4ipnet®
for your IP network

Product Handbook

EAP760 V1.00

Enterprise Access Point

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FCC CAUTION

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 or more of the following measures:

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

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 device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device is restricted to indoor use when operated in the 5.15 to 5.25 GHz frequency range.

※ FCC requires this product to be used indoors for the frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

IMPORTANT NOTE:

FCC 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.

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CE CAUTION

Declaration of Conformity with Regard to the 1999/5/EC (R&TTE Directive) for
European Community, Switzerland, Norway, Iceland, and Liechtenstein
Model: EAP760

For 2.4 GHz radios, the device has been tested and passed the requirements of the following standards, and hence fulfills the EMC and safety requirements of R&TTE Directive within the CE marking requirement.

• Radio: EN 300.328
• EMC: EN 301.489-1, EN 301.489-17,
• EMC: EN 55022 Class B, EN 55024 + A1 + A2 including the followings:
EN 61000-3-2, EN 61000-3-3.
EN 61000-4-2, EN 61000-4-3, EN 61000-4-4,
EN 61000-4-5, EN 61000-4-6, EN 61000-4-11
• Safety: EN 60950-1 + A11,

Caution:

- This declaration is only valid for configurations (combinations of software, firmware, and hardware) provided and supported by 4ipnet Inc. The use of software or firmware not provided and supported by 4ipnet Inc. may result in the equipment no longer being compliant with the regulatory requirements.

European standards dictate maximum radiated transmit power of 100mW EIRP and frequency range 2.400-2.4835 GHz. This equipment is intended to be used in all EU and EFTA countries. Outdoor use may be restricted to certain frequencies and/or may require a license for operation. Contact your local regulatory authority for compliance.

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Preface

4ipnet EAP760 is a high-end, dual radio 802.11 b/g/n + ac MIMO Access Point (AP) with the best performance for business and industrial applications and is compliant with the latest industrial wireless security standards that are required in the tightly secured enterprise network environments.

EAP760 makes the wireless communication fast, secure and easy. It supports business grade security such as 802.1X, and Wi-Fi Protected Access (WPA and WPA2). The EAP760 supports multiple point-to-point wireless links to form wider wireless network coverage.

EAP760 also features multiple ESSIDs with VLAN tags and multiple Virtual APs; great for enterprise applications, such as separating traffic from different departments using different ESSIDs. The PoE Uplink port is able to receive power from Power over Ethernet (PoE) sourcing devices.

This Quick Installation Guide provides instructions and reference materials to get you started with 4ipnet EAP760.

Package Contents

1. 4ipnet EAP760 x 1
2. Quick Installation Guide (QIG) x 1
3. Wall Mount Kit x 1

It is recommended to keep the original packing material for possible future shipment when repair or maintenance is required. Any returned product should be packed in its original packaging to prevent damage during delivery.

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System Overview

EAP760 Front View

1	**External Antenna**	External antennas via SMA connectors. 1a, 1b and 1c corresponds to Ant1, Ant2 and Ant3 of the system.
2	**LED Indicator**	An LED indicator is available to show the AP's operation status. Green indicates power on, and orange indicates WES' status.

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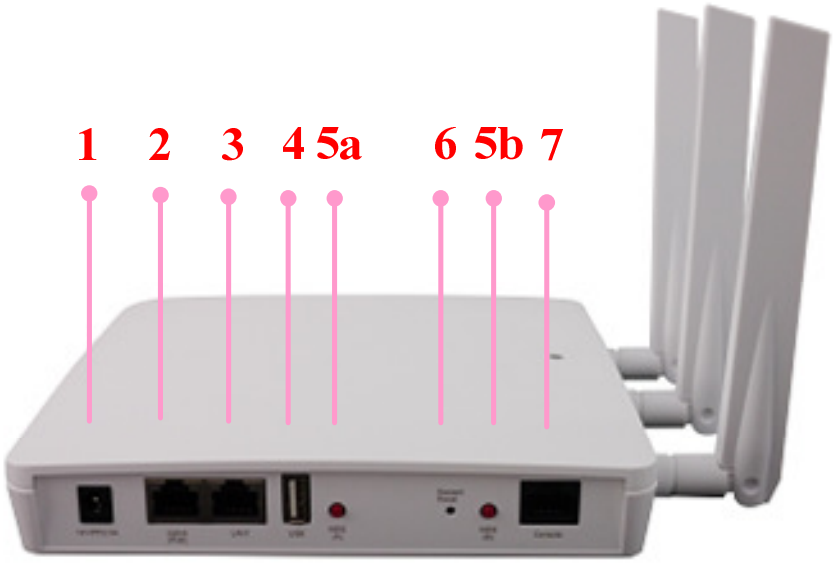

