

User Manual



EAP900H
version 1.0

Dual Band N900 Indoor Access Point
Ceiling Mount Design

IMPORTANT

To install this Access Point please refer to the **Quick Installation Guide** included in the product packaging.

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Chapter 1

Product Overview



Introduction

Key Features

- Up to 30 dBm transmit power enabling long range connectivity
- Supports IEEE802.11a/b/g/n wireless standards with up to 450 Mbps data rate on each band.
- Six internal 5 dBi omni-directional MIMO antennas
- Can be monitored after deployment with
- EnGenius EZ Controller™ software for Windows (Free online download)
- Can be used with included power adapter or via PoE with PoE 802.3at - capable switches or injectors
- Dual Band/Three Stream
- Leader in Price/Performance
- Band Steering shifts dual band clients to 5 GHz for better throughput performance
- Secured Guest Network

can be used with
802.3at
capable switches or injectors



Introduction

The EAP900H is a high-powered, long-range dual-band concurrent wireless 802.11a/b/g/n access point with four major functional modes. The EAP900H is designed to operate in numerous environments from large homes, small and medium-sized businesses, multiple-floor offices, hotels and other venues to larger enterprise deployments.

Its high-powered, long-range characteristics make it a cost-effective alternative to ordinary access points that don't have the range and reach to connect to a growing number of wireless users who wish to connect to a large home or business network.

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range may vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environment, and mix of devices in the network. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. For United States of America: Copyright © 2013 EnGenius Technologies, Inc. All rights reserved.

The EAP900H supports the 2.4GHz frequency band under 802.11 b/g/n mode while at the same time providing 5GHz band for communicating or transferring files in a less congested network frequency band.

The EAP900H delivers up to 6x faster wireless speeds and 7x extended coverage than legacy 802.11a/b/g wireless devices. Even though the EAP900H has been designed and engineered for traffic heavy and demanding business environments it is also quite at home in larger house scenarios because it efficiently extends the wireless range of an existing home router, especially in very architecturally-challenging structures to provide whole home connectivity.

To protect sensitive data during wireless transmissions, the EAP900H offers different encryption settings for wireless transmissions including industry-standard WPA and WPA2 encryption. The EAP900H also includes MAC address filtering to allow network administrators to offer network access only to known computers and other devices based on their MAC addresses.

System Requirements

The following are the Minimum System Requirements in order to configure the device.

- Computer with an Ethernet interface or wireless network capability
- Windows OS (XP, Vista, 7), Mac OS, or Linux-based operating systems
- Web-Browsing Application (i.e.: Internet Explorer, Firefox, Safari, or another similar browser application)

Package Contents

The EAP900H package contains the following items (all items must be in package to issue a refund):

- EAP900H Access Point
- Power Adapter
- RJ-45 Ethernet Cable
- CD with User Manual
- Quick Installation Guide
- Wall Mount Screw kit

Applications

Wireless LAN (WLAN) products are easy to install and highly efficient. The following list describes some of the many applications made possible through the power and flexibility of WLANs:

- **Difficult-to-Wire Environments:** There are many situations where wires cannot be installed or deployed easily or cannot be hidden from view. Older buildings, sites with multiple buildings, and/or areas make the installation of a Ethernet-based LAN impossible, impractical or expensive.
- **Temporary Workgroups:** Create temporary workgroups/networks in more open areas within a building - auditoriums, amphitheater classrooms, ballrooms, arenas, exhibition centers, temporary offices where one wants either a permanent or temporary Wireless LAN established.
- **The Ability to Access Real-Time Information:** Doctors/Nurses, Point-of-Sale Employees, and/or Warehouse Workers can access real-time information while dealing with patients, serving customers, and/or processing information.
- **Frequently Changing Environments:** Set up networks in environments that change frequently (i.e.: Show Rooms, Exhibits, etc.).
- **Small Office and Home Office (SOHO) Networks:** SOHO users need a cost-effective, easy and quick installation of a small network.
- **Wireless Extensions to Existing Ethernet-based Networks:** Devices like the EAP900H enable network administrators, installers and end-users to extend the range and reach of an existing Ethernet-based network.
- **Training/Educational Facilities:** Training sites at corporations or students at universities use wireless connectivity to ease access to information, information exchanges, and learning.

Technical Specifications

Standard:

IEEE 802.11a on 5 GHz
IEEE802.11b/g/n on 2.4 GHz
IEEE802.3at

Antenna

Six Internal 5 dBi Omni-directional Antennas

Physical Interface

1 x 10/100/1000 Gigabit Ethernet Port
1 x Reset Button
1 x Power Connector

LED Indicator

Power
WPS
WLAN (Wireless Connection)
LAN

Power Requirements

External Power Adapter
DC IN, 12V / 2A

Operation Modes

Access Point
WDS

WDS Detail

WDS AP
WDS Bridge

Security

WEP (64/128bit)
WPA/WPA2 (TKIP/AES)
Hidden ESSID
MAC address filtering, up to 50 field
L2 Isolation
802.1x Authenticator (MD5/TLS/TTLS/PEAP)
Guest Network

QoS (Quality of Service)

WMM (Wireless Multimedia)

Physical/Environment Conditions

Operating:

Temperature: 32°F to 122°F (0°C to 50°C)
Humidity (non-condensing): 90% or less

Storage:

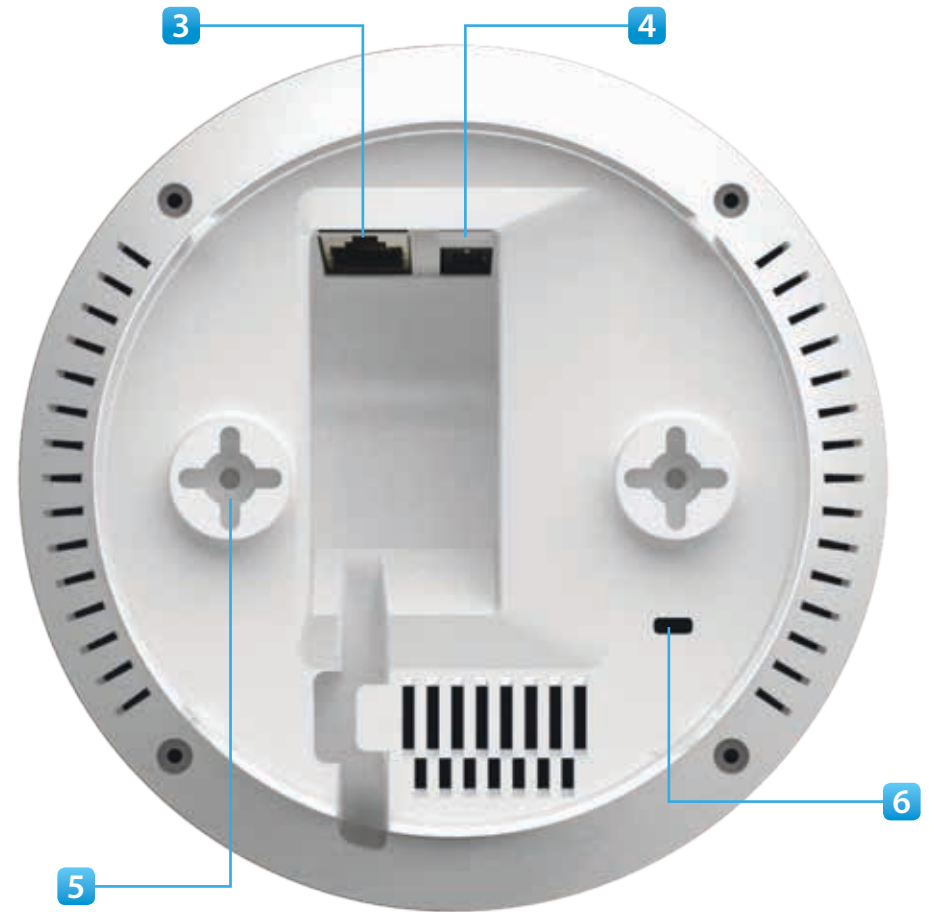
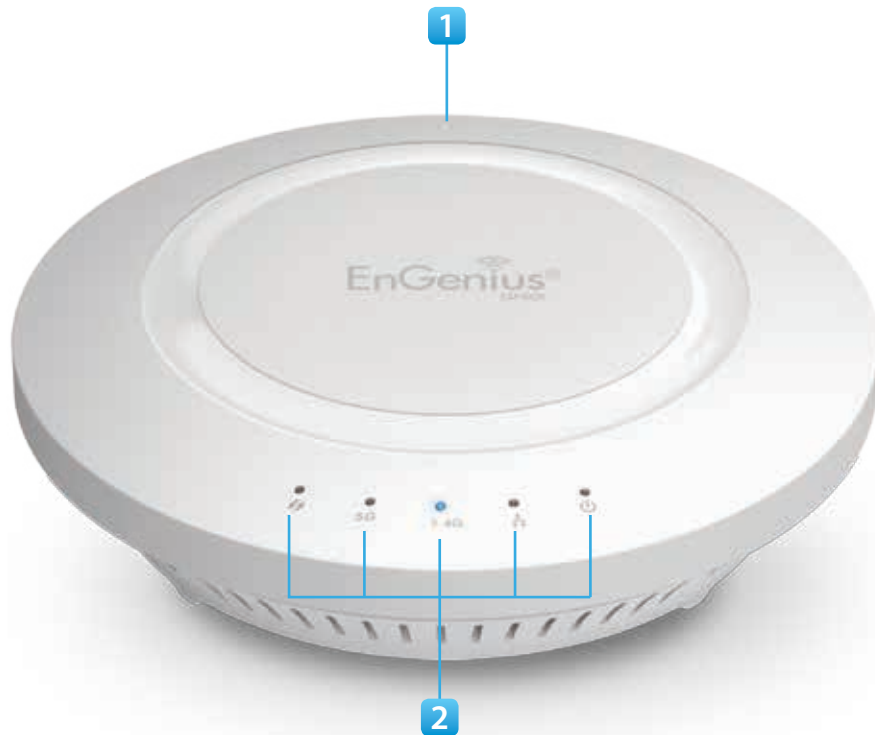
Temperature: -4°F to 140°F (-20°C to 60 °C)
Humidity (non-condensing): 90% or less

Physical Interface

Dimensions and Weights

Diameter: 6.36"

Height: 2.17"



- 1 Reset Button:** One click for reset the device. Press over 10 seconds for reset to factory default.
- 2 LED Indicators:** LED lights for WPS, WLAN 5G, WLAN 2.4G, Ethernet port and Power
- 3 LAN Port (802.3at PoE):** Ethernet port for RJ-45 cable.

