power	On	System On	
rowei	Off	System Off	
Signal Indicator	On	Indicates the wireless signal strength of remote AP	
(Client Mode)	Off	No remote wireless signal	
LAN 1	On	Port linked.	
LAN	Off	No link.	
LAN 2	On	Port linked.	
LAN Z	Off	No link.	

Table 2-1 The LED indication

2.1.1 The Bottom Panel – Port

The Bottom panel provides the physical connectors connected to the power adapter and any other network device. Figure 2-3 shows the bottom panel of the WNAP-7325.

Bottom Panel



Figure 2-3 Bottom Panel

PoE Injector



Figure 2-4 PoE Injector

H/W Interface Definition

Object	Description		
	10/100Mbps RJ45 port , auto MDI/ MDI-X and passive PoE supported		
	Connect LAN port to the PoE injector to power on the device.		
PoE LAN (Passive PoE)	Pin assignment: Pin 4, 5 (+) Pin 7, 8 (-) Pin 3 (Reset)		
	10/100Mbps RJ45 port , auto MDI/ MDI-X Connect this port to the network equipment.		
LAN 2	When the option "Enable POE Pass Through" on the System Management page is checked, the LAN2 can supply passive PoE power to the second WNAP-7325 or WNAP-6325 through LAN 2.		

	Press the Reset button on the device or on the PoE injector over 5 seconds to return to factory default setting.
Reset	※ If you have connected with the ELA-100, please DO NOT press the
	reset button on the PoE injector to prevent the ELA-100 from being
	damaged.

Table 2-2 The PoE Injector Indication

Chapter 3. Connecting to the AP

3.1 Preparation before Installation

3.1.1 Professional Installation Required

Please seek assistance from a professional installer who is well trained in the RF installation and knowledgeable in the local regulations.

3.1.2 Safety Precautions

- 1. To keep you safe and install the hardware properly, please read and follow these safety precautions.
- 2. If you are installing the WNAP-7325 for the first time, for your safety as well as others', please seek assistance from a professional installer who has received safety training on the hazards involved.
- 3. Keep safety as well as performance in mind when selecting your installation site, especially where there are electric power and phone lines.
- 4. When installing the WNAP-7325, please note the following things:
 - Do not use a metal ladder;
 - Do not work on a wet or windy day;
 - Wear shoes with rubber soles and heels, rubber gloves, long sleeved shirt or jacket.
- 5. When the system is operational, avoid standing directly in front of it. Strong RF fields are present when the transmitter is on.

3.2 Installation Precautions

- Users MUST use a proper and well-installed surge arrestor and grounding kit with the WNAP-7325;
 otherwise, a random lightning could easily cause fatal damage to the WNAP-7325. EMD (Lightning)
 DAMAGE IS NOT COVERED UNDER WARRANTY.
- Users MUST use the "Power cord and PoE Injector" shipped in the box with the WNAP-7325. Use of other options will cause damage to the WNAP-7325.



OUTDOOR INSTALLATION WARNING

IMPORTANT SAFETY PRECAUTIONS:

LIVES MAY BE AT RISK! Carefully observe these instructions and any special instructions that are included with the equipment you are installing.

CONTACTING POWER LINES CAN BE LETHAL. Make sure no power lines are anywhere where possible contact can be made. Antennas, masts, towers, guy wires or cables may lean or fall and contact these lines. People may be injured or killed if they are touching or holding any part of equipment when it contacts electric lines. Make sure that equipment or personnel do not come in contact directly or indirectly with power lines.

contact power if it falls either during installation or later.



The horizontal distance from a tower, mast or antenna to the nearest power line should be at least twice the total length of the mast/antenna combination. This will ensure that the mast will not

TO AVOID FALLING, USE SAFE PROCEDURES WHEN WORKING AT HEIGHTS ABOVE GROUND.

- Select equipment locations that will allow safe, simple equipment installation.
- Don't work alone. A friend or co-worker can save your life if an accident happens.
- Use approved non-conducting lasers and other safety equipment. Make sure all equipment is in good repair.
- If a tower or mast begins falling, don't attempt to catch it. Stand back and let it fall.
- If anything such as a wire or mast does come in contact with a power line, DON'T TOUCH IT OR ATTEMPT TO
 MOVE IT. Instead, save your life by calling the power company.
- Don't attempt to erect antennas or towers on windy days.

MAKE SURE ALL TOWERS AND MASTS ARE SECURELY GROUNDED, AND ELECTRICAL CABLES CONNECTED TO ANTENNAS HAVE LIGHTNING ARRESTORS. This will help prevent fire damage or human injury in case of lightning, static build-up, or short circuit within equipment connected to the antenna.

- The base of the antenna mast or tower must be connected directly to the building protective ground or to one or more approved grounding rods, using 1 OAWG ground wire and corrosion-resistant connectors.
- Refer to the National Electrical Code for grounding details.

IF A PERSON COMES IN CONTACT WITH ELECTRICAL POWER. AND CANNOT MOVE:

- DON'T TOUCH THAT PERSON, OR YOU MAY BE ELECTROCUTED.
- Use a non-conductive dry board, stick or rope to push or drag them so they no longer are in contact with electrical power.

Once they are no longer contacting electrical power, administer CPR if you are certified, and make sure that emergency medical aid has been requested.

3.3 Installing the AP

Please install the AP according to the following steps. Don't forget to pull out the power plug and keep your hands dry.

Step 1. Push the latch in the bottom of the WNAP-7325 to remove the sliding cover.



Figure 3-1 Connect the Antenna

Step 2. Plug the RJ45 Ethernet cable into the PoE LAN Port of the WNAP-7325.

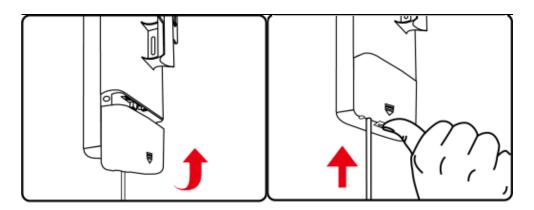


Figure 3-2 Connect the Ethernet cable

Step 3. Plug the power cord into the DC port and the other end into the AC socket. Then, plug the RJ45 cable (as shown in picture 4 under Step 1) into the POE port of the PoE injector.

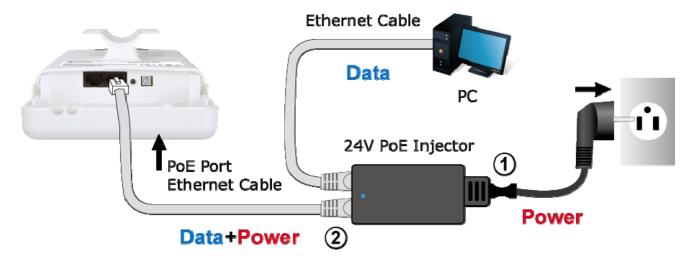


Figure 3-3 Connect the PoE injector

3.4 Standard Pole Mounting

Place the strap through the slots on the back of the WNAP-7325 and then around the pole. Tighten the strap to secure the WNAP-7325.



Figure 3-4 Pole Mounting

Chapter 4. Quick Installation Guide

This chapter will show you how to configure the basic functions of your AP within minutes.



A computer with wired Ethernet connection to the Wireless AP is required for the first-time configuration.

4.1 Manual Network Setup - TCP/IP Configuration

The default IP address of the WNAP-7325 is **192.168.1.253**. And the default Subnet Mask is 255.255.255.0. These values can be changed as you desire. In this guide, we use all the default values for description.

Connect the WNAP-7325 with your PC via an Ethernet cable which is then plugged into a LAN port of the PoE injector with one end and into a LAN port of the PC with the other end. Then power on the WNAP-7325 via PoE injector or PoE switch.

In the following sections, we'll introduce how to install and configure the TCP/IP correctly in **Windows 7**. And the procedures in other operating systems are similar. First, make sure your Ethernet adapter is working, and refer to the Ethernet adapter's manual if needed.

4.1.1 Configuring the IP Address Manually

Summary:

- Set up the TCP/IP Protocol for your PC.
- Configure the network parameters. The IP address is 192.168.1.xxx ("xxx" is any number from 2 to 252), Subnet Mask is 255.255.255.0, and Gateway is 192.168.1.253 (The AP's default IP address)
- 1 Select **Use the following IP address** radio button.
- 2 If the AP's LAN IP address is 192.168.1.1, enter IP address 192.168.1.x (x is from 2 to 254), and Subnet mask 255.255.255.0.
- 3 Select **Use the following DNS server addresses** radio button. In the **Preferred DNS Server** field, you can enter the DNS server IP address which has been provided by your ISP

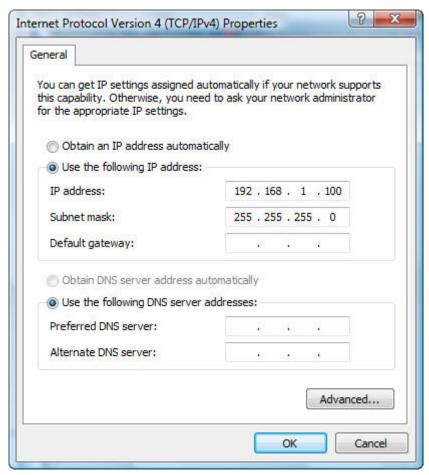


Figure 4-1 TCP/IP Setting

Now click **OK** to save your settings.

Now, you can run the ping command in the **command prompt** to verify the network connection between your PC and the AP. The following example is in **Windows 7** OS. Please follow the steps below:

- 1. Click on **Start > Run**.
- 2. Type "cmd" in the Search box.

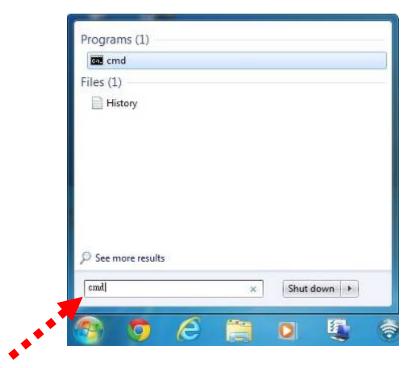


Figure 4-2 Windows Start Menu

3. Open a command prompt and type *ping 192.168.1.253*, and then press Enter.

If the result displayed is similar to **Figure 4-3**, it means the connection between your PC and the AP has been established well.

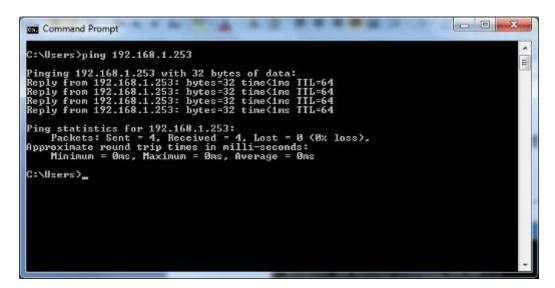


Figure 4-3 Successful result of Ping command

If the result displayed is similar to **Figure 4-4**, it means the connection between your PC and the AP has failed.

```
C:\Users\ping 192.168.1.253

Pinging 192.168.1.253 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.1.253:
Packets: Sent = 4, Received = 8, Lost = 4 (100% loss),

C:\Users\_
```

Figure 4-4 Failed result of Ping command

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your AP. Some firewall software programs may block a DHCP request on newly installed adapters.

4.2 Starting Setup in the Web UI

It is easy to configure and manage the WNAP-7325 with the web browser.

Step 1. To access the configuration page, open a web browser and enter the default IP address http://192.168.1.253 in the web address field of the browser.

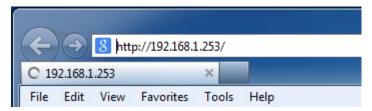


Figure 4-5 Login by default IP address

After a moment, a login window will appear. Enter **admin** for the User Name and Password, both in lower case letters. Then click the **OK** button or press the **Enter** key.



Figure 4-6 Login Window

Default IP Address: 192.168.1.253

Default User Name: admin
Default Password: admin



If the above screen does not pop up, it may mean that your web browser has been set to a proxy. Go to **Tools menu>Internet Options>Connections>LAN Settings** in the screen that appears, cancel the Using Proxy checkbox, and click OK to finish it.