EAP760 Back View

1	**12V ⎓ 2.5 A**	Attach power adaptor here
2	**Uplink (PoE) Port**	Offers uplink connection. This port can be used to connect to a controller, gateway, or directly to the Internet. 802.3at PoE is also supported
3	**LAN 1 Port**	The ports for connections with LAN side devices
4	**USB Port**	USB interface reserved for future use
5a	**WES Button (A)**	For IT administrators to easily setup WDS links with the RF card (A).
5b	**WES Button (B)**	For IT administrators to easily setup WDS links with the RF card (B).
6	**Restart / Reset**	Press once to restart the system; to reset the system to factory default settings, hold for more than 5 seconds.
7	**Console Port**	To access EAP760 via the console interface.

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Hardware Installation

Please follow the steps mentioned below to install the hardware of EAP760:

1. Place the EAP760 at the best location.

The best location for EAP760 is usually at the center of your intended wireless network.

2. Connect the EAP760 to your network device.

Connect one end of the Ethernet cable to the Uplink port of EAP760 and the other end of the cable to a switch, a router, or a hub. EAP760 is then connected to your existing wired LAN network.

There are two ways to supply power over to EAP760.

3. Connect the DC power adapter to the EAP760 power socket.

EAP760 Uplink port is capable of receiving DC currents. Connect an IEEE 802.3at-compliant PSE device (e.g. a PoE-switch) to the Uplink port of EAP760 with the Ethernet cable.

Now, the Hardware Installation is complete.

- *Using a different power adapter may damage this system.*
- *To verify the wired connection between EAP760 and you switch / router / hub, please also check the LED status indicator of the respective network devices.*

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Getting Started

4ipnet EAP760 supports web-based configuration. When hardware installation is complete, EAP760 can be configured through a PC by using a web browser such as Mozilla Firefox 2.0 or Internet Explorer version 6.0 and above.

The default values of LAN IP address and subnet mask of EAP760 are:

IP Address: *192.168.1.1*

Subnet Mask: *255.255.255.0*

Steps:

1. To access the Web Management Interface, connect the administrator PC to the Uplink port of EAP760 via an Ethernet cable. Then, set a static IP address on the same subnet mask as EAP760 in TCP/IP of your PC, such as the following example:

   IP Address: *192.168.1.100*

   Subnet Mask: *255.255.255.0*

2. Launch the web browser on your PC by entering the IP address of EAP760 (**https://192.168.1.1**) in the address field, and then press ***Enter***.

Example of entering EAP760's default IP Address via a web browser

3. The following Admin Login Page will appear. Enter **"admin"** for both the *Username* and *Password* fields, and then click ***Login***.