- 4 Power Connector:** DC IN for Power.
- 5 Ceiling (Wall) Mount Hole:** Using the provided hardware, the EAP900H can be attached to a ceiling or wall.
- 6 Kensington Security Slot:** To protect your EAP900H, use the Kensington security slot to attach a cable lock.

Chapter 2

Before you begin



Before you Begin

This section will guide you through the installation process. Placement of the EnGenius EAP900H is essential to maximize the access point's performance. Avoid placing the EAP900H in an enclosed space such as a closet, cabinet, or stairwell.

Considerations for Wireless Installation

The operating distance of all wireless devices cannot be pre-determined due to a number of unknown obstacles in the environment that the device is deployed in. These could be the number, thickness, and location of walls, ceilings, or other objects that the EAP900H's wireless signals must pass through. Here are some key guidelines to allow the EAP900H to have optimal wireless range.

- Keep the number of walls and/or ceilings between the EAP900H and other network devices to a minimum. Each wall and/or ceiling can reduce the signal strength, resulting in lower signal strength.
- Building materials makes a difference. A solid metal door and/or aluminum studs may have a significant negative effect on the signal strength of the EAP900H. Locate your wireless devices carefully so the signal can pass through a drywall and/or open doorways. Materials such as glass, steel, metal, concrete, water (example: fish tanks), mirrors, file cabinets and/or brick can also diminish wireless signal strength.
- Interference from your other electrical devices and/or appliances that generate RF noise can also diminish the EAP900H's signal strength. The most common types of devices are microwaves or cordless phones.

Computer Settings

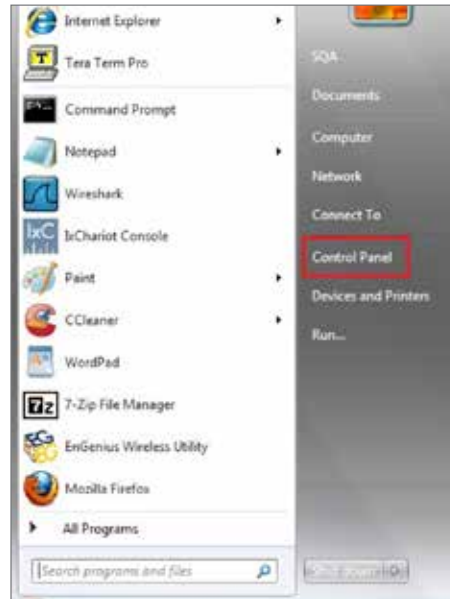
Windows XP / Windows 7

In order to use the EAP900H, you must first configure the TCP/IPv4 connection of your Windows OS computer system.

1. Click **Start** button and open **Control Panel**.



Windows XP



Windows 7

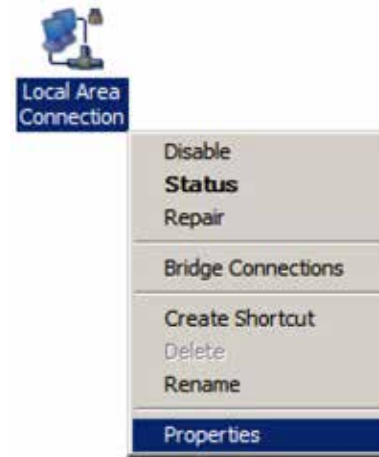
2a. In **Windows XP**, click **Network Connections**.



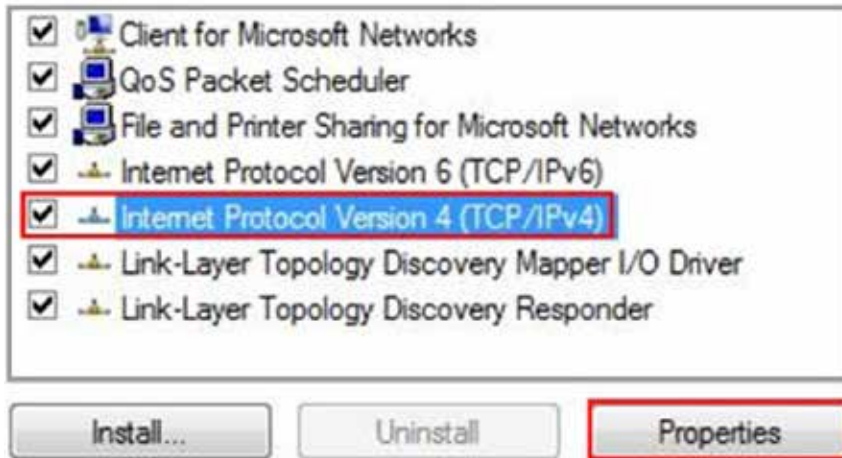
2b. In **Windows 7**, click **View Network Status and Tasks** in the **Network and Internet** section, then select **Change adapter settings**.



3. Right click on **Local Area Connection** and select **Properties**.



4. Select “Internet Protocol Version 4 (TCP/IPv4)” and then select **Properties**.



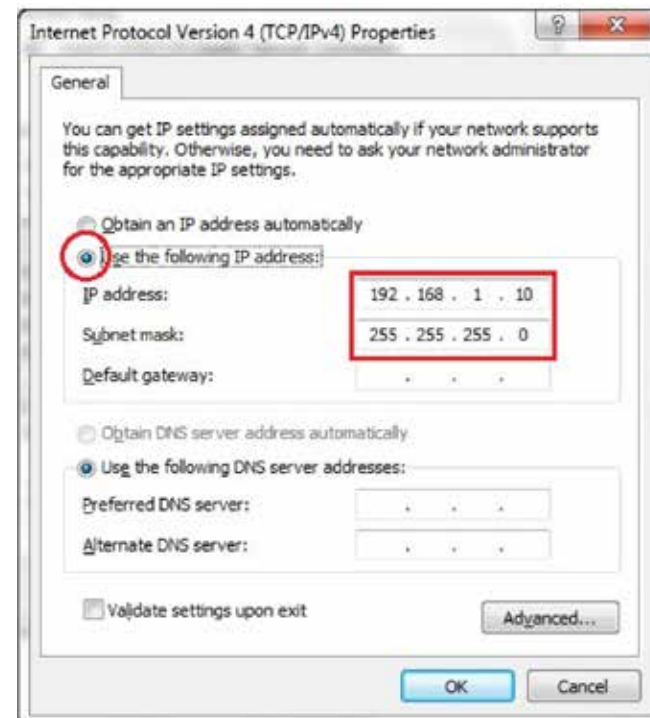
5. Select Use the following IP address and enter an IP address that is different from the EAP900H and subnet mask then click OK.

Note: Ensure that the IP address and subnet mask are on the same subnet as the device.

For example: EAP900H IP address: 192.168.1.1

PC IP address: 192.168.1.2 - 192.168.1.255

PC subnet mask: 255.255.255.0



Apple Mac OS X

1. Go to **System Preferences** (can be opened in the Applications folder or selecting it in the Apple Menu).
2. Select **Network** in the **Internet & Network** section.



3. Highlight **Ethernet**.

4. In **Configure IPv4**, select **Manually**.
5. Enter an IP address that is different from the EAP900H and subnet mask then press **OK**.

Note: Ensure that the IP address and subnet mask are on the same subnet as the device.

For example: EAP900H IP address: 192.168.1.1

PC IP address: 192.168.1.2 - 192.168.1.255

PC subnet mask: 255.255.255.0

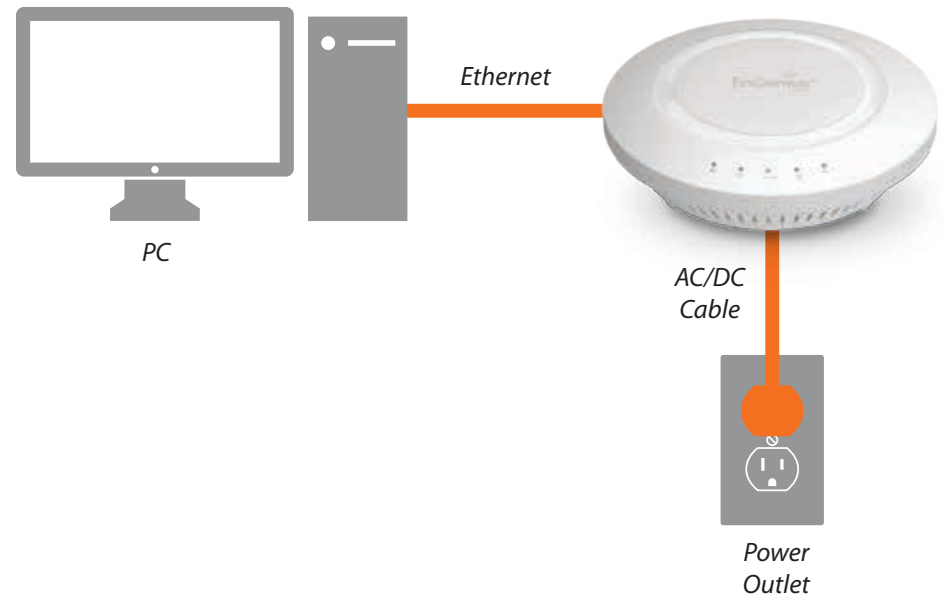
6. Click **Apply** when done.