After entering the username and password, the Operation Mode page screen appears as in Figure 4-8



Figure 4-7 WNAP-7325 Web UI Screenshot

Step 2. You can choose an Operation Mode. Please refer to the instructions in the next chapter for configuring the other Operation Modes.



Figure 4-8 Choose Operation Mode

Step 3. Please enter the SSID and configure your Encryption Settings, Pre-Shared Key, etc. Then click the **Save** button to make the configuration take effect immediately.

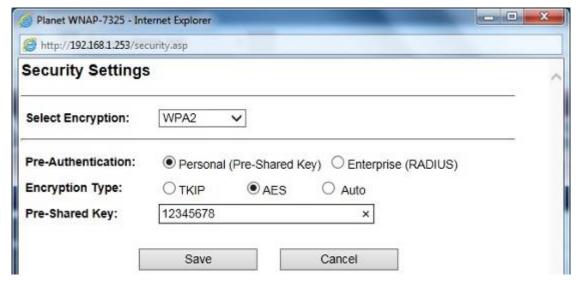


Figure 4-9 Configure Wireless Settings

Chapter 5. Configuring the AP

This chapter delivers a detailed presentation of AP's functionalities and features under 4 main menus (**Operation Mode**, **System Configuration**, **Tools** and **Device Status**) below, allowing you to manage the AP with ease.



Figure 5-1 Main Menu

5.1 Operation Mode

On this page, you can select different operation modes of the WNAP-7325, including Access Point, Client, WDS AP, WDS Client, AP Router and Wireless ISP.



Figure 5-2 Operation Modes

5.1.1 Access Point

Click "Operation Mode" → "Access Point" and the following page will be displayed. This section allows you to configure the Access Point mode.

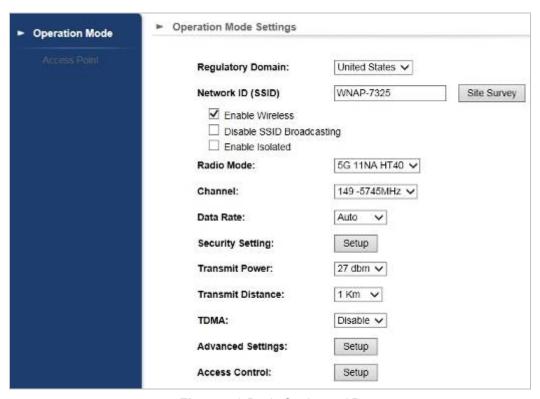


Figure 5-3 Basic Settings - AP

Object	Description			
Regulatory Domain	Select your domain from the list.			
Network SSID	It is the wireless network name. The default SSID is WNAP-7325.			
Site Survey	Click "Site Survey" to check the signal of remote sites.			
Enable Wireless	Check it to enable Wireless function.			
Disable SSID Broadcasting	Check it to disable SSID broadcasting.			
Enable Isolated	Check it to isolate each connected wireless client so that they cannot access each other.			
Radio Mode	Select the channel width to "Auto Select", "5G 11NA HT20" or "5G 11NA HT40"			
• Channel	Select the operating channel you would like to use. The channel range will be changed by selecting a different domain.			
Data Rate	Select MCS0~15 or Auto from the pull-down menu. The default is "Auto".			
Security Setting	Press "Setup" for more configurations. Please refer to 5.1.7 Security Setting for more information.			
Transmit Power	The range of transmit power is "12~27 dbm". In case of shortening the distance and the coverage of the wireless network, input a smaller value to reduce the radio transmission			

	power.	
Transmit Distance	Select a specified distance of the two nodes.	
• TDMA	Displays the System Time.	
Advanced Cettings	Press "Setup" for more configurations. Please refer to 5.1.8	
Advanced Settings	Advanced Settings for more information.	
Access Control	Press "Setup" for more configurations. Please refer to 5.1.9	
Access Control	Access Control for more information.	

5.1.2 Client

Click "Operation Mode" \rightarrow "Client" and the following page will be displayed. This section allows you to configure the Client mode.

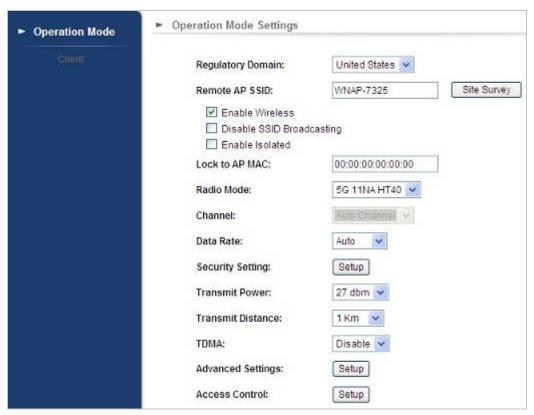


Figure 5-4 Basic Settings - Client

Object	Description
Regulatory Domain	Select your domain from the list.
Network SSID	It is the wireless network name. The default SSID is WNAP-7325.
Site Survey	Click "Site Survey" to find the remote sites to associate.
Enable Wireless	Check it to enable Wireless function.

Disable SSID Broadcasting	Check it to disable SSID broadcasting.
Enable Isolated	Check it to isolate each connected wireless clients so that they cannot access each other.
Lock to AP MAC	Enter the Mac address of the remote AP.
Radio Mode	Select the channel width to "Auto Select", "5G 11NA HT20" or "5G 11NA HT40"
Data Rate	Select MCS0~15 or Auto from the pull-down menu. The default is "Auto".
Security Setting	Press "Setup" for more configurations. Please refer to 5.1.7 Security Setting for more information.
Transmit Power	The range of transmit power is "12~27 dbm". In case of shortening the distance and the coverage of the wireless network, input a smaller value to reduce the radio transmission power.
Transmit Distance	Select a specified distance of the two nodes.
• TDMA	Displays the System Time.
Advanced Settings	Press " Setup " for more configurations. Please refer to 5.1.8 Advanced Settings for more information.
Access Control	Press " Setup " for more configurations. Please refer to 5.1.9 Access Control for more information.

5.1.3 WDS AP

Click "Operation Mode" \rightarrow "WDS AP" and the following page will be displayed. This section allows you to configure the WDS AP mode. For each wireless parameter, please refer to section 5.1.1 AP for more information.

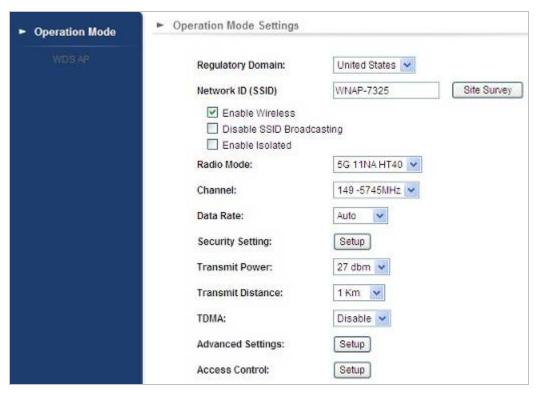


Figure 5-5 Basic Settings – WDS AP

5.1.4 WDS Client

Click "Operation Mode" \rightarrow "WDS Client" and the following page will be displayed. This section allows you to configure the WDS Client mode. For each wireless parameter, please refer to section 5.1.2 Client for more information.

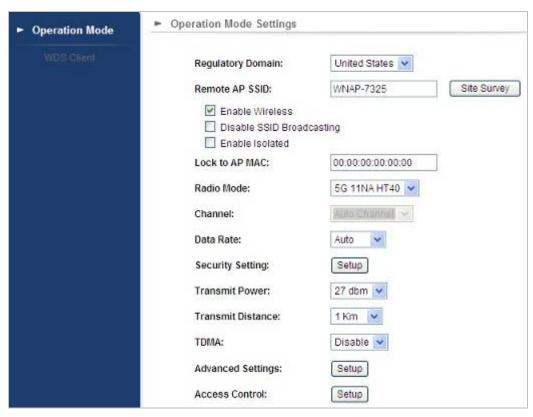


Figure 5-6 Basic Settings – WDS Client

5.1.5 AP Router

Click "Operation Mode" → "AP Router" and the following page will be displayed. This section allows you to configure the AP Router mode.

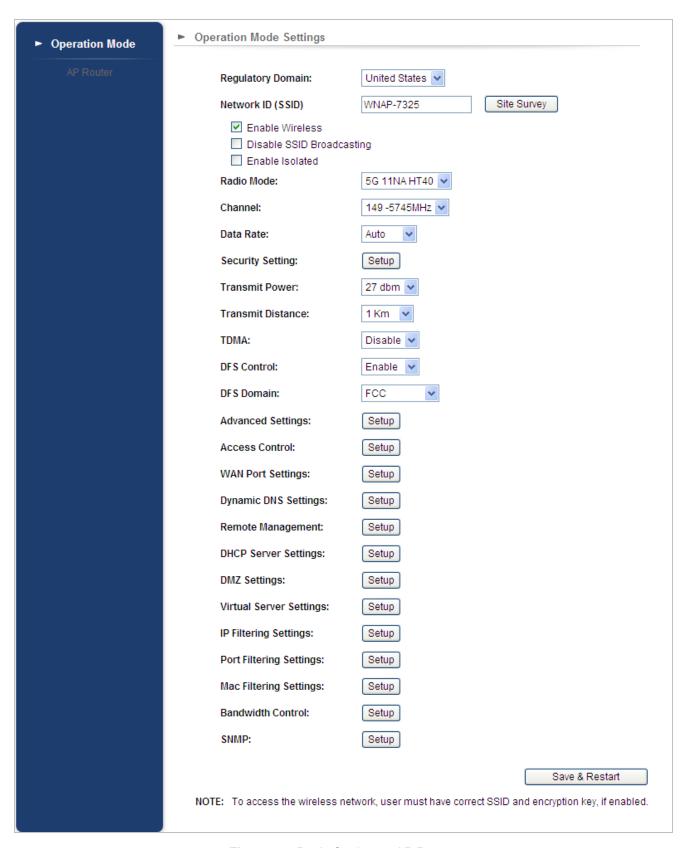


Figure 5-7 Basic Settings – AP Router

5.1.6 Wireless ISP

Click "Operation Mode" \rightarrow "Wireless ISP" and the following page will be displayed. This section allows you to configure the Wireless ISP mode.

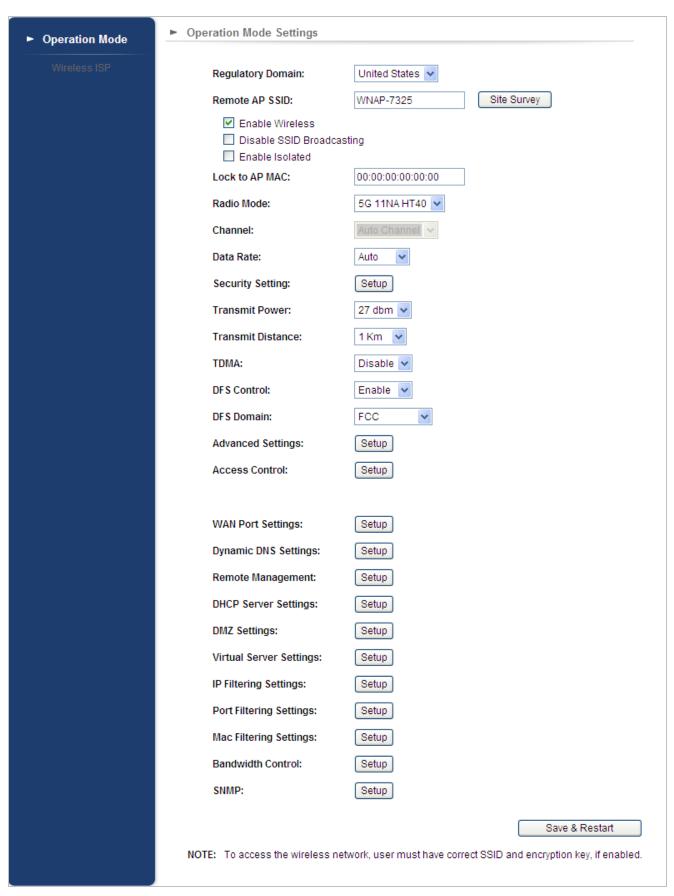


Figure 5-8 Basic Settings - WISP

5.1.7 Security Setting

Choose the operation mode you required, and then enter "**Security Setting**" by clicking the **Setup** button next to it and the following page will be displayed. This section allows you to configure the wireless security settings.