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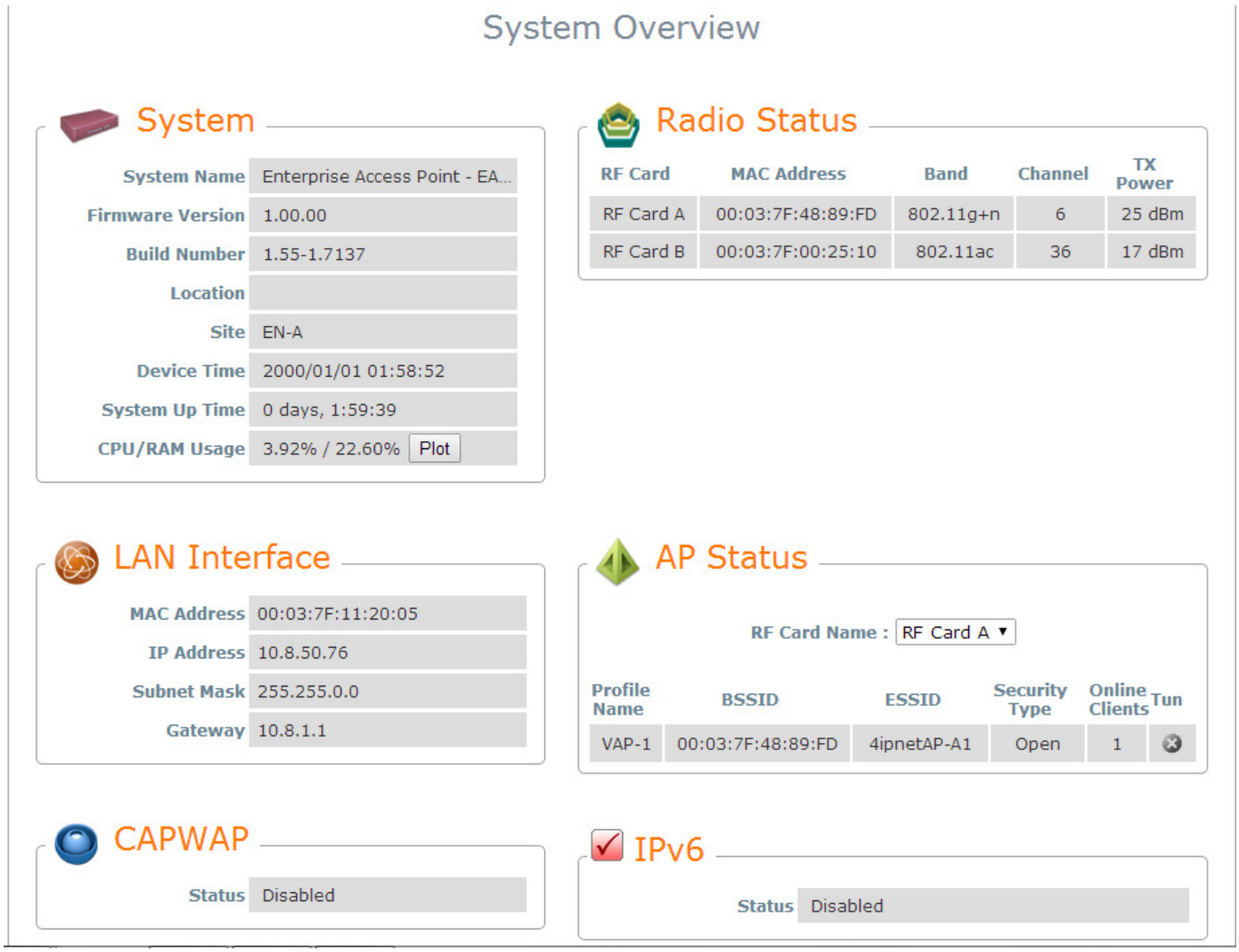
Administrator Login Page

4. After a successful login to EAP760, a **System Overview** page of the Web Management Interface will appear, as depicted below.



The Web Management Interface - System Overview Page

5. To logout, simply click on the ***Logout*** button at the upper right hand corner of the interface to return to the Administrator Login Page. Click ***OK*** to logout.