Hardware Installation

1. Ensure that the computer in use has an Ethernet Controller (RJ-45 Ethernet Port). For more information, verify with your computer's user manual.
2. Connect one end of the Category 5e Ethernet cable into the RJ-45 port of the EAP900H and the other end to the RJ-45 port of the computer. Ensure that the cable is securely connected to both the EAP900H and the computer.
3. Connect the Power Adapter DC connector to the DC-IN port of the EAP900H and the Power Adapter to an available electrical outlet. Once both connections are secure, verify the following:
 - a) Ensure that the POWER light is on (it will be orange).
 - b) Ensure that the 2.4GHz/5GHz WLAN light is on (it will be green for 5G, blue for 2.4G).
 - c) Ensure that the LAN (Computer/EAP900H Connection) light is on (it will be blue).
 - d) Once all three lights are on, proceed to set up the access point using the computer.

This diagram depicts the hardware configuration.



Mounting the EAP900H

Using the provided hardware, the EAP900H can be attached to a ceiling or wall.

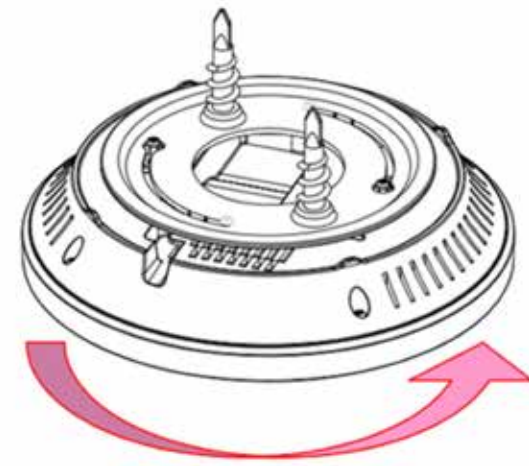
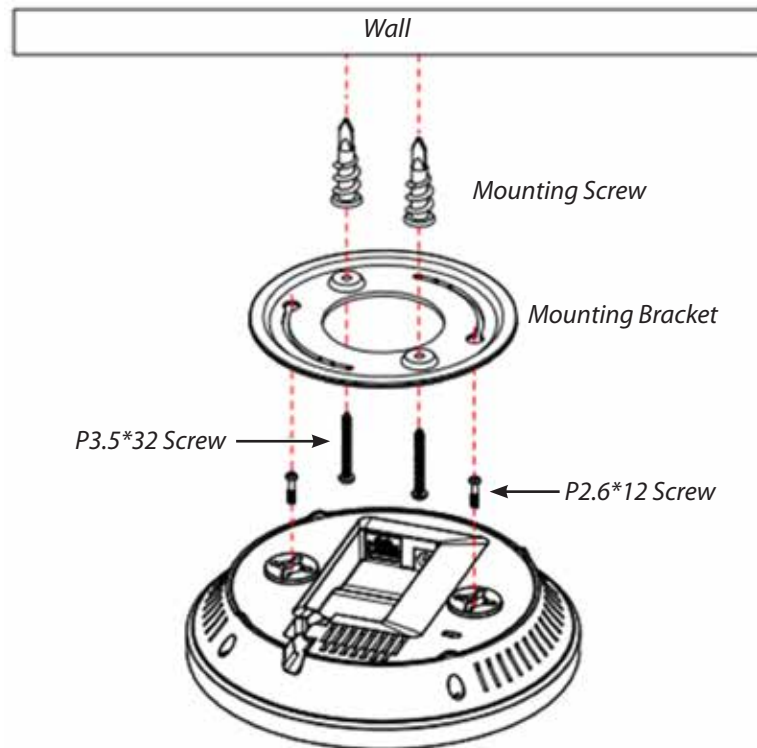
To attach the EAP900H to a ceiling or wall using the mounting bracket:

1. Attach the mounting bracket to the wall or ceiling using the provided wall/ceiling mounting hardware kit.
2. Insert the provided short screws into the bottom cover of the EAP900H.

Leave enough of the screws exposed to ensure that the unit can be attached to the mounting bracket.

If extra space is required, use the provided spacers and long screws from the T-Rail mounting hardware kit to increase the space between the unit and the mounting bracket.

3. Mount the EAP900H on the mounting bracket by rotating the unit clockwise about 90 degrees to secure it in place.



Lock the EAP900H by revolving

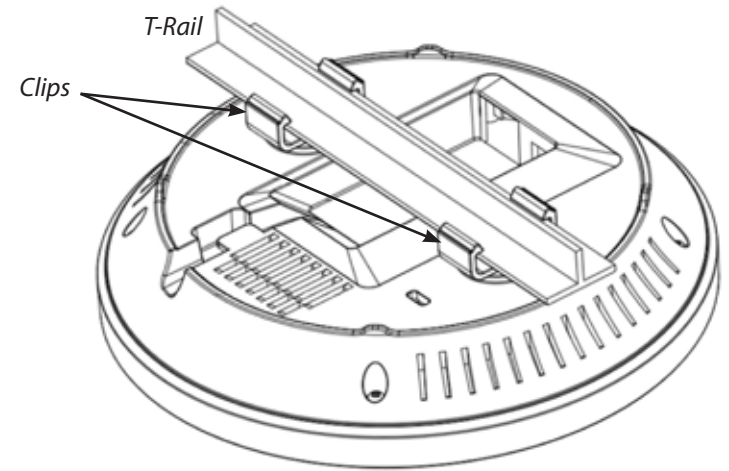
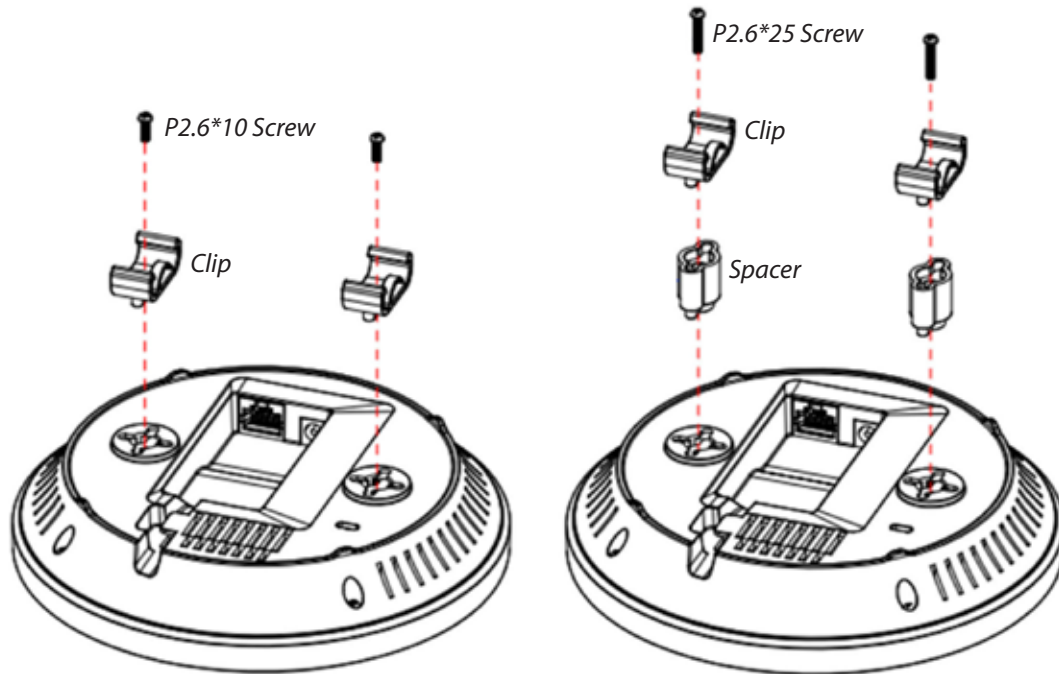
To attach the EAP900H to a ceiling using the provided T-rail connectors:

1. Attach the T-rail connectors to the bottom cover of the EAP900H using the provided short screws.

Note: Two sizes of T-rail connectors are included in the mounting hardware kit: 15/16in (2.38cm) and 9/16in (1.43cm). If extra space is required to accommodate drop ceiling tiles, use the provided spacers and long screws.

2. Line up the connected T-rail connectors with an appropriately sized rail and press the unit onto the rail until it snaps into place.

Note: To protect your EAP900H, use the Kensington security slot to attach a cable lock (cable lock is not included).



Chapter 3

Configuring Your Access Point



Configuring Your Access Point

This section will show you how to configure the device using the web-based configuration interface.

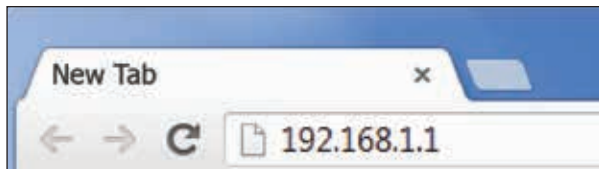
Default Settings

Please use your Ethernet port or wireless network adapter to connect the Access Point.

IP Address	192.168.1.1
Username / Password	admin / admin

Web Configuration

1. Open a web browser (Internet Explorer/Firefox/Safari) and enter the IP Address **http://192.168.1.1**



Note: If you have changed the default LAN IP Address of the Access Point, ensure you enter the correct IP Address.

2. The default username and password are admin. Once you have entered the correct username and password, click the Login button to open the web-base configuration page.