Figure 5-9 Security Settings

Object	Description
Select Encryption	Select the encryption that you need. None: No security required WEP: Input 5, 13 (ASCII) or 10, 26 (HEX) character for WEP key. WPA: Enter ASCII characters between 8 and 63 character or 8 to 64 hexadecimal characters. WPA2: Enter ASCII characters between 8 and 63 character or 8 to 64 hexadecimal characters. WPA-Mixed: Enter ASCII characters between 8 and 63 character or 8 to 64 hexadecimal characters.

■ None

Authentication is disabled and no password/key is required to connect to the access point.

■ WEP

WEP (Wired Equivalent Privacy) is a basic encryption. For a higher level of security consider using the WPA encryption.



Figure 5-10 Security Settings – WEP

Object	Description	
• Authentication	You can select Open System , Shared Key or Auto .	
Key Length	Choose the WEP key length. You can choose 64-bit or 128-bit .	
Key Format	You can choose ASCII or Hex.	
• Encryption Key	Enter the keys in the fields.	

■ WPA

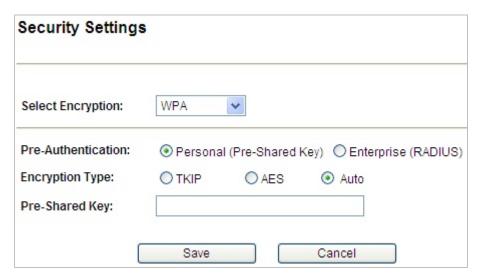


Figure 5-11 Security Settings – WPA Personal

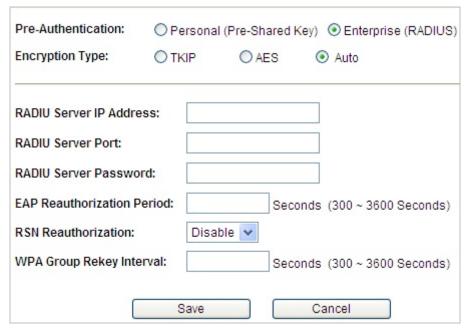


Figure 5-12 Security Settings – WPA Enterprise

Object	Description	
Pre-Authentication	Select "Personal (Pre-Shared Key)" or "Enterprise (RADIUS)"	
	encryption type.	
• Encryption Type	Set the WPA to be TKIP , AES or Auto .	
Pre-Shared Key	Enter the keys in the fields.	
• RADIU Server IP Address	Enter the RADIUS server host IP address.	
DADIII Comron Dont	Set the UDP port used in the authentication protocol of the RADIUS	
RADIU Server Port	server. Value must be between 1 and 65535.	
• RADIU Server Password	Enter a shared secret/password between 1 and 99 characters in length.	
• EAP		
Reauthorization	Set duration of session timeout in seconds between 300 and 3600.	
Period		
• RSN	Frankla an disable DCN non-the visation	
Reauthorization	Enable or disable RSN reauthorization.	
• WPA Group Re-key Interval	Set duration of session timeout in seconds between 300 and 3600.	

■ WPA2

Please refer to WPA for more information.

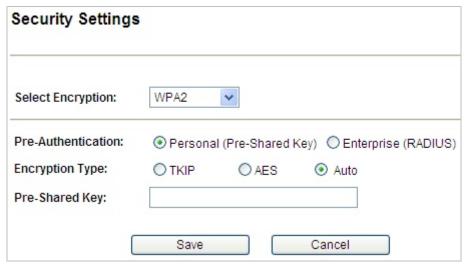


Figure 5-13 Security Settings – WPA2 Personal

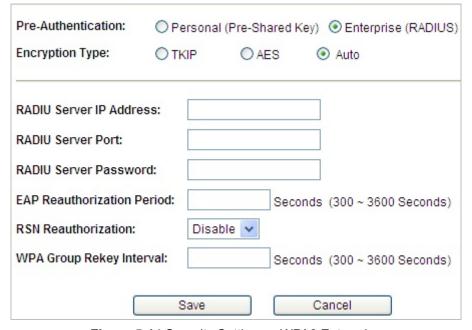


Figure 5-14 Security Settings – WPA2 Enterprise

■ WPA-Mixed

Please refer to WPA for more information.

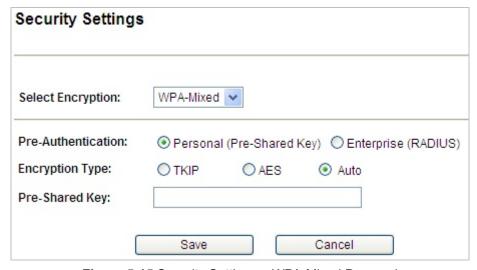


Figure 5-15 Security Settings – WPA-Mixed Personal

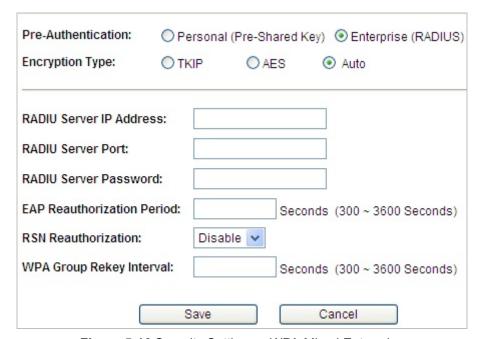


Figure 5-16 Security Settings – WPA-Mixed Enterprise

5.1.8 Advanced Settings

Choose the operation mode you require, and then enter "**Advanced Settings**" by clicking the **Setup** button next to it and the following page will be displayed. This section allows you to configure the wireless advanced settings.

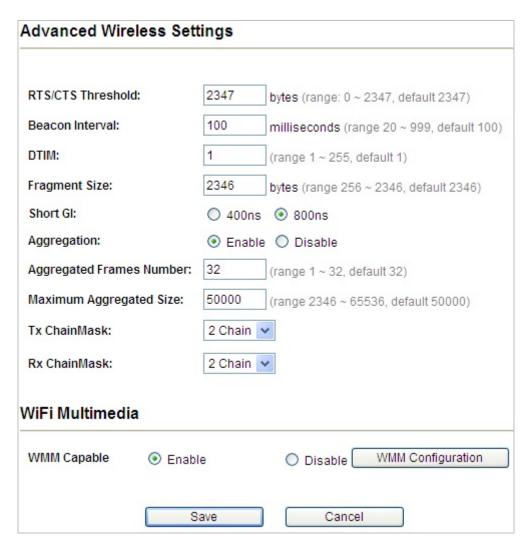


Figure 5-17 Advanced Settings

Object	Description
• RTS/CTS	When the length of a data packet exceeds this value, the router will send
	an RTS frame to the destination wireless node, and the latter will reply
Threshold	with a CTS frame, and thus they are ready to communicate. The default
	value is 2347.
Beacon Interval	Set beacon interval, the value range is from 20 to 999. The default value
	is 100.
• DTIM	Set the DTIM (delivery traffic indication message) period value of the
	wireless radio. The default value is 1.
	A data packet that exceeds this value in length will be divided into
Fragment Size	multiple packets. The number of packets influences wireless network
	performance. Avoid setting this value low. Default at 2346.
Short GI	Guard intervals are used to ensure that distinct transmissions do not
	interfere with one another. Only effect under Mixed Mode.
Aggregation	A part of the 802.11n standard that allows sending multiple frames per

	single access to the medium by combining frames together into one		
	larger frame. It creates the larger frame by combining smaller frames		
	with the same physical source, destination end points, and traffic class		
	(QoS) into one large frame with a common MAC header		
 Aggregated Frames Number 	Determines the number of frames combined in the new larger frame.		
Maximum Aggregated Size	Determines the size (in bytes) of the larger frame.		
	Displays the number of independent spatial data streams the device is		
To Obstalla Marala	transmitting (TX) and receiving (RX) simultaneously within one spectral		
Tx ChainMask	channel of bandwidth. Multiple chains increase data transfer		
	performance significantly.		
	Displays the number of independent spatial data streams the device is		
Rx ChainMask	transmitting (TX) and receiving (RX) simultaneously within one spectral		
	channel of bandwidth. Multiple chains increase data transfer		
	performance significantly.		
	Wi-Fi Multimedia (WMM) is a Wi-Fi Alliance interoperability certification		
WMM Capable	based on the IEEE 802.11e standard, which provides Quality of Service		
	(QoS) features to IEE 802.11 networks. WMM prioritizes traffic		
	according to four categories: background, best effort, video and voice.		

	WMM	Parameters of	Station	15
	Aifsn	CWMin	CWMax	Тхор
AC_BE	3	4	6	0
AC_BK	7	4	10	0
AC_VI	1	3	4	3008
AC_VO	1	2	3	1504
	WMM Par	ameters of Acc	cess Point	
	Aifsn	CWMin	CWMax	Тхор
AC_BE	3	4	6	0
AC_BK	7	4	10	0
AC_VI	1	3	4	3008
AC_VO	1	2	3	1504
	Apply	Cancel	Close	

Figure 5-18 WMM Configuration

WMM Capable		
BE	Traditional IP data, medium throughput and delay.	
ВК	High throughput, non time sensitive bulk data e.g. FTP	
VI	Time sensitive video data with minimum time delay.	
VO	Time sensitive data such as VoIP and streaming media with minimum time delay.	
Aifsn	Arbitration Inter-Frame Space (milliseconds): Specifies additional time between when a channel goes idle and the AP/client sends data frames. Traffic with a lower AIFSN value has a higher priority.	
CWMin	Maximum Contention Window (milliseconds): This value is the upper limit to random backoff value doubling (see above).	
СWМах	Arbitration Inter-Frame Space (milliseconds): Specifies additional time between when a channel goes idle and the AP/client sends data frames. Traffic with a lower AIFSN value has a higher priority.	
Тхор	Transmission Opportunity (milliseconds): The maximum interval of time an AP/client can transmit. This makes channel access more efficiently prioritized. A value of 0 means only one frame per transmission. A greater value effects higher priority.	

5.1.9 Access Control

Choose the operation mode you require, and then enter "Access Control" by clicking the Setup button next to it and the following page will be displayed. This section allows you to configure the wireless access control settings.



Figure 5-19 Access Control

Object	Description
Wireless Access	You can choose "Disable", "Allow Listed" or "Deny Listed".
Control Mode	
Mac Address	The MAC address to be filtered.
Comment	Enter a comment of this setting.

5.1.10 WAN Port Settings

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "WAN Port Settings" by clicking the Setup button next to it. This section allows you to configure the internet connection settings.

■ DHCP (Auto Config)

Choose "**DHCP**" and the router will automatically obtain IP addresses, subnet masks and gateway addresses from your ISP.



Figure 5-20 WAN Port Settings – DHCP

■ Static Mode (Fixed IP)

If your ISP offers you static IP Internet connection type, select "**Static Mode**" and then enter IP address, subnet mask, primary DNS and secondary DNS information provided by your ISP in the corresponding fields.

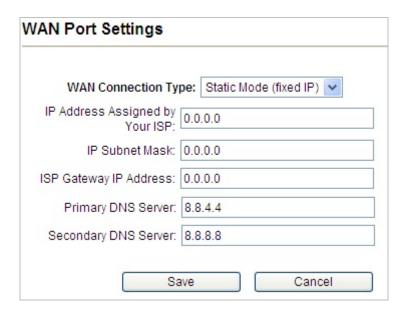


Figure 5-21 WAN Port Settings – Static IP

Object	Description
 IP Address Assigned by Your ISP 	Enter the WAN IP address provided by your ISP. Enquire your ISP if you are not clear.
• IP Subnet Mask	Enter WAN Subnet Mask provided by your ISP.
ISP Gateway IP Address	Enter the WAN Gateway address provided by your ISP.
Primary DNS	Enter the necessary DNS address provided by your ISP. Default is
Server	8.8.4.4.
Secondary DNS Server	Enter the other DNS address if your ISP provides you with 2 such addresses. Default is 8.8.8.8.