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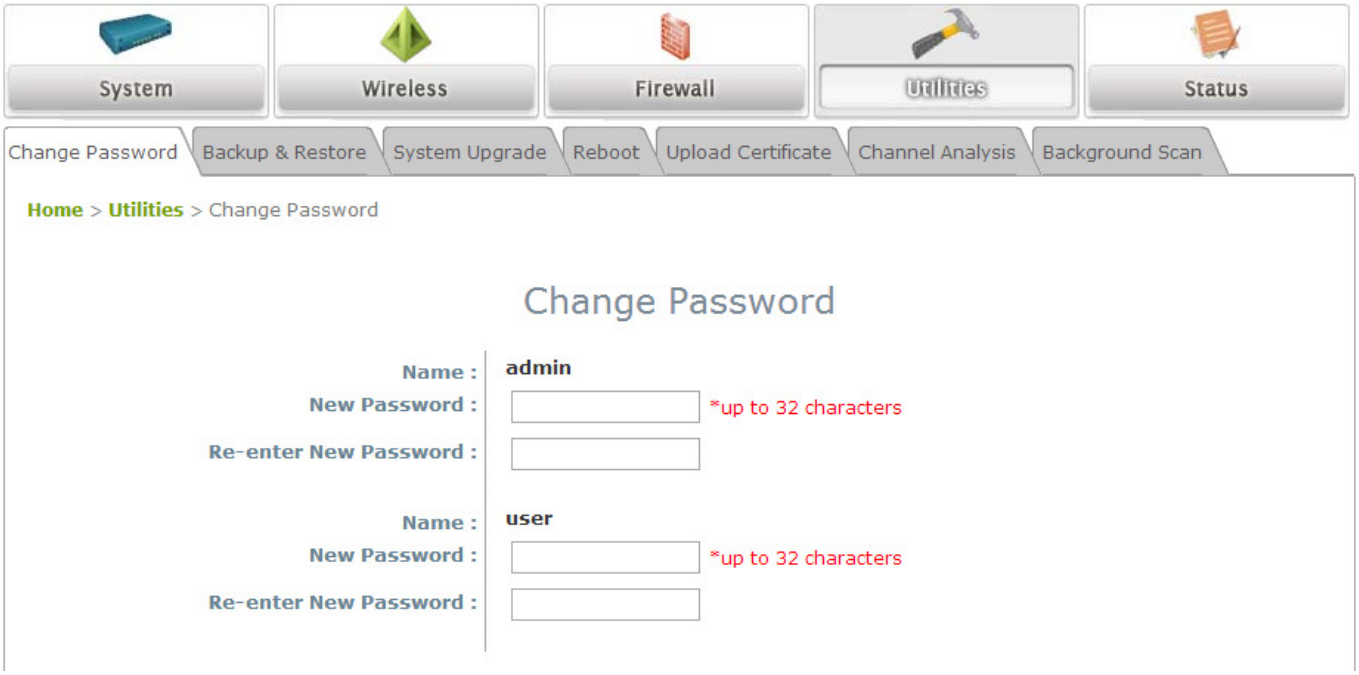
Common Settings

Step 1. Change Administrator's Password



Change Password Page

- Click on the **Utilities** icon on the main menu, and select the **Change Password** tab.
- Enter the old password and then a new password with a length of up to 32 characters, and retype it in the **Re-enter New Password** field.
- Click ***SAVE*** to save the changes.