3. If successful, you will be logging in and see the EAP900H User Menu.



Chapter 4

Building a Wireless Network



The EAP900H has the ability to operate in various modes. This chapter describes the operating modes of the EAP900H.

Access Point Mode

In Access Point Mode, EAP900H behaves like a central connection for stations or clients that support IEEE 802.11a/b/g/n networks. The stations and clients must be configured to use the same SSID (Service Set Identifier) and security password to associate with the EAP900H. The EAP900H supports up to eight SSIDs at the same time for secure access.



WDS AP Mode

The EAP900H also supports WDS AP mode. This operating mode allows wireless connections to the EAP900H using WDS technology. In this mode, configure the MAC addresses in both Access Points to enlarge the wireless area by enabling WDS Link settings. WDS supports four AP MAC addresses.



WDS Bridge Mode

In WDS Bridge Mode, the EAP900H can wirelessly connect different LANs by configuring the MAC address and security settings of each EAP900H device. Use this mode when two wired LANs located a small distance apart want to communicate with each other. The best solution is to use the EAP900H to wirelessly connect two wired LANs, as shown in the following figure.

WDS Bridge Mode can establish four WDS links, creating a star-like network.

Note: WDS Bridge Mode does not act as an Access Point. Access Points linked by WDS are using the same frequency channel. More Access Points connected together may lower throughput. This configuration can be susceptible to generate endless network loops in your network, so it is recommended to enable the Spanning Tree function to prevent this from happening.



Chapter 5

Status



The **Status** section contains the following options:

- Main
- 2.4G/5G Wireless Client List,
- 2.4G/5G Connection Status,
- 2.4G/5G WDS Link List
- System Log.

The following sections describe these options.

Save Changes

This page lets you save and apply the settings shown under **Unsaved changes list**, or cancel the unsaved changes and revert them to the previous settings that were in effect.

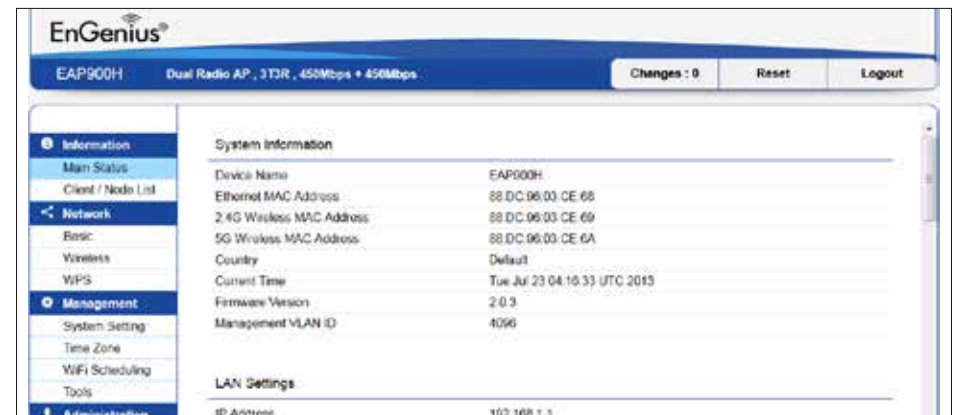


Main Status

Clicking the **Main Status** link under the **Status** menu or clicking **Home** at the top-right of the EAP900H Page shows the status information about the current operating mode.

- The **System Information** section shows general system information such as Device Name, MAC Address, Current Time, Firmware Version, and Management VLAN ID

Note: VLAN ID is only applicable in Access Point or WDS AP mode.



- The **LAN Settings** section shows the Local Area Network settings such as the LAN IP Address, Subnet Mask, and DNS Address.

LAN Settings	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
Primary DNS	0.0.0.0
Secondary DNS	0.0.0.0
DHCP Client	Disable
Spanning Tree Protocol	Disable

- The **Current 2.4 GHz / 5 GHz Wireless Settings** section shows wireless information such as Operating Mode, Frequency, and Channel. Since the EAP900H supports multiple-SSIDs, information about each SSID, the ESSID and security settings, are displayed

Note: Profile Settings is only applicable in Access Point, WDS AP.

Device Setting		
Device Name	EAP900H	
Country/Region	Please Select a Country Code	
Band Steer	Disable	
	<small>NOTE: To enable this function, you must have at least one of the same SSID for both 2.4GHz and 5GHz.</small>	
	2.4GHz Wireless Radio	5GHz Wireless Radio
Operation Mode	Access Point	Access Point
Wireless Mode	802.11 B/G/N Mixed	802.11 A/N Mixed
Channel HT Mode	20/40MHz	40MHz
Extension Channel	Upper Channel	Lower Channel
Channel / Frequency	Auto	Auto

2.4 GHz / 5 GHz Wireless Client List

Clicking the 2.4 GHz /5 GHz Wireless Client List link under the **Status** menu displays the list of clients associated to the EAP900H's 2.4 GHz / 5 GHz, along with the MAC addresses and signal strength for each client. Clicking **Refresh** updates the client list.

Note: Only applicable in Access Point and WDS AP mode.

2.4 GHz / 5 GHz WDS Link List

Click on the 2.4 GHz /5 GHz WDS Link List link under the Status menu. This page displays the current status of the WDS link, including WDS Link ID, MAC Address, Link Status and RSSI.


Note: Only applicable in WDS AP and WDS Bridge mode.

2.4GHz Wireless Radio					
SSID:#	MAC Address	TX(Bytes)	RX(Bytes)	RSSI(dBm)	Kick and Ban
5GHz Wireless Radio					
SSID:#	MAC Address	TX(Bytes)	RX(Bytes)	RSSI(dBm)	Kick and Ban

[Refresh](#)

System Log

The EAP900H automatically logs (records) events of possible interest in its internal memory. To view the logged information, click the **System Log** link under the **Status** menu. If there is not enough internal memory to log all events, older events are deleted from the log. When powered down or rebooted, the log will be cleared.



The screenshot shows a configuration page for the System Log. It is divided into two sections: Syslog and Local Log. The Syslog section has a dropdown menu set to 'Disable' and a text input field for 'Log Server IP Address / Computer Name' containing '0.0.0.0'. The Local Log section has a dropdown menu set to 'Enable'. At the bottom of the page is a blue 'Apply Save' button.

Syslog	
Syslog	Disable ▾
Log Server IP Address / Computer Name	0.0.0.0

Local Log	
Local Log	Enable ▾

Apply Save

Chapter 6

System

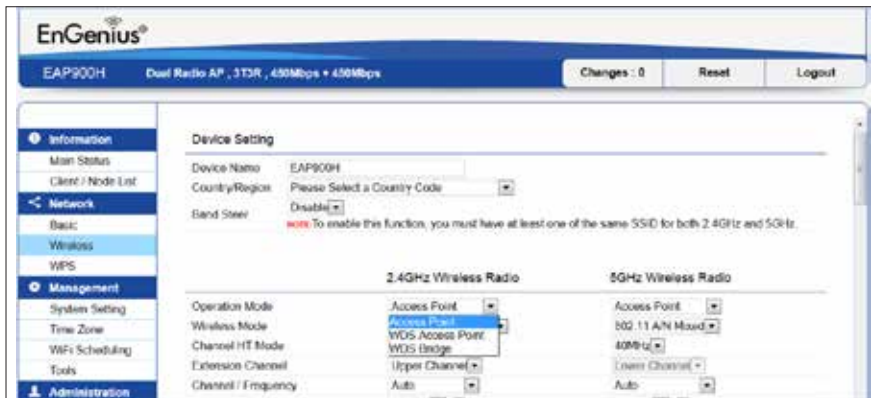


Operation Mode

The EAP900H supports three operating modes:

Access Point, WDS AP and WDS Bridge.

Device Settings



Device Name: Enter a name for the device. The name you type appears in SNMP management. This name is not the SSID and is not broadcast to other devices.

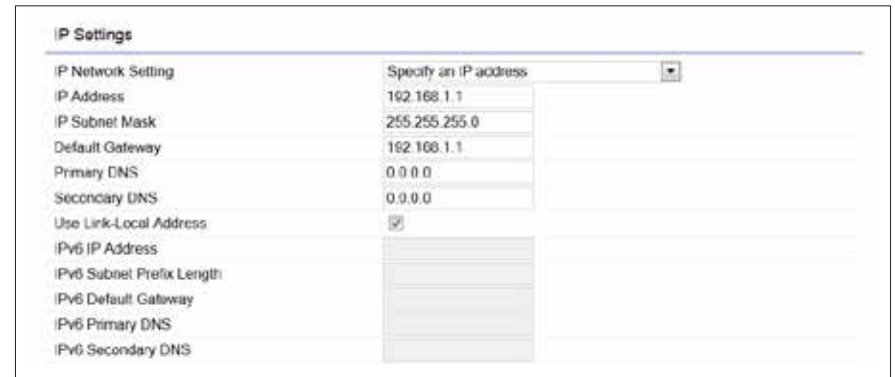
Country/Region: Select a Country/Region to conform to local regulations.

Operation Mode: Use the radio button to select an operating mode.

Accept / Cancel: Click **Accept** to confirm the changes or **Cancel** to cancel and return previous settings.

IP Settings

This page allows you to modify the device's IP settings.



IP Network Setting: Select whether the device IP address will use the static IP address specified in the IP Address field or be obtained automatically when the device connects to a DHCP server.

IP Address: The IP Address of this device.

IP Subnet Mask: The IP Subnet Mask of this device.

Default Gateway: The Default Gateway of this device. Leave it blank if you are unsure of this setting.

Primary / Secondary DNS: The primary / secondary DNS address for this device.

Accept / Cancel: Click **Accept** to confirm the changes or **Cancel** to cancel and return previous settings.