■ PPPOE (ADSL)

Select **PPPOE** if your ISP is using a PPPoE connection and provide you with PPPoE user name and password info.



Figure 5-22 WAN Port Settings – PPPOE

Object	Description
User Name	Enter the User Name provided by your ISP.
• Password	Enter the password provided by your ISP.
Verify Password	Enter the password again to verify if it is correct.

5.1.11 Dynamic DNS Settings

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "Dynamic DNS Settings" by clicking the Setup button next to it. This section allows you to configure the DDNS settings.

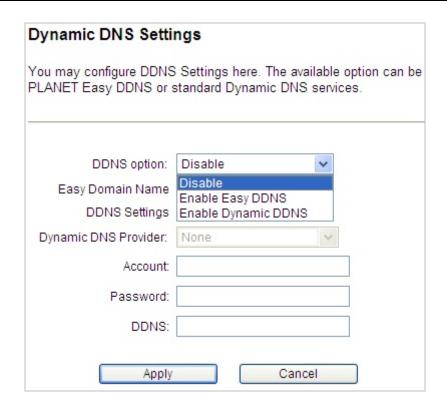


Figure 5-23 Dynamic DNS Settings

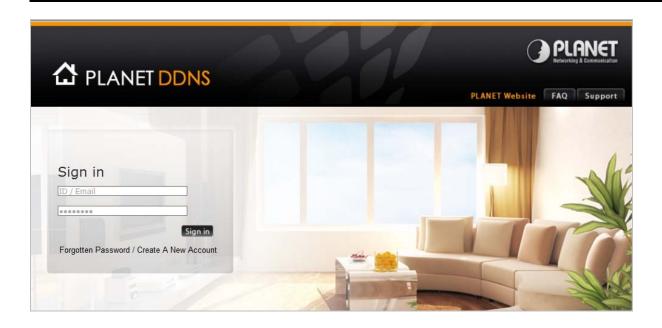
Object	Description	
	Disable: Disable DDNS function	
DDNS option	Enable Easy DDNS: Enable PLANET Easy DDNS	
	Enable Dynamic DDNS: You are allowed to modify the DDNS	
	settings.	
• Dynamic DNS Provider	Select a server provider or disable the existing server.	
• Account	Enter the DDNS user name of the DDNS account.	
• Password	Enter the DDNS password of the DDNS account.	
• DDNS	Enter the host name or domain name provided by DDNS	
	provider.	

Example of Planet DDNS Settings:



Please go to http://www.planetddns.com/ to register a Planet DDNS account.

Please refer to the FAQ (http://www.planetddns.com/index.php/faq) for how to register a free account.



Click "Operation Mode" → "AP Router" or "Wireless ISP", select Dynamic DNS Settings and press "Setup".

Dynamic DNS Settings:	Setup

Step 1. Select "Enable Dynamic DDNS" and "PlanetDDNS.com" from the list of Dynamic DNS Provider to use the Planet DDNS service.

Dynamic DNS Settings		
You may configure DDNS Settings here. The available option can be PLANET Easy DDNS or standard Dynamic DNS services.		
DDNS option:	Enable Dynamic DDNS ▼	
Easy Domain Name	Disable Enable Easy DDNS	
DDNS Settings	Enable Dynamic DDNS	
Dynamic DNS Provider:	PlanetDDNS.com ▼	
Account:	username	
Password:		
DDNS:	username	
Apply	Cancel	

Step 2. Configure the DDNS account that has been registered in Planet DDNS website.

Account: Enter your DDNS host (format: xxx.planetddns.com, xxx is the registered domain name)

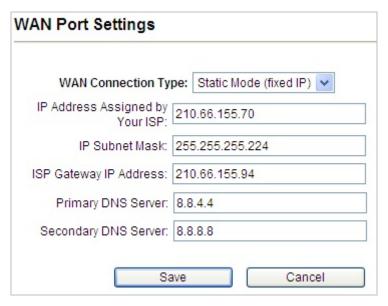
Password: Enter the password of your account.

DDNS: Enter your DDNS host again.

Step 3. Go to "Remote Management" to enable remote access from WAN port.



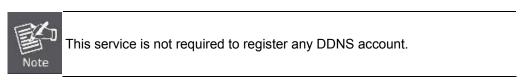
Step 4. Go to "WAN Port Settings" to configure WAN connection to Static Mode (fixed IP).



Step 5. Save the setting and connect your WAN port of the Wireless AP to the internet via Ethernet cable. In a remote computer, enter the DDNS host name as the figure shown below. Then, you should be able to login the WNAP-7325 remotely.



Example of Easy DDNS Settings:



Please refer to the procedure listed as follows to configure using Planet Easy DDNS service.

Step 1. Select "Enable Easy DDNS" to use the Planet Easy DDNS service.

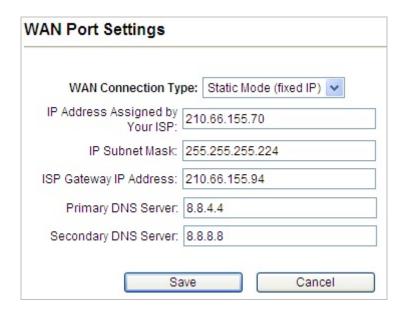
Easy Domain Name: Display the specified domain name for this device. (Format: ptxxxxxx.planetddns.com, xxxxxx is the last six-digit of the WAN Port MAC address)

Dynamic DNS Setti	ngs
	S Settings here. The available option can be standard Dynamic DNS services.
DDNS option:	Enable Easy DDNS
Easy Domain Name	WNAP-7325
DDNS Settings	
Dynamic DNS Provider:	PlanetDDNS.com 😽
Account:	pt459ce3
Password:	*****
DDNS:	pt459ce3.planetddns.com
Apply	Cancel

Step 2. Go to "Remote Management" to enable remote access from WAN port.



Step 3. Go to "WAN Port Settings" to configure WAN connection to Static Mode (fixed IP).



Step 6. Save the setting and connect your WAN port of the Wireless AP to the internet via Ethernet cable. In a remote computer, enter the Easy Domain Name displayed in **Step 1**. Then, you should be able to login the WNAP-7325 remotely.



5.1.12 Remote Management

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "Remote Management" by clicking the Setup button next to it. This section allows you to enable or disable the remote management through the WAN port.



Figure 5-24 Remote Management

Object	Description
Remote management (via WAN)	Enable or Disable this function.
Ping from WAN	Enable or Disable this function.

5.1.13 DHCP Server Settings

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "DHCP Server Settings" by clicking the Setup button next to it. This section allows you to configure the DHCP server.

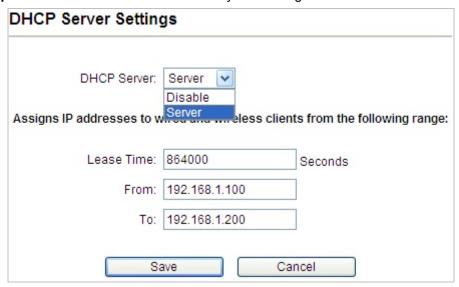


Figure 5-25 DHCP Server Settings

Object	Description
DHCP Server	Select as DHCP server or disable the function.
• Lease Time	Select the time for using one assigned IP from the dropdown list. After the lease time, the AP automatically assigns new IP addresses to all connected computers.
• From	The start IP address of all the available successive IPs.
• To	The end IP address of all the available successive IPs.

5.1.14 DMZ Settings

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "DMZ Settings" by clicking the Setup button next to it. This section allows you to configure the DMZ server.



Figure 5-26 DMZ Settings

Object	Description
DMZ Setting	Disable or Enable DMZ function.
DMZ IP Address	Enter the DMZ IP address.

5.1.15 Virtual Server Settings

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "Virtual Server Settings" by clicking the Setup button next to it. This section allows you to configure the virtual server.

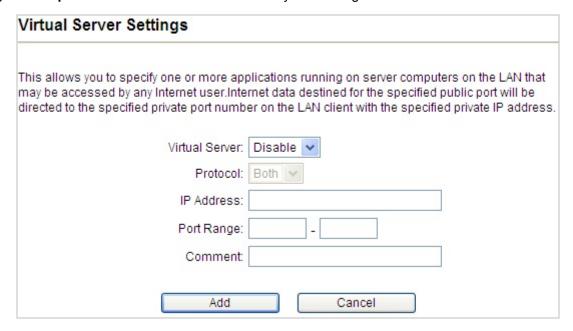


Figure 5-27 Virtual Server Settings

Object	Description
Virtual Server	Enable or disable Virtual Server.
• Protocol	You can choose TCP, UDP or Both.
• IP Address	Enter the LAN IP.

Port Range	Set the range of public port.
• Comment	Set a name for the rule.

5.1.16 IP Filtering Settings

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "IP Filtering Settings" by clicking the Setup button next to it. This section allows you to configure the IP filtering settings.



Figure 5-28 IP Filtering Settings

Object	Description
• Filtering	Enable or disable IP Filtering.
• Protocol	You can choose TCP, UDP or Both.
IP Address	Enter the IP address to be filtered.
• Comment	Set a name for the rule.

5.1.17 Port Filtering Settings

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "Port Filtering Settings" by clicking the Setup button next to it. This section allows you to configure the port filtering settings.

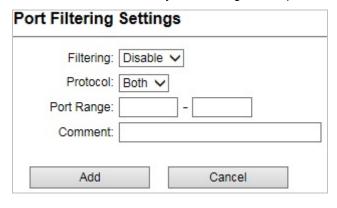


Figure 5-29 Port Filtering Settings

Object	Description
• Filtering	Enable or disable IP Filtering.
• Protocol	You can choose TCP, UDP or Both.
Port Range	Enter the range of Port to be filtered.
• Comment	Set a name for the rule.

5.1.18 MAC Filtering Settings

Click "Operation Mode" \rightarrow "AP Router" or "Wireless ISP" and then enter the "Mac Filtering Settings" by clicking the Setup button next to it. This section allows you to configure the MAC filtering settings.



Figure 5-30 Mac Filtering Settings

Object	Description
• Filtering	Enable or disable Mac Filtering.
Mac Address	Enter the Mac address to be filtered.
• Comment	Set a name for the rule.

5.1.19 Bandwidth Control

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "Bandwidth Control" by clicking the Setup button next to it. This section allows you to configure the bandwidth control.

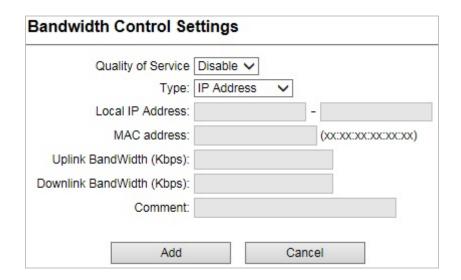


Figure 5-31 Bandwidth Control Settings

Object	Description
Quality of Service	Enable or disable the QoS service.
• Type	Select QoS type IP Address or Mac Address.
Local IP Address	The IP address segment which uses this QoS rule.
MAC Address	The Mac address which uses this QoS rule.
Uplink BandWidth (Kbps)	Set the maximum uplink bandwidth allowed by the listed QoS rules.
Downlink BandWidth (Kbps)	Set the maximum downlink bandwidth allowed by the listed QoS rules.
• Comment	Set a name for the rule.

5.1.20 SNMP

Click "Operation Mode" → "AP Router" or "Wireless ISP" and then enter the "SNMP" by clicking the Setup button next to it. This section allows you to configure the SNMP.