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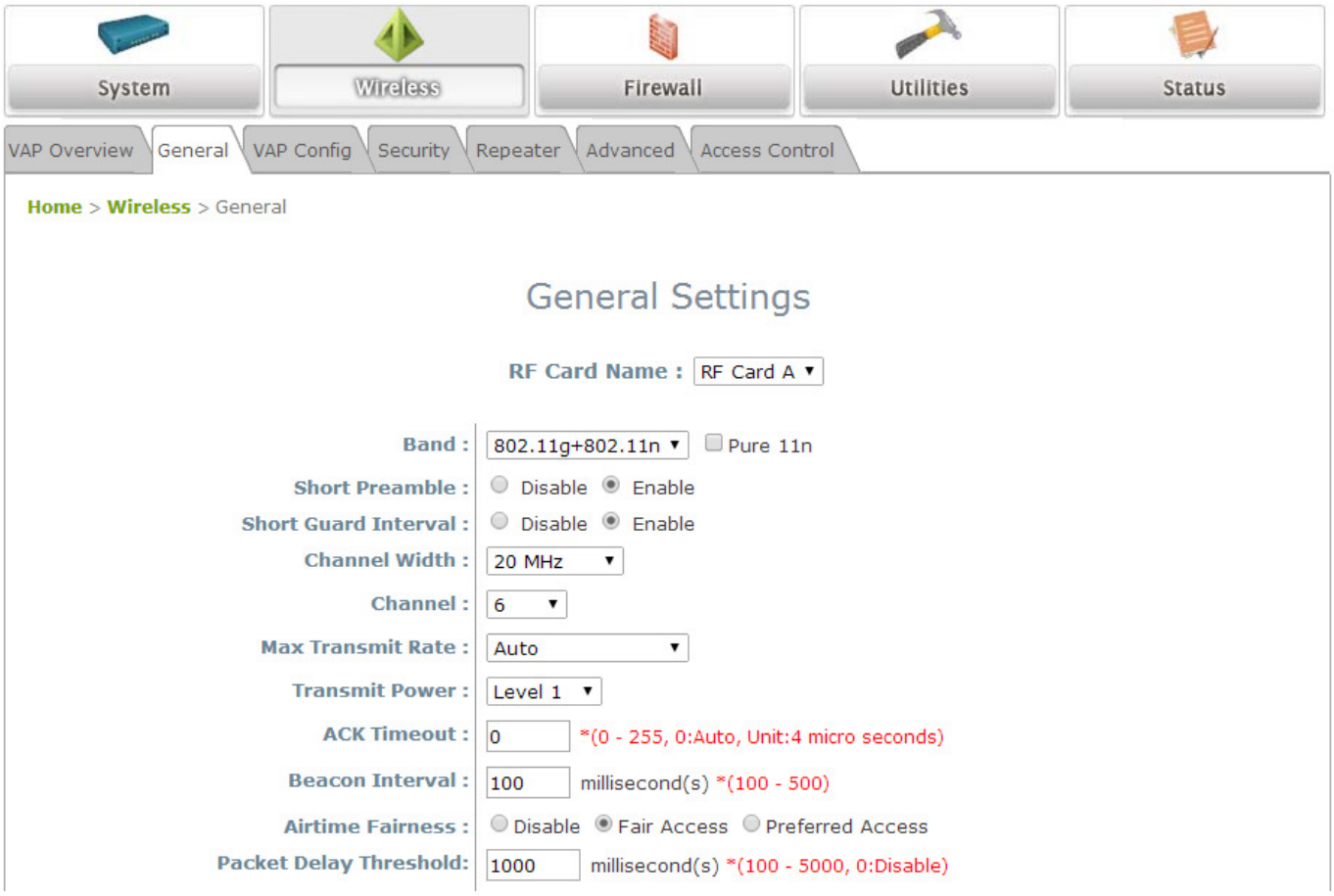
Step 2. Configure General AP (Access Point) Settings



Wireless General Settings Page

- Click on the **Wireless** icon on the main menu, and then select the **General** tab.
- Determine the **Band** and **Channel** settings:

  Select your preferred **Band** and **Channel** for you wireless connection. For example, select **802.11g+802.11n** for the band and 6 for the channel. For a detailed guide to configuration, please refer to the EAP760 User Manual.