Spanning Tree Setting

This page allows you to modify the Spanning Tree settings. Enabling Spanning Tree protocol will prevent network loops in your LAN network

Spanning Tree Settings		
Spanning Tree Status	Off	
Bridge Hello Time	2	seconds (1-10)
Bridge Max Age	20	seconds (6-40)
Bridge Forward Delay	4	seconds (4-30)
Priority	32768	(0-65535)

Save

Spanning Tree Status: Enable or disable the Spanning Tree function.

Bridge Hello Time: Specify Bridge Hello Time, in seconds. This value determines how often the device sends handshake packets to communicate information about the topology throughout the entire Bridged Local Area Network.

Bridge Max Age: Specify Bridge Max Age, in seconds. If another bridge in the spanning tree does not send a hello packet for a long period of time, it is assumed to be dead.

Bridge Forward Delay: Specify Bridge Forward Delay, in seconds. Forwarding delay time is the time spent in each of the Listening and Learning states before the Forwarding state is entered. This delay is provided so that when a new bridge comes onto a busy network, it analyzes data traffic before participating.

Priority: Specify the Priority Number. A smaller number has greater priority.

Save: Click Save to confirm the changes.

Chapter 7

2.4G / 5G Wireless



Wireless Network

This page displays the current status of the Wireless settings of the EAP900H.

Access Point / WDS AP mode:

	2.4GHz Wireless Radio	5GHz Wireless Radio
Operation Mode	Access Point	Access Point
Wireless Mode	802.11 B/G/N Mixed	802.11 A/N Mixed
Channel HT Mode	20/40MHz	40MHz
Extension Channel	Upper Channel	Lower Channel
Channel / Frequency	Auto	Auto
Transmit Power	20 dBm <input type="checkbox"/> Obey Regulatory Power	20 dBm <input type="checkbox"/> Obey Regulatory Power
Data Rate	Auto	Auto
RTS/CTS Threshold (1 - 2346)	2346	2346
Limited Clients	127 <input type="checkbox"/> Enable	127 <input type="checkbox"/> Enable
Aggregation	Enable <input type="checkbox"/> 32 Frames	Enable <input type="checkbox"/> 32 Frames
AP Detection	50000 Bytes(Max) <input type="button" value="Scan"/>	50000 Bytes(Max) <input type="button" value="Scan"/>

Wireless mode: supports 802.11b/g/n mixed mode in 2.4G and 802.11a/n mixed mode in 5G.

Channel HT Mode: The default channel bandwidth is 20 / 40MHz. The larger the channel, the better the transmission quality and speed.

Extension Channel: Select upper or lower channel. Your selection may affect the Auto channel function.

Channel / Frequency: Select the channel and frequency appropriate for your country's regulation.

Auto: Check this option to enable auto-channel selection.

AP Detection: AP Detection can select the best channel to use by scanning nearby areas for Access Points.

Current Profile: Configure up to eight different SSIDs (4 in WDS AP mode). If many client devices will be accessing the network, you can arrange the devices into SSID groups. Click **Edit** to configure the profile and check whether you want to enable extra SSID.

Accept / Cancel: Click Accept to confirm the changes or Cancel to cancel and return previous settings.

2.4G/5G SSID Profile

2.4G Wireless Settings							
#	Enable	SSID	Edit	Security	Suppressed SSID	Station Separation	Isolation VID
1	<input checked="" type="checkbox"/>	EnGenius03CE69-2 4G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	1
2	<input type="checkbox"/>	EnGenius03CE69_2-2 4G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	2
3	<input type="checkbox"/>	EnGenius03CE69_3-2 4G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	3
4	<input type="checkbox"/>	EnGenius03CE69_4-2 4G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	4
5	<input type="checkbox"/>	EnGenius03CE69_5-2 4G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	5
6	<input type="checkbox"/>	EnGenius03CE69_6-2 4G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	6
7	<input type="checkbox"/>	EnGenius03CE69_7-2 4G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	7
8	<input type="checkbox"/>	EnGenius03CE69_8-2 4G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	8

5G Wireless Settings							
#	Enable	SSID	Edit	Security	Suppressed SSID	Station Separation	Isolation VID
1	<input checked="" type="checkbox"/>	EnGenius03CE6A-5G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	51
2	<input type="checkbox"/>	EnGenius03CE6A_2-5G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	52
3	<input type="checkbox"/>	EnGenius03CE6A_3-5G	Edit	None	<input type="checkbox"/>	<input type="checkbox"/>	53

SSID: Specify the SSID for the current profile.

Suppressed SSID: Check this option to hide the SSID from clients. If checked, the SSID will not appear in the site survey.

Station Separation: Click the appropriate radio button to allow or prevent communication between client devices.

Wireless Security: See the Wireless Security section.

Save / Cancel: Click Save to accept the changes or Cancel to cancel and return previous settings.

Wireless Security

The Wireless Security section lets you configure the EAP900H's security modes: WEP, WPA-PSK, WPA2-PSK, WPA-PSK Mixed, WPA, WPA2, and WPA Mixed. It is strongly recommend to use WPA2-PSK.

WEP Encryption:

2.4G Wireless Security	
Security Mode	WEP
Auth Type	Open System
Input Type	Hex
Key Length	40/64-bit (10 hex digits or 5 ASCII char)
Default Key	1
Key1	
Key2	
Key3	
Key4	

Auth Type: Select Open System or Shared Key.

Input type: ASCII: Regular Text (recommended)

HEX: Hexadecimal Numbers (For advanced users)

Key Length: Select the desired option and ensure the wireless clients use the same setting. Choices are 64, 128, 152-bit password lengths.

Default Key: Select the key you wish to be default. Transmitted data is ALWAYS encrypted using the Default Key; the other Keys are for decryption only. You must enter a Key Value for the Default Key.

Encryption Key #: Enter the key value or values you wish to use. Only the Key selected as Default is required. The others are optional.

WPA-PSK (WPA Pre-Shared Key) Encryption:

2.4G Wireless Security	
Security Mode	WPA-PSK
Encryption	Both(TKIP+AES)
Passphrase	
Group Key Update Interval	3600

Encryption: Select the WPA encryption type you would like. Please ensure that your wireless clients use the same settings.

Passphrase: Wireless clients must use the same key to associate the device. If using ASCII format, the Key must be from 8 to 63 characters in length. If using HEXformat, the Key must be 64 HEX characters in length.

Group Key Update Interval: Specify how often, in seconds, the group key changes.

WPA Encryption: Access Point / WDS AP mode

2.4G Wireless Security	
Security Mode	WPA Mixed-Enterprise ▾
Encryption	Both(TKIP+AES) ▾
Group Key Update Interval	3600
Radius Server	
Radius Port	1812
Radius Secret	
Radius Accounting	Disable ▾
Radius Accounting Server	
Radius Accounting Port	1813
Radius Accounting Secret	
Interim Accounting Interval	600

Encryption: Select the WPA encryption type you would like. Please ensure that your wireless clients use the same settings.

Radius Server: Enter the IP address of the Radius server.

Radius Port: Enter the port number used for connections to the Radius server.

Radius Secret: Enter the secret required to connect to the Radius server.

Group Key Update Interval: Specify how often, in seconds, the group key changes.

Radius Accounting: Enable or disable accounting feature.

Radius Accounting Server Enter the IP address of the Radius accounting server.

Radius Accounting Port Enter the port number used for connections to the Radius accounting server.

Radius Accounting Secret Enter the secret required to connect to the Radius accounting server.

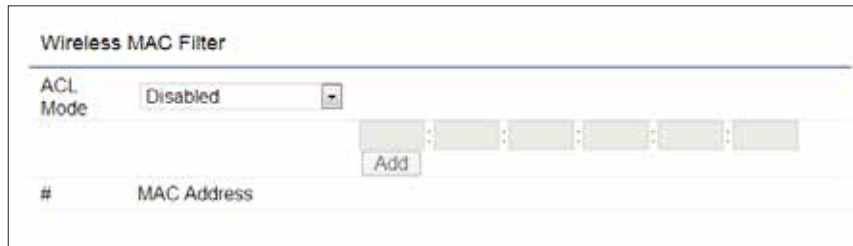
Interim Accounting Interval Specify how often, in seconds, the accounting data sends.

Note: 802.11n does not allow WEP/WPA-PSK TKIP/WPA2-PSK TKIP security mode. The connection mode will automatically change from 802.11n to 802.11g.

Wireless MAC Filtering

Wireless MAC Filtering is used to allow or deny network access to wireless clients (computers, tablet PCs, NAS, smartphones, etc.) according to their MAC addresses. You can manually add a MAC address to restrict the permission to access EAP900H. The default setting is **Disable Wireless MAC Filter**.

Note: Only applicable in Access Point and WDS AP mode.



The screenshot shows the 'Wireless MAC Filter' configuration interface. At the top, the title 'Wireless MAC Filter' is displayed. Below it, the 'ACL Mode' is set to 'Disabled' in a dropdown menu. To the right of the dropdown is an 'Add' button. Below these elements is a table with two columns: '#' and 'MAC Address'. The table is currently empty.

ACL Mode: Determines whether network access is granted or denied to clients whose MAC addresses appear in the MAC Address table on this page. Choices are: Disabled, Deny MAC in the list, or Allow MAC in the list.

MAC Address: Enter the MAC address of the wireless client.

Add: Click Add to add the MAC address to the MAC Address table.

Delete: Delete the selected entries.

Apply: Click Apply to apply the changes.

Wireless Advanced

This page allows you to configure wireless advanced settings. It is recommended that the default settings are used unless the user has experience with more advanced networking features.