Figure 5-32 SNMP Settings

Object	Description
• SNMP	Enable or disable the SNMP service.
Dood Community	Enter a Read Community name for verification with the SNMP manager
Read Community	for SNMP Read requests.
Write Community	Enter a Write Community name for verification with the SNMP manager
	for SNMP Write requests.
• Trap IP 1	Enter the Trap IP address.
Trap Community	Enter an SNMP Trap Community name for verification with the SNMP
	manager for SNMP Trap requests.

5.2 System Configuration

On this page, you can configure the system of the WNAP-7325, including IP settings, Time settings, Password settings, System management, Ping Watchdog, Firmware upgrade, Configuration save and restore, Factory default, Reboot and Schedule reboot.

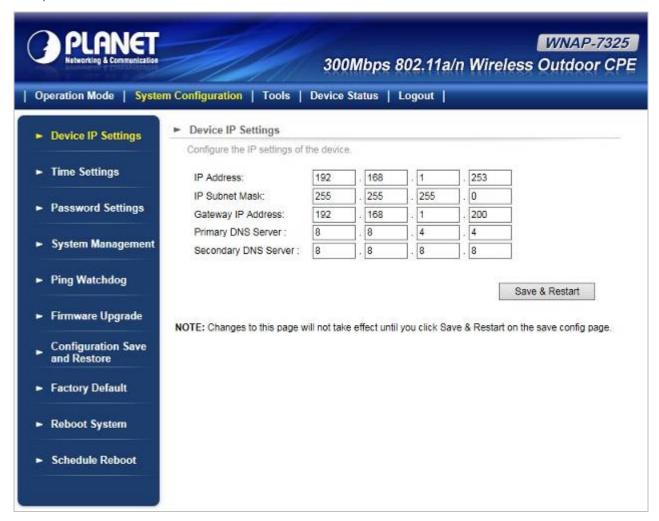


Figure 5-33 System Configuration default page

5.2.1 Default IP Settings

Click "System Configuration" → "Device IP Settings" and the following page will be displayed.

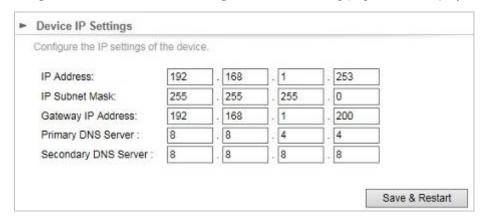


Figure 5-34 Default IP Settings

The page includes the following fields:

Object	Description
	WNAP-7325's LAN IP.
• IP Address	The default is 192.168.1.253. You can change it according to your
	needs.
IP Subnet Mask	WNAP-7325's LAN subnet mask.
Gateway IP Address	The Gateway IP address of WNAP-7325.
Primary DNS Server	Enter the DNS server. The default is 8.8.4.4.
Secondary DNS Server	Enter the DNS server. The default is 8.8.8.8.

5.2.2 Time Settings

Click "System Configuration" → "Time Settings" and the following page will be displayed.

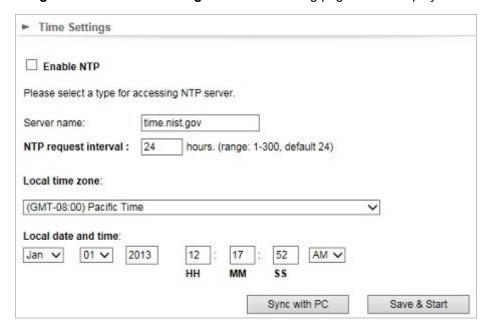


Figure 5-35 Time Settings

Object	Description
Enable NTP	Enable it to support NTP (Network Time Protocol) for automatic time and date setup.
Server Name	Enter the host name or IP address of the time server if you wish.
NTP Request Interval	Specify a frequency (in hours) for the access point to update/synchronize with the NTP server.
Local Time Zone	Select the time zone of your country/region. If your country/region is not listed, please select another country/region whose time zone is

	the same as yours.
Local Date and Time	Set the access point's date and time manually.

5.2.3 Password Settings

Click "System Configuration" → "Password Settings" and the following page will be displayed.



Figure 5-36 Password Settings

Object	Description
• Current Password	Set the access point's administrator password. This is used to log in
	to the browser based on the configuration interface.
New Password	Enter a new password.
• Re-enter New	Enter the new password again.
Password	

5.2.4 System Management

Click "System Configuration" → "System Management" and the following page will be displayed.

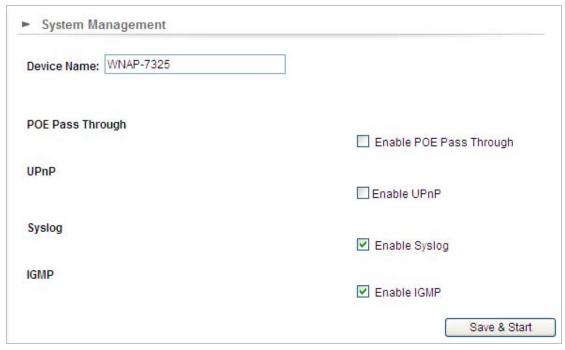


Figure 5-37 System Management

Object	Description
Device Name	Enter a name for this access point. Default is WNAP-7325.
POE Passthrough	Enable the POE Passthrough function.
	※ When the option "Enable POE Passthrough" in the System
	Management page is checked, the LAN2 can supply passive PoE
	power to the second WNAP-7325 or WNAP-6325 through the LAN 2.
• UPnP	Check to enable the UPnP function.
	The UPnP feature allows the devices, such as Internet computers,
	to access the local host resources or devices as needed. UPnP
	devices can be automatically discovered by the UPnP service
	application on the LAN. This option is only available in AP
	Router mode.
• Syslog	Check to enable Syslog function.
• IGMP	Check to enable the IGMP Proxy function.
	This option is only available in AP Router mode.

5.2.5 Ping Watchdog

Click "System Configuration" → "Ping Watchdog" and the following page will be displayed.

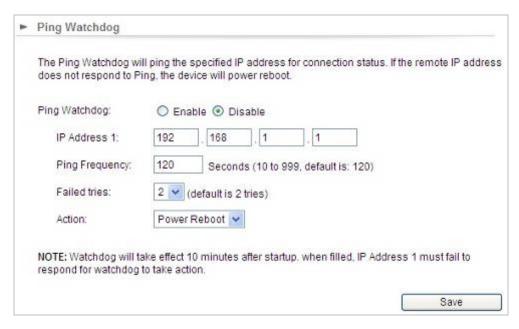


Figure 5-38 Ping Watchdog

Object	Description
Ping Watchdog	Enable or Disable this function.
• IP Address 1	Enter the IP address which pings every time interval
Ping Frequency	Set times from 10 to 999.
Failed tries	Select failed tries from 1 to 5.
• Action	System will reboot when failing to ping the IP.

5.2.6 Firmware Upgrade

Click "System Configuration" → "Firmware Upgrade" and the following page will be displayed.



Figure 5-39 Firmware Upgrade

Object	Description
• Browse	Click Browse to select the firmware file and click Upgrade to
	upgrade the firmware.

5.2.7 Configuration Save and Restore

Click "System Configuration" → "Configuration Save and Restore" and the following page will be displayed.

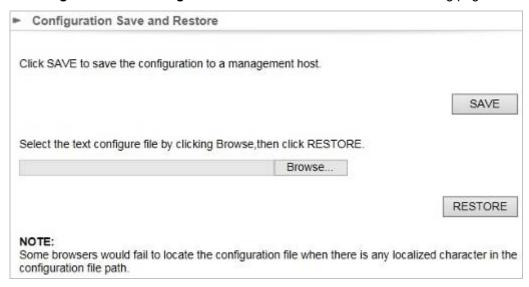


Figure 5-40 Configuration Save and Restore

Object	Description
• SAVE	Click SAVE to save the configuration to a management host.
• Browse	Click Browse to select the configuration file and click Restore to
	restore the configuration file.

5.2.8 Factory Default

Click "System Configuration" \rightarrow "Factory Default" and the following page will be displayed.

Press **YES** to restore to factory default.

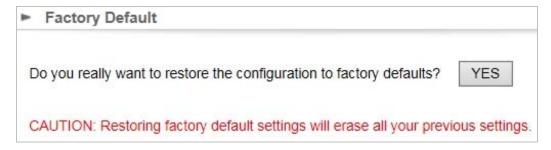


Figure 5-41 Factory Default

5.2.9 Reboot System

Click "System Configuration" → "Reboot System" and the following page will be displayed.

Press **YES** to reboot the system.

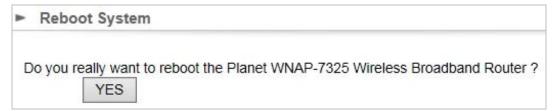


Figure 5-42 Reboot System

5.2.10 Schedule Reboot

Click "System Configuration" → "Schedule Reboot" and the following page will be displayed.

This page allows you to enable and configure system reboot schedule. The device can regularly reboot according to the reserved time when connecting to the Internet.

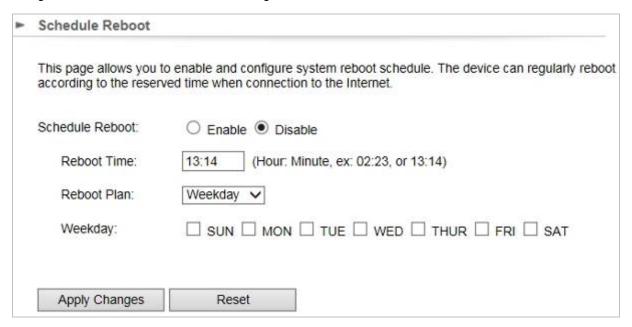


Figure 5-43 Schedule Reboot

Object	Description
Schedule Reboot	Enable or Disable this function.
Reboot Time	Enter the time that you want to reboot this device.
Reboot Plane	Select Weekday to reboot in the day you choose or Every day.
Weekday	Select the day that you want to reboot.



- This setting will only take effect when the Internet connection is accessible and the GMT time is configured correctly.
- 2. You must select at least one day when choosing "Weekday" as your reboot plan.
- 3. When choosing "Every day" as your reboot plan, the "Weekday" will be grayed out (disabled), which means Every day will auto reboot at the time that you schedule.
- Example of how to configure **Schedule Reboot**. Please take the following steps:

Before configuring schedule reboots, please ensure the Internet connection is accessible and the GMT time is configured correctly according to **NTP Settings** page.

Step 1. Enable the "Schedule Reboot".

Step 2. Enter the Reboot Time (24-hour format) to enable this function to take effect. For example, if you want this function to work at 23:00 every Sunday, choose "Weekday" in the Reboot Plan field.

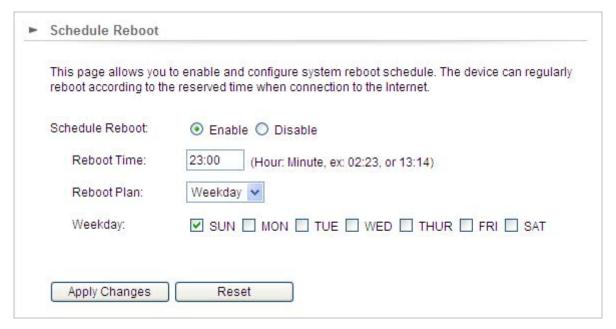


Figure 5-44 Schedule Reboot - Example

Step 3. Click the "Apply Changes" button to take this function effect.

5.3 Tools

5.3.1 Network Ping

Click "Tools" → "Network Ping" and the following page will be displayed.

Ping is a network tool used to test whether a particular host is reachable across an IP network. Enter the IP, Ping Count, and click "**Ping**" to diagnostic your internet connection.



Figure 5-45 Network Ping

5.3.2 Network Traceroute

Click "Tools" → "Network Traceroute" and the following page will be displayed.

Traceroute is a computer network diagnostic tool for displaying the route (path) and measuring transit delays of packets across an Internet Protocol (IP) network. It can help identify connection problems.

Enter the IP and click "Traceroute" to diagnostic your internet connection.