Note: Admin should be aware of Dynamic Frequency Selection (DFS) mandated on some channels of the 5GHz band. When an EAP760 detects interference, this mechanism will limit the ability to broadcast the SSID on one of the channels listed below:

1) Country Code: 840 (US)
DFS Channels: 52 56 60 64 100 104 108 112 116 120 124 128 132 136 140

2) Country Code: 250 (EU)
DFS Channels: 52 56 60 64

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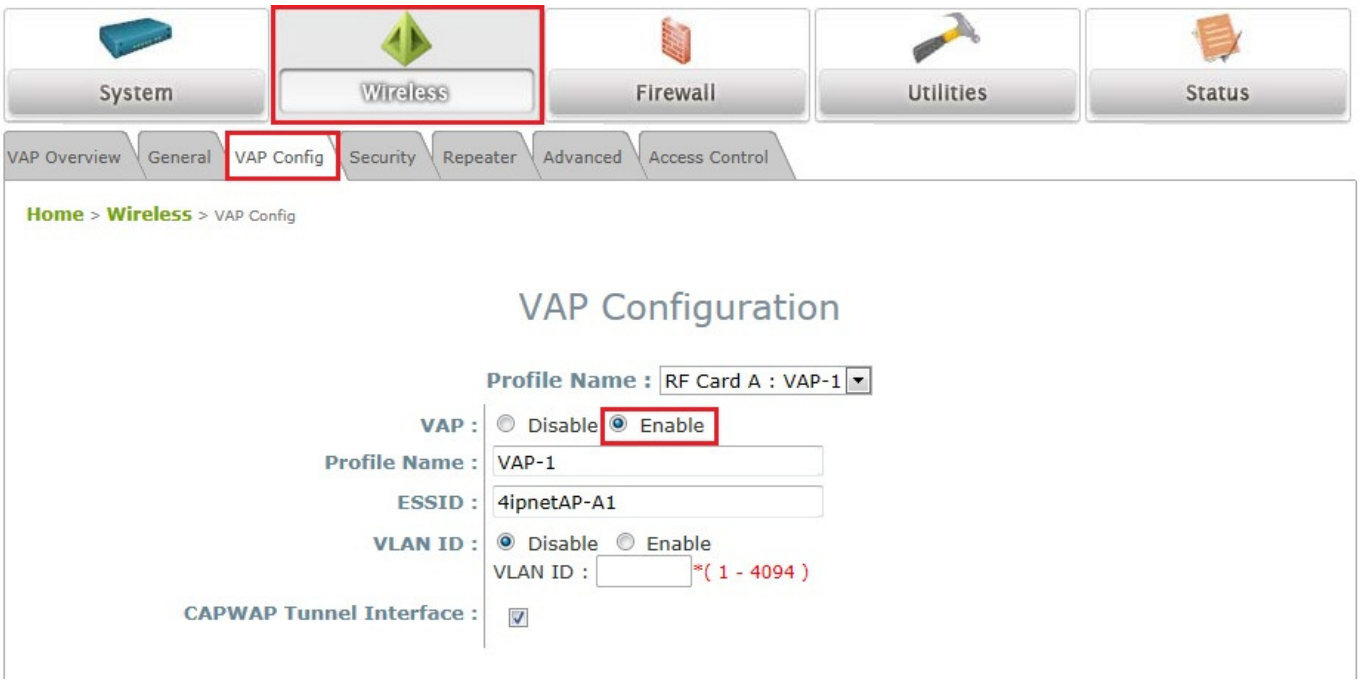
Step 3. Configure VAP (Virtual Access Point) Profile Settings



VAP Configuration Page (VAP-1 shown)

- EAP760 supports up to 16 virtual APs (VAPs) per RF Card.
- Configure VAP profile settings：

  (a) Select the **VAP Configuration** tab to configure the settings of the desired VAP.

  (b) Enable a specific VAP from the drop-down menu of **Profile Name** and configure related settings below.
- Check VAP status：

  After finishing VAP configuration, the status of enabled Virtual APs shall be reflected on the VAP Overview page.