2.4G/5G Wireless Advanced

	2.4GHz Wireless Radio	5GHz Wireless Radio
Operation Mode	WDS Access Point	Access Point
Wireless Mode	802.11 B/G/N Mixed	802.11 A/N Mixed
Channel HT Mode	20/40MHz	40MHz
Extension Channel	Upper Channel	Lower Channel
Channel / Frequency	Auto	Auto
Transmit Power	20 dBm <input type="checkbox"/> Obey Regulatory Power	20 dBm <input type="checkbox"/> Obey Regulatory Power
Data Rate	Auto	Auto
RTS/CTS Threshold (1 - 2346)	2346	2346
Limited Clients	127 <input type="checkbox"/> Disable	127 <input type="checkbox"/> Enable
Aggregation	32 Frames 50000 Bytes(Max)	32 Frames 50000 Bytes(Max)
AP Detection	<input type="button" value="Scan"/>	<input type="button" value="Scan"/>

Data Rate: Select a data rate from the drop-down list. The data rate affects throughput of data in the EAP900H. The lower the data rate, the throughput will be lower, but so will the transmission distance.

Transmit Power: Set the power output of the wireless signal.

RTS/CTS Threshold: Specify the threshold package size for RTS/CTS. A small number causes RTS/CTS packets to be sent more often and consumes more bandwidth.

Distance: Specify the distance between Access Points and clients. Longer distances may drop high-speed connections.

Aggregation: Merges data packets into one packet. This option reduces the number of packets, but increases packet sizes.

Accept / Cancel: Click Accept to confirm the changes or Cancel to cancel and return previous settings.

WPS (Wi-Fi Protected Setup)

Wi-Fi Protected Setup (WPS) feature complies with the Wi-Fi Alliance WPS standard and makes it easier to quickly add client devices to an established, security-enabled Wi-Fi network.

WPS reduces the user steps required to configure a network and supports two methods that are familiar to most consumers to configure a network and enable security.

Note: Only applicable in Access Point and WDS AP mode.

WPS (Wi-Fi Protected Setup)

The screenshot shows a web interface titled "2.4G / WPS Setting". It contains the following fields and controls:

WPS	Disable -
WPS Current Status	UnConfigured <input type="button" value="Release Configuration"/>
Self Pin Code	31580649
SSID	EnGenius03CE69-2.4G
Authentication Mode	None
Key Value	None
WPS via Push Button	<input type="button" value="Start to Process"/>
WPS via Pin	<input type="text"/> <input type="button" value="Start to Process"/>

At the bottom left, there is a blue "Save" button.

WPS: Select to **Enable** or **Disable** the WPS feature.

WPS Current Status: Shows whether the WPS function is **Configured** or **unConfigured**. When it is Configured, the WPS has been used to authorize connection between the device and wireless clients.

Self Pin Code: The PIN code of this device.

SSID: The SSID (wireless network name) used when connecting using WPS.

Authentication Mode: Shows the encryption method used by the WPS process.

Passphrase Key: This is the passphrase key that is randomly generated during the WPS process. It is required if wireless clients that do not support WPS attempts to connect to the wireless network.

WPS via Push Button: Click this button to initialize WPS feature using the push button method.

WPS via PIN: Enter the PIN code of the wireless device and click this button to initialize WPS feature using the PIN method.

WDS Link Settings

Using WDS (Wireless Distribution System) will allow a network administrator or installer to connect to Access Points wirelessly. Doing so will extend the wired infrastructure to locations where cabling is not possible or inefficient to implement.

Note: Compatibility between different brands and models of access points is not guaranteed. It is recommended that the WDS network be created using the same models for maximum compatibility.

Also note: All Access Points in the WDS network needs to use the same Channel and Security settings.

To create a WDS network, please enter the MAC addresses of the Access Points that you want included in the WDS. There can be a maximum of four access points.

Note: Only applicable in WDS AP and WDS Bridge mode.

2.4G/5G WDS Link Settings

ID	MAC Address	Mode
1		Disable
2		Disable
3		Disable
4		Disable

Security: Select None or AES from drop-down list.

AES Passphrase: Enter the key values you wish to use. Other AP(s) must use the same key to establish WDS link.

MAC Address: Enter the Access Point's MAC address to which you want to extend the wireless area.

Mode: Select Disable or Enable from the drop-down list.

Accept / Cancel: Click Accept to confirm the changes or Cancel to cancel and return previous settings.

Chapter 8

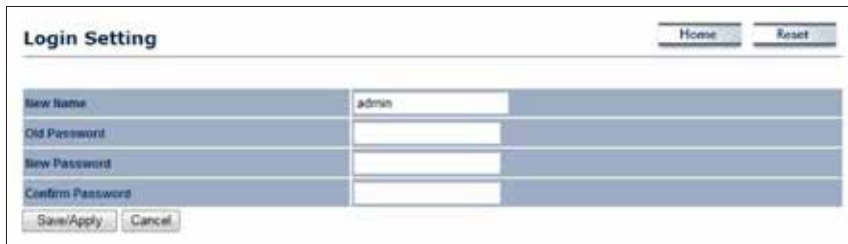
Management



Administration

This page allows you to change the EAP900H username and password. By default, the username is admin and the password is: admin. The password can contain 0 to 12 alphanumeric characters and is case sensitive.

Login Setting



The screenshot shows a web interface titled "Login Setting". At the top right, there are two buttons: "Home" and "Reset". Below the title bar, there are four input fields stacked vertically, each with a label on the left and a text box on the right. The first field is labeled "New Name" and contains the text "admin". The second field is labeled "Old Password" and is empty. The third field is labeled "New Password" and is empty. The fourth field is labeled "Confirm Password" and is empty. At the bottom left of the form area, there are two buttons: "Save/Apply" and "Cancel".

New Name: Enter a new username for logging in to the New Name entry box.

Old Password: Enter the old password for logging in to the Old Password entry box.

New Password: Enter the new password for logging in to the New Password entry box.

Confirm Password: Re-enter the new password in the Confirm Password entry box for confirmation.

Save/Apply / Cancel: Click Save/Apply to apply the changes or Cancel to return previous settings.

Management VLAN Settings

This page allows you to assign a VLAN tag to the packets. A VLAN is a group of computers on a network whose software has been configured so that they behave as if they were on a separate Local Area Network (LAN). Computers on VLAN do not have to be physically located next to one another on the LAN.

Note: Only applicable in Access Point and WDS AP mode.

Management VLAN Settings Home Reset

2.4G Current Profiles

SSID	Security	Isolation	VID	Enable
EnGeniusDTAC6C_2.4G	WPA-PSK Mixed TKIP/AES	<input checked="" type="checkbox"/>	1	<input checked="" type="checkbox"/>
EnGeniusDTAC6C_2.2.4G	None	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>
EnGeniusDTAC6C_3.2.4G	None	<input checked="" type="checkbox"/>	3	<input checked="" type="checkbox"/>
EnGeniusDTAC6C_4.2.4G	None	<input checked="" type="checkbox"/>	4	<input checked="" type="checkbox"/>
EnGeniusDTAC6C_5.2.4G	None	<input checked="" type="checkbox"/>	5	<input checked="" type="checkbox"/>
EnGeniusDTAC6C_6.2.4G	None	<input checked="" type="checkbox"/>	6	<input checked="" type="checkbox"/>
EnGeniusDTAC6C_7.2.4G	None	<input checked="" type="checkbox"/>	7	<input checked="" type="checkbox"/>
EnGeniusDTAC6C_8.2.4G	None	<input checked="" type="checkbox"/>	8	<input checked="" type="checkbox"/>

5G Current Profiles

SSID	Security	Isolation	VID	Enable
EnGeniusDTAC6D_5G	WPA-PSK Mixed TKIP/AES	<input checked="" type="checkbox"/>	51	<input checked="" type="checkbox"/>
EnGeniusDTAC6D_2.5G	None	<input checked="" type="checkbox"/>	52	<input checked="" type="checkbox"/>
EnGeniusDTAC6D_3.5G	None	<input checked="" type="checkbox"/>	53	<input checked="" type="checkbox"/>
EnGeniusDTAC6D_4.5G	None	<input checked="" type="checkbox"/>	54	<input checked="" type="checkbox"/>
EnGeniusDTAC6D_5.5G	None	<input checked="" type="checkbox"/>	55	<input checked="" type="checkbox"/>
EnGeniusDTAC6D_6.5G	None	<input checked="" type="checkbox"/>	56	<input checked="" type="checkbox"/>
EnGeniusDTAC6D_7.5G	None	<input checked="" type="checkbox"/>	57	<input checked="" type="checkbox"/>
EnGeniusDTAC6D_8.5G	None	<input checked="" type="checkbox"/>	58	<input checked="" type="checkbox"/>

Caution: If you reconfigure the Management VLAN ID, you may lose connectivity to the access point. Verify that the switch and DHCP server can support the reconfigured VLAN ID, and then re-connect to the new IP address.

Management VLAN ID

No VLAN tag

Specified VLAN ID:
(Must be in the range 1 - 4094.)

Accept Cancel

Profile Isolation: Restricted client to communicate with different VID by selecting the radio button.

VLAN ID: Specify the VLAN tag for each profile.

Management VLAN ID: If your network includes VLANs, you can specify a VLAN ID for packets pass through the Access Point with a tag. Otherwise, select No VLAN tag.