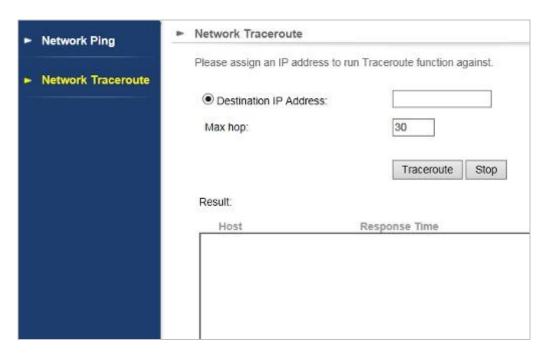


Figure 5-46 Network Traceroute

5.4 Device Status

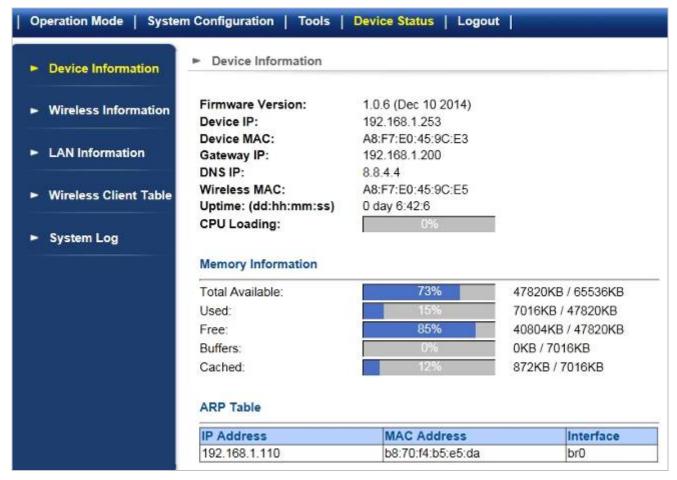


Figure 5-47 Device Status

5.4.1 Device Information

Click "**Device Status**" → "**Device Information**" and the following page will be displayed.

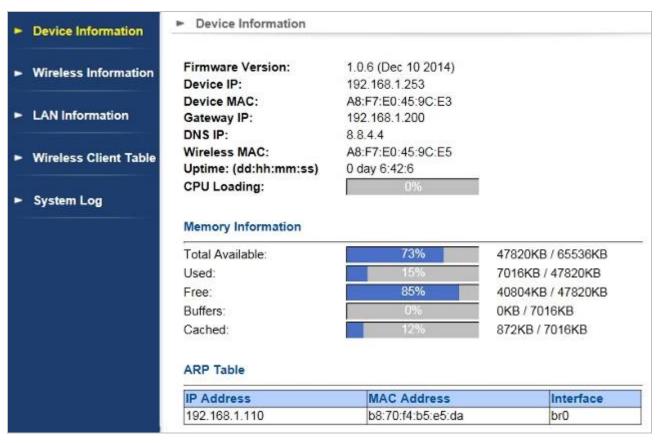


Figure 5-48 Device Information

The page includes the following fields:

Object	Description
• Firmware Version	Displays current F/W version.
Device IP	Displays IP of AP.
Device MAC	Displays AP's LAN MAC address.
Gateway IP	Displays Gateway IP of AP.
• DNS IP	Displays DNS IP of AP.
Wireless MAC	Displays AP's Wireless MAC address.
• Uptime	Displays the uptime of AP.
CPU Loading	Displays the CPU loading of AP.

5.4.2 Wireless Information

Click "**Device Status**" → "**Wireless Information**" and the following page will be displayed.

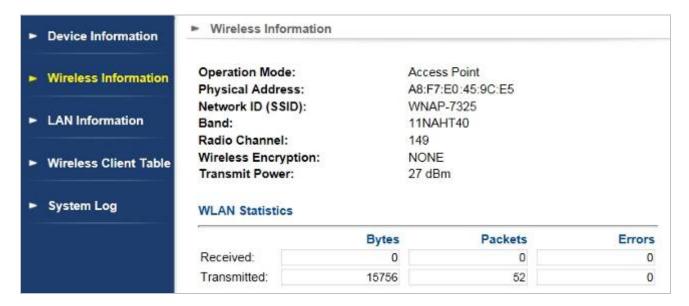


Figure 5-49 Wireless Information

The page includes the following fields:

Object	Description
Operation Mode	Displays current Operation Mode.
Physical address	Displays AP's Wireless MAC address.
• SSID	It is the wireless network name. The default SSID is WNAP-7325.
• Band	Displays operating channel width which is Auto Select , 5G 11NA HT20 or 5G 11NA HT40 .
Radio Channel	Displays the channel you would like to use. The channel range will be changed by selecting a different domain.
Wireless Encryption	Displays the encryption type that you would like to use.
Transmit Power	Display the TX power that you would like to use.

5.4.3 LAN Information

Click "Device Status" → "LAN Information" and the following page will be displayed.

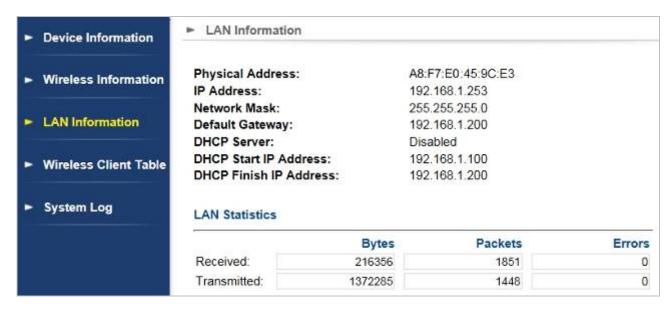


Figure 5-50 LAN Information

The page includes the following fields:

Object	Description
Physical Address	Displays AP's LAN MAC address.
IP Address	Displays IP of AP.
Network Mask	Displays Network Mask of AP.
Default Gateway	Displays Gateway IP of AP.
DHCP Server	Enable or Disable DHCP server.
DHCP Start IP Address	Enter the starting IP address for the DHCP server's IP assignment.
DHCP Finish IP	Enter the ending IP address for the DHCP server's IP
Address	assignment.

5.4.4 Wireless Client Table

Click "Device Status" \rightarrow "Wireless Client Table" and the following page will be displayed.



Figure 5-51 Wireless Client Table

The page includes the following fields:

Object	Description			
• No.	Displays the number of connecting device.			
Mac Address	Displays Mac address of AP.			
Connection Speed	Displays connection speed of device.			
	Display signal strength of device.			
 Signal Strength 	The signal strength between "-30 and -70" can set up a reliable			
	connection.			

5.4.5 System Log

Choose menu "**Device Status** → "**System Log**" to view the logs of the Wireless AP.

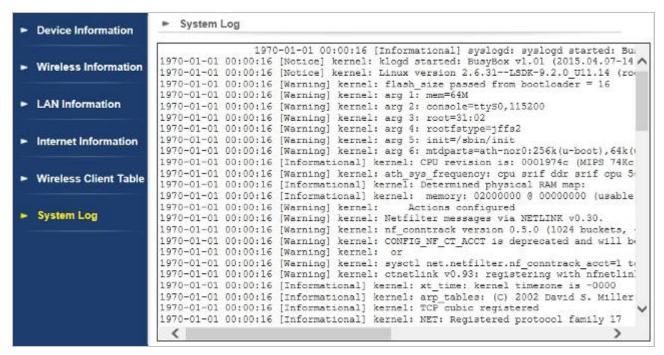


Figure 5-52 System Log

5.5 Logout

Select "Logout" to logout the system.

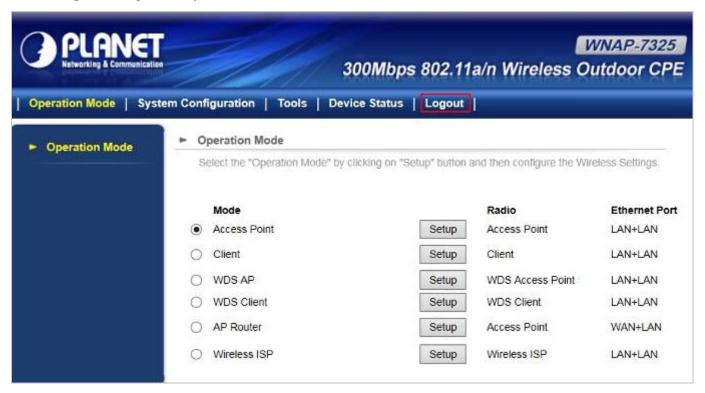


Figure 5-53 Logout



Figure 5-54 Re-login

Appendix A: Troubleshooting

If you found the AP is working improperly or stop responding to you, please read this troubleshooting first before contacting the Planet Tech Support for help. Some problems can be solved by yourself within very short time.

Scenario	Solution		
The AP is not responding to me when I want to access it by web browser.	 a. Please check the connection of the power cord and the Ethernet cable of this AP. All cords and cables should be correctly and firmly inserted to the AP. b. If all LEDs on this AP are off, please check the status of power adapter, and make sure it is correctly powered. c. You must use the same IP address section that AP uses. d. Are you using MAC or IP address filter? Try to connect the AP by another computer and see if it works; if not, please reset the AP to the factory default settings (Press the 'reset' button for over 10 seconds). e. Set your computer to static IP address, and see if the Planet Smart Discovery can find the AP or not. f. If you did a firmware upgrade and this happens, contact the Planet Tech Support for help. g. If all the solutions above don't work, contact the Planet Tech Support for help. 		
I can't get connected to the Internet.	 a. Check the Internet connection status from the router that is connected with the AP. b. Please be patient. Sometimes, Internet is just that slow. c. If you have connected a computer to Internet directly before, try to do that again, and check if you can get connected to Internet with your computer directly attached to the device provided by your Internet service provider. d. Check PPPoE / L2TP / PPTP user ID and password in your router again. e. Call your Internet service provider and check if there's something wrong with their service. f. If you just can't connect to one or more website, but you can still use other internet services, please check URL/Keyword filter. g. Try to reset the AP and try again later. h. Reset the device provided by your Internet service provider. i. Try to use IP address instead of hostname. If you can use IP address to communicate with a remote server, but can't use hostname, please check DNS setting. 		
I can't locate my AP by my wireless	a. 'Broadcast ESSID' set to off?		

Appendix B: Use Planet Smart Discovery to find AP

To easily discover the WNAP-7325 in your Ethernet environment, the Planet Smart Discovery Utility from user's manual CD-ROM is an ideal solution.

The following install instructions will guide you to running the Planet Smart Discovery Utility.

Step 1: Deposit the Planet Smart Discovery Utility in administrator PC.

Step 2: Execute this utility.



Step 3: Click the "Refresh" button as shown below to update the list of the currently connected devices.

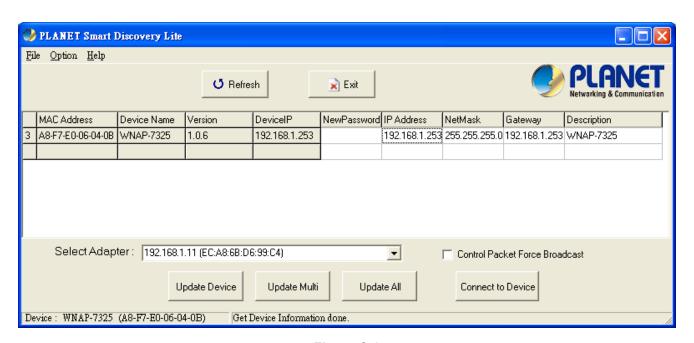


Figure C-1

Step 3: Select the WNAP-7325 from the list and then click the "Connect to Device" button to login to the Web Management Configuration Page.

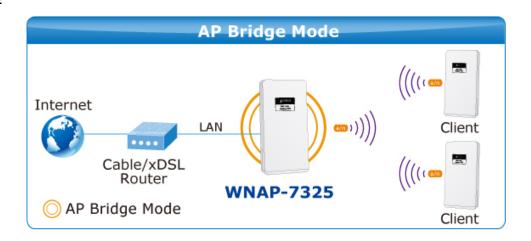


The fields in white background can be modified directly, and then you can apply the new setting by clicking the "**Update Device**" button.