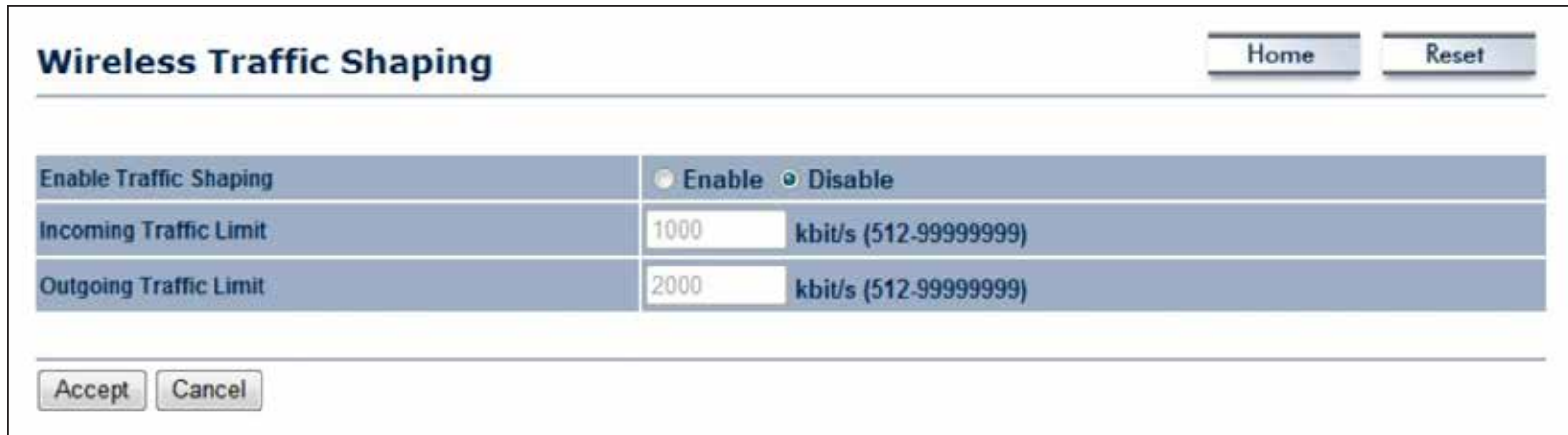
Accept / Cancel: Click Accept to confirm the changes or Cancel to cancel and return previous settings.

Note:

1. If you reconfigure the Management VLAN ID, you may lose your connection to the EAP900H. Verify that the DHCP server supports the reconfigured VLAN ID and then reconnect to the EAP900H using the new IP address.
2. Clicking Accept does not apply the changes. To apply them, use Status > Save/Load (see section 5.1).

Wireless Traffic Shaping

Traffic shaping regulates the flow of packets leaving an interface to deliver improved Quality of Service.



The screenshot shows a web-based configuration page titled "Wireless Traffic Shaping". At the top right, there are "Home" and "Reset" buttons. The main content area contains three rows of settings:

Enable Traffic Shaping	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Incoming Traffic Limit	1000 kbit/s (512-99999999)
Outgoing Traffic Limit	2000 kbit/s (512-99999999)

At the bottom left, there are "Accept" and "Cancel" buttons.

Enable Traffic Shaping: Check this option to enable wireless traffic shaping.

Incoming Traffic Limit: Specify the wireless transmission speed used for downloading.

Outgoing Traffic Limit: Specify the wireless transmission speed used for uploading.

Accept / Cancel: Click Accept to confirm the changes or Cancel to cancel and return previous settings.

SNMP Settings

This page allows you to assign the Contact Details, Location, Community Name, and Trap Settings for Simple Network Management Protocol (SNMP). This is a networking management protocol used to monitor network attached devices. SNMP allows messages (called protocol data units) to be sent to various parts of the network. Upon receiving these messages, SNMP compatible devices (called agents) return the data stored in their Management Information Bases

SNMP Settings	
SNMP	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Contact	<input type="text"/>
Location	<input type="text"/>
Community Name (Read Only)	public
Community Name (Read/Write)	private
Trap Destination Address	<input type="text"/>
Trap Destination Community Name	public
SNMPv3	<input checked="" type="radio"/> v3Enable <input type="radio"/> v3Disable
User Name	admin
Auth Protocol	MDS
Auth Key	12345678
Priv Protocol	DES
Priv Key	12345678
Engine ID	<input type="text"/>

Save/Apply Cancel

SNMP Enable/Disable: Enable or Disable SNMP feature.

Contact: Specify the contact details of the device

Location: Specify the location of the device.

Community Name (Read Only): Specify the password for the SNMP community for read only access.

Community Name (Read/Write): Specify the password for the SNMP community with read/write access.

Trap Destination Address: Specify the IP address of the computer that will receive the SNMP traps.

Trap Destination Community Name: Specify the password for the SNMP trap community.

SNMPv3: Enable or Disable SNMPv3 feature.

User Name: Specify the username for SNMPv3.

Auth Protocol: Select the authentication protocol type: MDS or SHA.

Auth Key: Specify the authentication key for authentication.

Priv Protocol: Select the privacy protocol type: DES.

Priv Key: Specify the privacy key for privacy.

Engine ID: Specify the engine ID for SNMPv3.

Save/Apply / Cancel: Click Save/Apply to apply the changes or Cancel to return previous settings.

Backup/Restore

This page allows you to save the current device configurations. When you save the configurations, you also can reload the saved configurations into the device through the Restore Saved Settings from A File section. If extreme problems occur, or if you have set the EAP900H wrongly, you can use the Factory Default button in the Revert to Factory Default Settings section to restore all the configurations of the EAP900H to the original default settings.

Save A Copy of Current Settings: Click Backup to save the current configured settings.

Restore Saved Settings from A File: To restore settings that have been previously backed up, click Browse, select the file, and click Restore.

Revert to Factory Default Settings: Click Factory Default button to restore the EAP900H to its factory default settings.

Backup/Restore Settings Home Reset

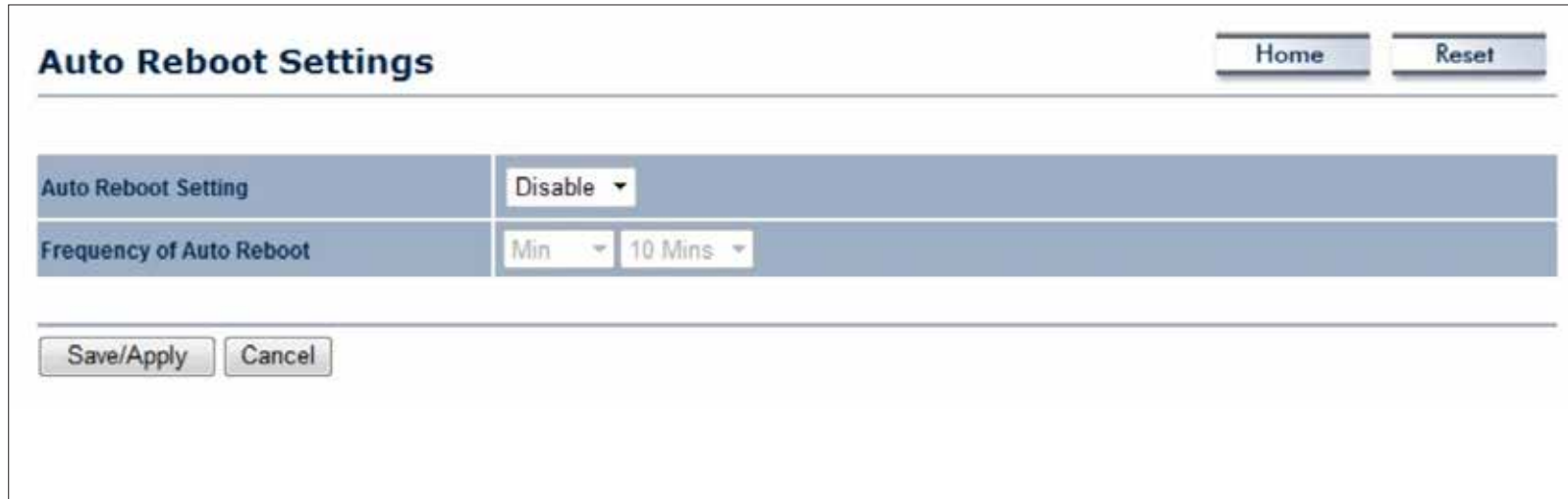
Save A Copy of Current Settings Backup

Restore Saved Settings from A File Browse... Restore

Revert to Factory Default Settings Factory Default

Auto Reboot Settings

You can specify how long to reboot the EAP900H periodically.



The screenshot shows a web interface for configuring auto-reboot settings. At the top left is the title "Auto Reboot Settings". At the top right are two buttons: "Home" and "Reset". Below the title is a table with two rows. The first row is labeled "Auto Reboot Setting" and has a dropdown menu set to "Disable". The second row is labeled "Frequency of Auto Reboot" and has two dropdown menus: the first is set to "Min" and the second is set to "10 Mins". At the bottom of the form are two buttons: "Save/Apply" and "Cancel".

Auto Reboot Settings		Home	Reset
Auto Reboot Setting	Disable		
Frequency of Auto Reboot	Min	10 Mins	

Save/Apply Cancel

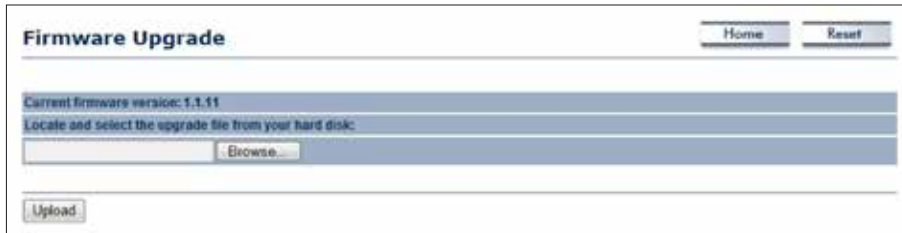
Auto Reboot Setting: Enable or disable the auto reboot function.

Frequency of Auto Reboot: To specify the time to reboot the EAP900H by Min, Hour, Day or Week.

Save/Apply / Cancel: Click Save/Apply to apply the changes or Cancel to return previous settings.

Firmware Upgrade

This page allows you to upgrade the firmware of the EAP900H



The screenshot shows the 'Firmware Upgrade' web page. At the top right are 'Home' and 'Reset' buttons. Below the title, it displays 'Current firmware version: 1.1.11'. A text prompt says 'Locate and select the upgrade file from your hard disk:' followed by a text input field and a 'Browse...' button. At the bottom left is an 'Upload' button.