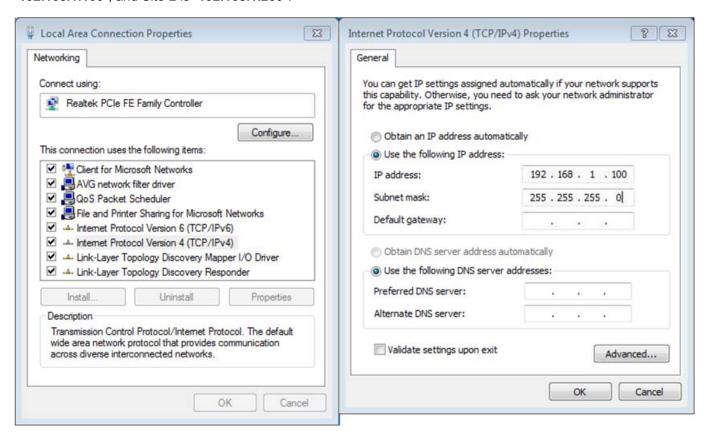
Appendix C: FAQ

Q1: How to set up the AP Client Connection

Topology:

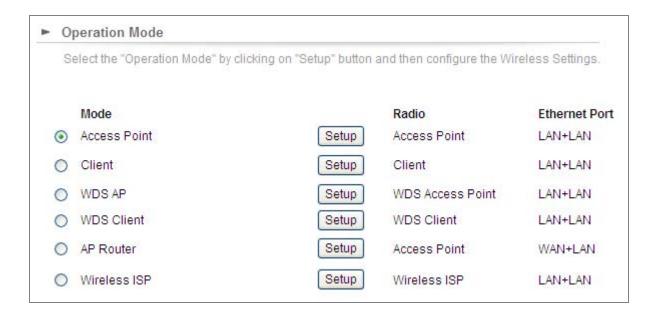


Step 1. Use static IP in the PCs that are connected with AP-1(Site-1) and AP-2(Site-2). In this case, Site-1 is "192.168.1.100", and Site-2 is "192.168.1.200".



Step 2. In AP-1, go to "Operation Mode" to configure it to Access Point Mode.

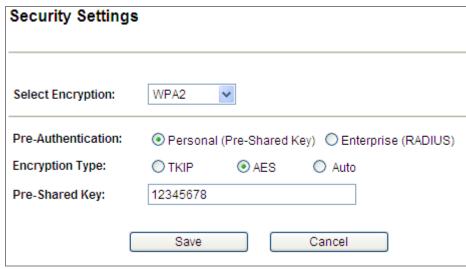
You can also configure it in "AP Router" mode if you want to connect the WAN port of the AP to the internet directly.



STEP 3. Click "**Setup**" to configure the following parameters and then click **Save & Restart** to save the settings.

- 1) Network ID (SSID): set to a unique value
- 2) Channel: set to a fixed one
- Security Setting: strongly suggested to configure it.
 In this case, we configure it to WPA2-PSK, AES

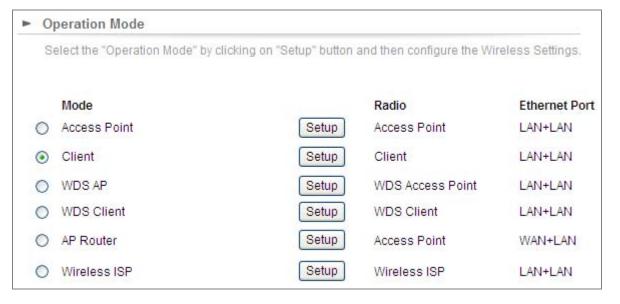




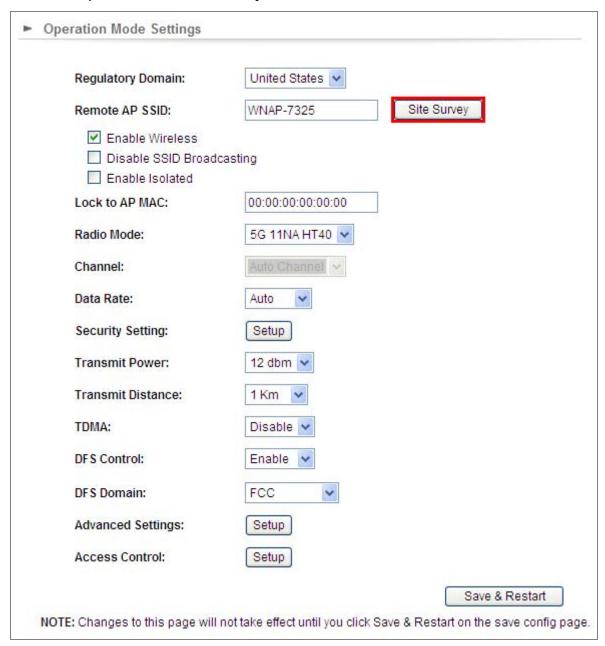
Step 4. In AP-2, modify the default IP to the same IP range but different from AP-1. In this case, the IP is changed to **192.168.1.252**.

onfigure the IP settings of	the device	ce.			
IP Address:	192	168	. 1	252	
IP Subnet Mask:	255	255	255	. 0	
Gateway IP Address:	192	. 168	_ 1	253	
Primary DNS Server :	8	. 8	_ 4	. 4	
Secondary DNS Server :	8	. 8	. 8	8	

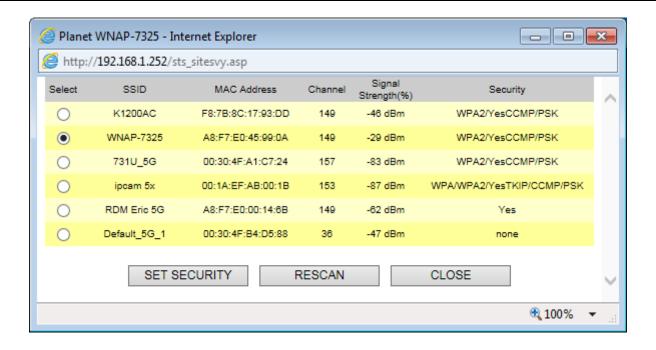
Step 5. In AP-2, configure it in "Client" mode and click "Setup".



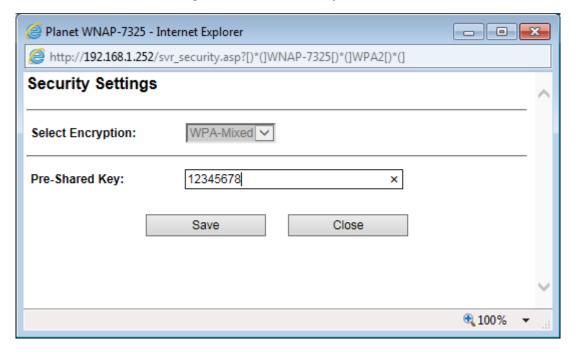
Step 6. Click "Setup" and then click Site Survey to find the AP-1.



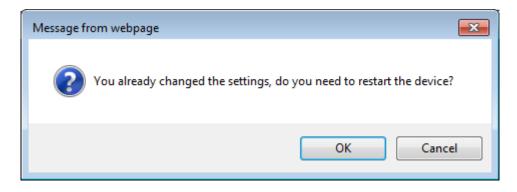
Step 7. Select the AP-1 from the list.



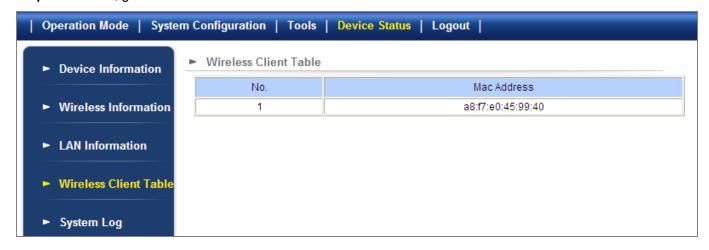
Step 8. Click "SET SECURITY" to configure the Pre-Shared Key and then click "Save" to close the window.



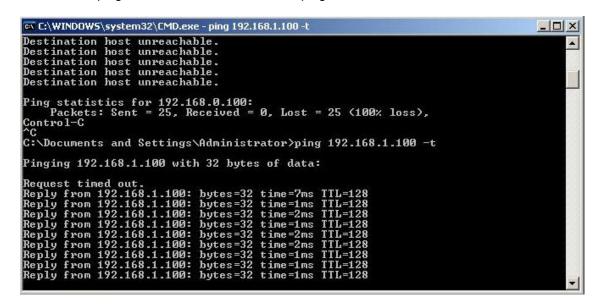
Step 9. Click "OK" and "Save & Restart" to apply the setting.



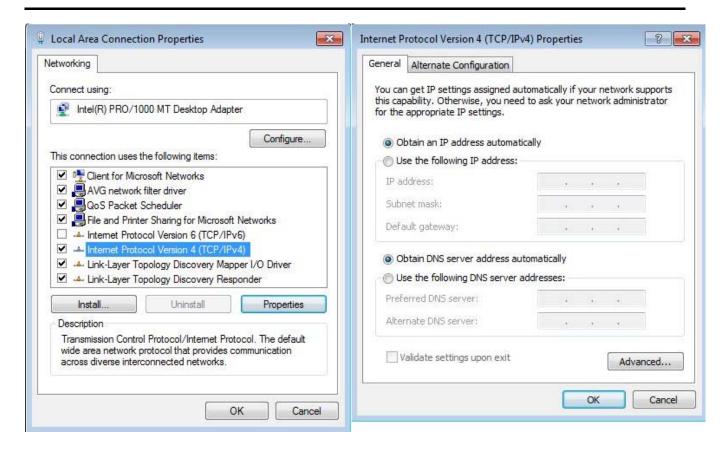
Step 10. In AP-1, go to "Device Status-> Wireless Client Table" to check whether AP-2 should be in the list.



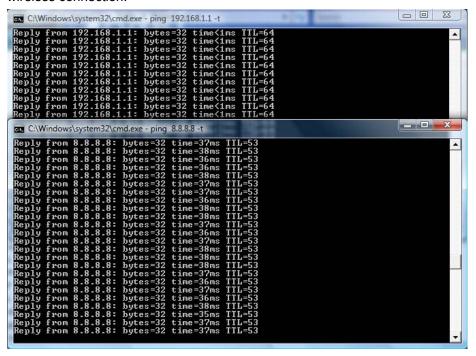
Step 11. Use command line tool to ping each other to ensure the link is successfully established. From Site-1, ping 192.168.1.200; and in Site-2, ping 192.168.1.100.



Step 12. Configure the TCP/IP settings of Site-2 to "Obtain an IP address automatically".



Step 13. Use command line tool to ping the DNS (e.g., Google) to ensure Site-2 can access internet through the wireless connection.



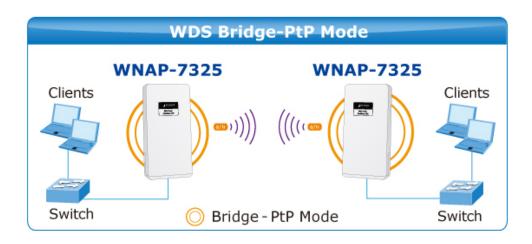
The attention of the following hints should be paid:



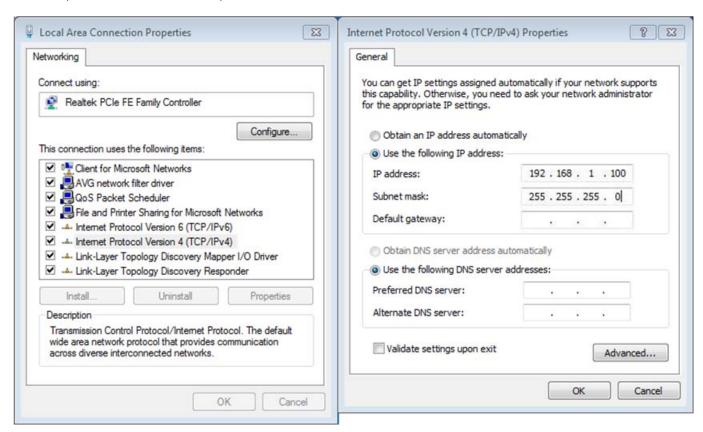
- 1) The encryption method must be the same as that of both sites if configured.
- 2) Both sites should be Line-of-Sight.
- 3) For the short distance connection less than 1km, please reduce the "Transmit power" of both sites
- 4) For the long distance connection over 1km, please adjust the "Transmit Distance" to the actual distance or double of the actual distance.

Q2: How to set up the WDS Connection

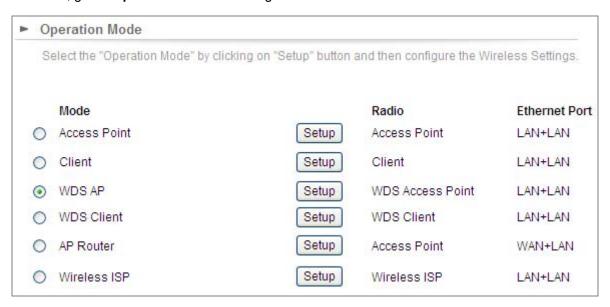
Topology:



Step 1. Use static IP in the PCs that are connected with WNAP-7350-1 (Site-1) and WNAP-7350-2 (Site-2). In this case, Site-1 is "192.168.1.100", and Site-2 is "192.168.1.200".



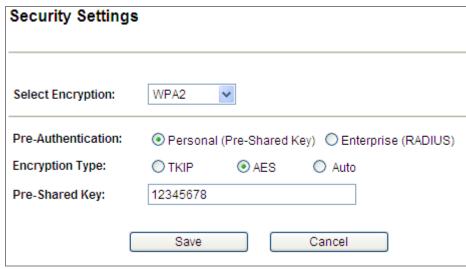
Step 2. In AP-1, go to "Operation Mode" to configure it in Access Point Mode.



Step 3. Click "Setup" to configure the following parameters and then click Save & Restart to save the settings.

- 4) Network ID (SSID): set to a unique value
- 5) Channel: set to a fixed one
- 6) **Security Setting**: strongly suggested to configure it. In this case, we configure it to WPA2-PSK, AES





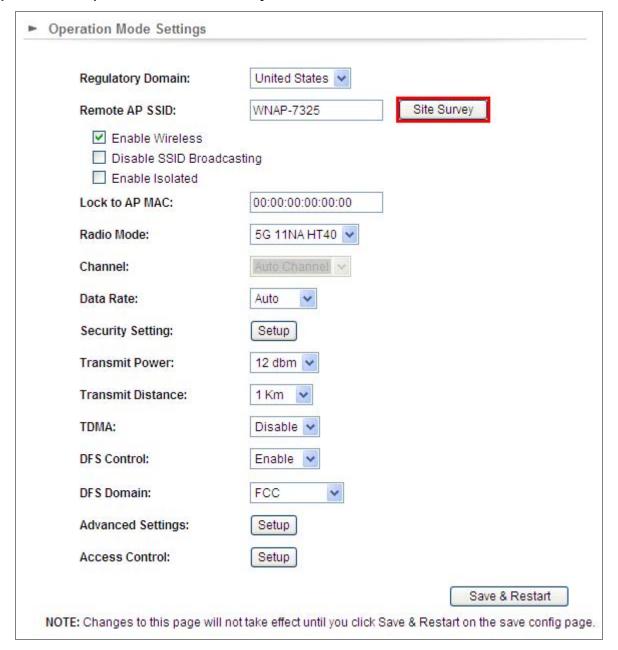
Step 4. In AP-2, modify the default IP to the same IP range but different from AP-1. In this case, the IP is changed to **192.168.1.252**.

onfigure the IP settings of	the device	ce.			
IP Address:	192	168	. 1	252	
IP Subnet Mask:	255	255	255	. 0	
Gateway IP Address:	192	. 168	_ 1	253	
Primary DNS Server:	8	. 8	_ 4	. 4	
Secondary DNS Server :	8	. 8	. 8	8	

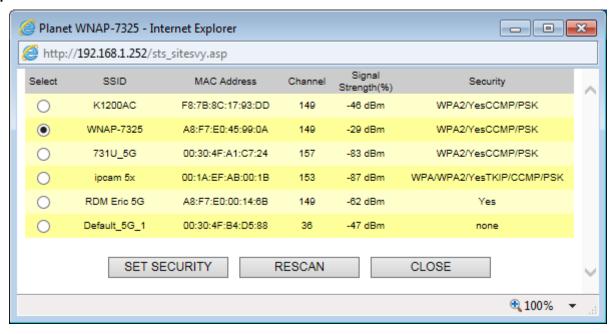
Step 5. In AP-2, configure it in "Client" mode and click "Setup".



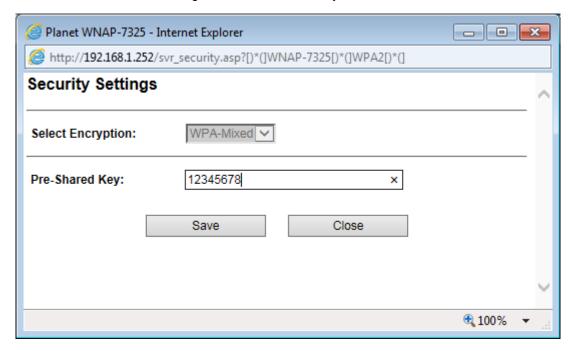
Step 6. Click "Setup" and then click Site Survey to find AP-1.



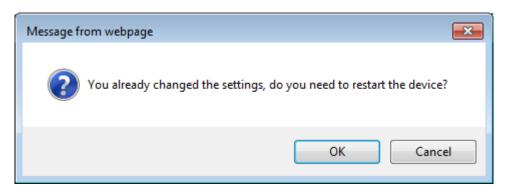
Step 7. Select AP-1 from the list.



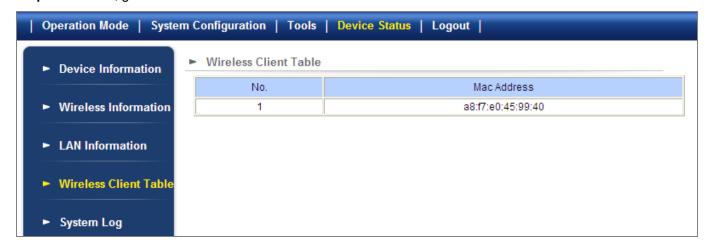
Step 8. Click "SET SECURITY" to configure the Pre-Shared Key and then click "Save" to close the window.



Step 9. Click "OK" and click "Save & Restart" to apply the setting.



Step 10. In AP-1, go to "Device Status-> Wireless Client Table" to check whether AP-2 should be in the list.



Step 11. Use command line tool to ping each other to ensure the link is successfully established.

From Site-1, ping 192.168.1.200; and in Site-2, ping 192.168.1.100.

```
C:\WINDOW5\system32\CMD.exe - ping 192.168.1.100 -t
                                                                                                                                                        _ | X
Destination
Destination
Destination
                       host
host
host
                                 unreachable.
                                 unreachable.
                                 unreachable.
Destination host unreachable.
Destination host unreachable.
Ping statistics for 192.168.0.100:
Packets: Sent = 25, Received = 0, Lost = 25 (100% loss),
Control-C
C:\Documents and Settings\Administrator>ping 192.168.1.100 -t
Pinging 192.168.1.100 with 32 bytes of data:
Request timed
Request tip
Reply from
                                                   bytes=32
bytes=32
bytes=32
bytes=32
bytes=32
bytes=32
                                                                     time=7ms
time=1ms
time=2ms
time=1ms
time=2ms
time=1ms
time=1ms
                            .100:
.168.1.100:
.168.1.100:
.168.1.100:
.168.1.100:
                      192.168.1.100:
192.168.1.100:
           from
from
```

The attention of the following hints should be paid:



- 1) The encryption method must be the same as that of both sites if configured.
- 2) Both sites should be Line-of-Sight.
- 3) For the short distance connection less than 1km, please reduce the "Transmit power" of both sites.
- 4) For the long distance connection over 1km, please adjust the "Transmit Distance" to the actual distance or double of the actual distance.



EC Declaration of Conformity

English	Hereby, PLANET Technology Corporation, declares that this 300Mbps 802.11a/n Wireless Outdoor CPE is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	Lietuviškai	Šiuo PLANET Technology Corporation,, skelbia, kad 300Mbps 802.11a/n Wireless Outdoor CPE tenkina visus svarbiausius 1999/5/EC direktyvos reikalavimus ir kitas svarbias nuostatas.
Česky	Společnost PLANET Technology Corporation, tímto prohlašuje, že tato 300Mbps 802.11a/n Wireless Outdoor CPE splňuje základní požadavky a další příslušná ustanovení směrnice 1999/5/EC.	Magyar	A gyártó PLANET Technology Corporation, kijelenti, hogy ez a 300Mbps 802.11a/n Wireless Outdoor CPE megfelel az 1999/5/EK irányelv alapkövetelményeinek és a kapcsolódó rendelkezéseknek.
Dansk	PLANET Technology Corporation, erklærer herved, at følgende udstyr 300Mbps 802.11a/n Wireless Outdoor CPE overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF	Malti	Hawnhekk, PLANET Technology Corporation, jiddikjara li dan 300Mbps 802.11a/n Wireless Outdoor CPE jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC
Deutsch	Hiermit erklärt PLANET Technology Corporation, dass sich dieses Gerät 300Mbps 802.11a/n Wireless Outdoor CPE in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)	Nederlands	Hierbij verklaart , PLANET Technology orporation, dat 300Mbps 802.11a/n Wireless Outdoor CPE in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG
Eestikeeles	Käesolevaga kinnitab PLANET Technology Corporation, et see 300Mbps 802.11a/n Wireless Outdoor CPE vastab Euroopa Nõukogu direktiivi 1999/5/EC põhinõuetele ja muudele olulistele tingimustele.	Polski	Niniejszym firma PLANET Technology Corporation, oświadcza, że 300Mbps 802.11a/n Wireless Outdoor CPE spełnia wszystkie istotne wymogi i klauzule zawarte w dokumencie "Directive 1999/5/EC".
Ελληνικά	ME THN ΠΑΡΟΥΣΑ , PLANET Technology Corporation, $\Delta H \Lambda \Omega N E I$ OTI AYTO 300Mbps 802.11a/n Wireless Outdoor CPEΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ	Português	PLANET Technology Corporation, declara que este 300Mbps 802.11a/n Wireless Outdoor CPE está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Español	Por medio de la presente, PLANET Technology Corporation, declara que 300Mbps 802.11a/n Wireless Outdoor CPE cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE	Slovensky	Výrobca PLANET Technology Corporation, týmto deklaruje, že táto 300Mbps 802.11a/n Wireless Outdoor CPE je v súlade so základnými požiadavkami a ďalšími relevantnými predpismi smernice 1999/5/EC.
Français	Par la présente, PLANET Technology Corporation, déclare que les appareils du 300Mbps 802.11a/n Wireless Outdoor CPE sont conformes aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE	Slovensko	PLANET Technology Corporation, s tem potrjuje, da je ta 300Mbps 802.11a/n Wireless Outdoor CPE skladen/a z osnovnimi zahtevami in ustreznimi določili Direktive 1999/5/EC.
Italiano	Con la presente , PLANET Technology Corporation, dichiara che questo 300Mbps 802.11a/n Wireless Outdoor CPE è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.	Suomi	PLANET Technology Corporation, vakuuttaa täten että 300Mbps 802.11a/n Wireless Outdoor CPE tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Latviski	Ar šo PLANET Technology Corporation, apliecina, ka šī 300Mbps 802.11a/n Wireless Outdoor CPE atbilst Direktīvas 1999/5/EK pamatprasībām un citiem atbilstošiem noteikumiem.	Svenska	Härmed intygar, PLANET Technology Corporation, att denna 300Mbps 802.11a/n Wireless Outdoor CPE står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.