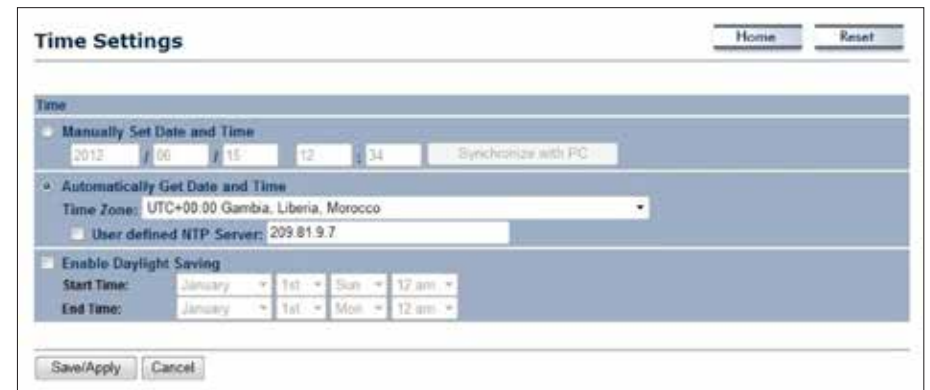
To perform the Firmware Upgrade:

1. Click the Browse button and navigate the OS File System to the location of the upgrade file.
2. Select the upgrade file. The name of the file will appear in the Upgrade File field.
3. Click the Upload button to commence the firmware upgrade.

Note: The device is unavailable during the upgrade process and must restart when the upgrade is completed. Any connections to or through the device will be lost.

Time Setting

This page allows you to set the internal clock of the EAP900H.



The screenshot shows the 'Time Settings' web page. At the top right are 'Home' and 'Reset' buttons. The page is titled 'Time' and has three main sections: 'Manually Set Date and Time' with date and time pickers and a 'Synchronize with PC' button; 'Automatically Get Date and Time' with a 'Time Zone' dropdown (set to 'UTC+00:00 Gambia, Liberia, Morocco') and a 'User defined NTP Server' input field (set to '209.81.9.7'); and 'Enable Daylight Saving' with 'Start Time' and 'End Time' pickers. At the bottom are 'Save/Apply' and 'Cancel' buttons.

Manually Set Date and Time: Manually specify the date and time.

Automatically Get Date and Time: Select a time zone from the drop-down list and check whether you want to enter the IP address of an NTP server or use the default NTP server to get have the internal clock set automatically.

Enable Daylight Saving: Check whether daylight savings applies to your area.

Log

This page allows you to setup Syslog and local log functions of the EAP900H.



Syslog: Enable or disable the syslog function.

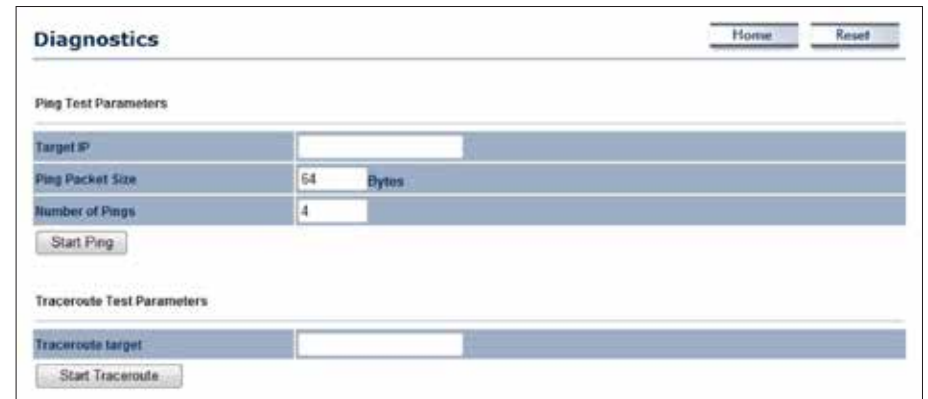
Log Server IP Address: Enter the IP address of the log server.

Local Log: Enable or disable the local log service.

Save/Apply / Cancel: Click Save/Apply to apply the changes or Cancel to return previous settings.

Diagnostics

This page allows you to analyze the connection quality of the EAP900H and trace the routing table to a target in the network.



Target IP: Enter the IP address you would like to search.

Ping Packet Size: Enter the packet size of each ping.

Number of Pings: Enter the number of times you want to ping.

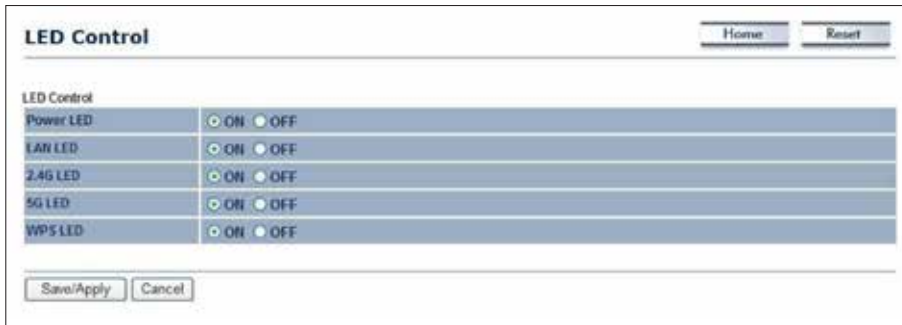
Start Ping: Click Start Ping to begin pinging target device (via IP).

Traceroute Target: Enter an IP address or domain name you want to trace.

Start Traceroute: Click Start Traceroute to begin the trace route operation.

LED Control

This page allows you to control LED on/off for Power, LAN interface, 2.4G/5G WLAN interface and WPS



The screenshot shows the 'LED Control' web page. At the top right, there are 'Home' and 'Reset' buttons. The main content area is titled 'LED Control' and contains a table with five rows, each representing a different LED type. Each row has two radio buttons: 'ON' and 'OFF'. The 'ON' radio button is selected for all five rows. At the bottom left, there are 'Save/Apply' and 'Cancel' buttons.

LED Control	ON	OFF
Power LED	<input checked="" type="radio"/>	<input type="radio"/>
LAN LED	<input checked="" type="radio"/>	<input type="radio"/>
2.4G LED	<input checked="" type="radio"/>	<input type="radio"/>
5G LED	<input checked="" type="radio"/>	<input type="radio"/>
WPS LED	<input checked="" type="radio"/>	<input type="radio"/>

Reset

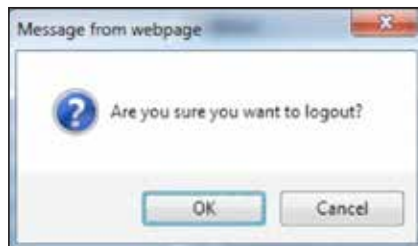
In some circumstances, it may be required to force the device to reboot. Click on **Reboot** the Device to reboot the EAP900H.



The screenshot shows the 'Reset' web page. At the top right, there are 'Home' and 'Reset' buttons. The main content area is titled 'Reset' and contains a blue informational message: 'The System Settings section allows you to reboot the device, or restore the device to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules you have created.' Below this message, there are two buttons: 'Reboot the Device' and 'Restore to Factory Defaults'.

Logout

Click **Logout** in Management menu to logout.



Appendix



Appendix A

Federal Communication Commission Interference Statement

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

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



FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

IMPORTANT NOTE: Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Appendix B - IC Interference Statement

Industry Canada Statement

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.



Caution:

- (i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.



Avertissement:

- (i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

FOR MOBILE DEVICE USAGE Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Pour l'utilisation de dispositifs mobiles) Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

Appendix C - CE Interference Statement

Europe - EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- **EN60950-1**
Safety of Information Technology Equipment
- **EN50385**
Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz - 300 GHz)
- **EN 300 328**
Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
- **EN 301 893**
Broadband Radio Access Networks (BRAN); 5 GHz high performance RLAN; Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive
- **EN 301 489-1**
Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
- **EN 301 489-17**
Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

This device is a 5GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

CE 0560

Česky [Czech]	[Jméno výrobce] tímto prohlašuje, že tento [typ zařízení] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede [fabrikantens navn] erklærer herved, at følgende udstyr [udstyrets typebetegnelse] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erkläre [Name des Herstellers], dass sich das Gerät [Gerätetyp] in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab [tootja nimi = name of manufacturer] seadme [seadme tüüp = type of equipment] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, [name of manufacturer], declares that this [type of equipment] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente [nombre del fabricante] declara que el [clase de equipo] cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ [name of manufacturer] ΔΗΛΩΝΕΙ ΟΤΙ [type of equipment] ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

Français [French]	Par la présente [nom du fabricant] déclare que l'appareil [type d'appareil] est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente [nome del costruttore] dichiara che questo [tipo di apparecchio] è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo [name of manufacturer / izgatavotāja nosaukums] deklarē, ka [type of equipment / iekārtas tips] atbilst Direktīvas 1999/ 5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo [manufacturer name] deklaruoja, kad šis [equipment type] atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart [naam van de fabrikant] dat het toestel [type van toestel] in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, [isem tal-manifattur], jiddikjara li dan [il-mudal tal-prodott] jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, [gyártó neve] nyilatkozom, hogy a [... típus] megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym [nazwa producenta] oświadczam, że [nazwa wyrobu] jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	[Nome do fabricante] declara que este [tipo de equipamento] está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	[Ime proizvajalca] izjavlja, da je ta [tip opreme] v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	[Meno výrobcu] týmto vyhlasuje, že [typ zariadenia] spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	[Valmistaja = manufacturer] vakuuttaa täten että [type of equipment = laitteen tyyppimerkintä] tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar [företag] att denna [utrustningstyp] står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.