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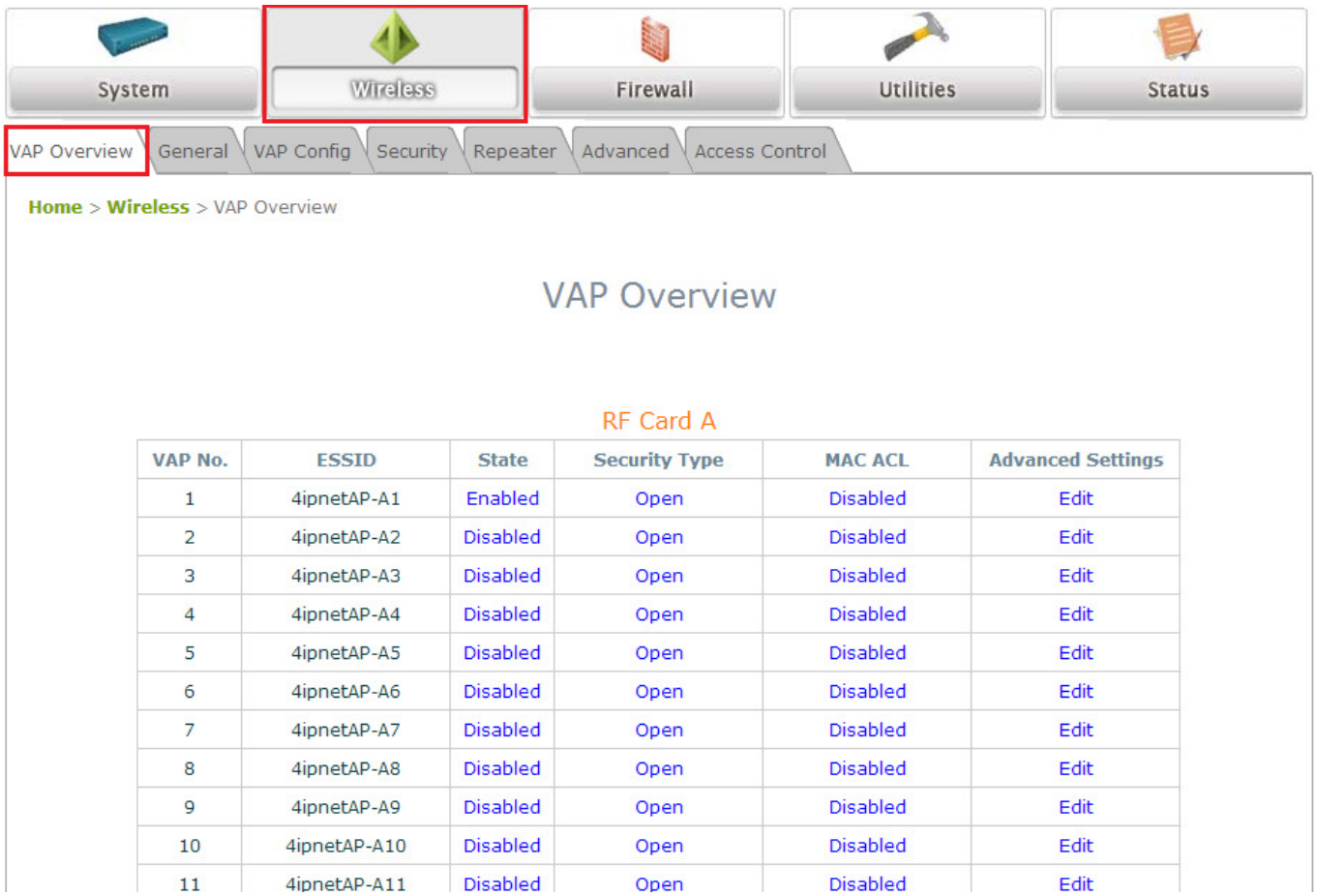

VAP No.	ESSID	State	Security Type	MAC ACL	Advanced Settings
1	4ipnetAP-A1	Enabled	Open	Disabled	Edit
2	4ipnetAP-A2	Disabled	Open	Disabled	Edit
3	4ipnetAP-A3	Disabled	Open	Disabled	Edit
4	4ipnetAP-A4	Disabled	Open	Disabled	Edit
5	4ipnetAP-A5	Disabled	Open	Disabled	Edit
6	4ipnetAP-A6	Disabled	Open	Disabled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

Virtual AP Overview Page

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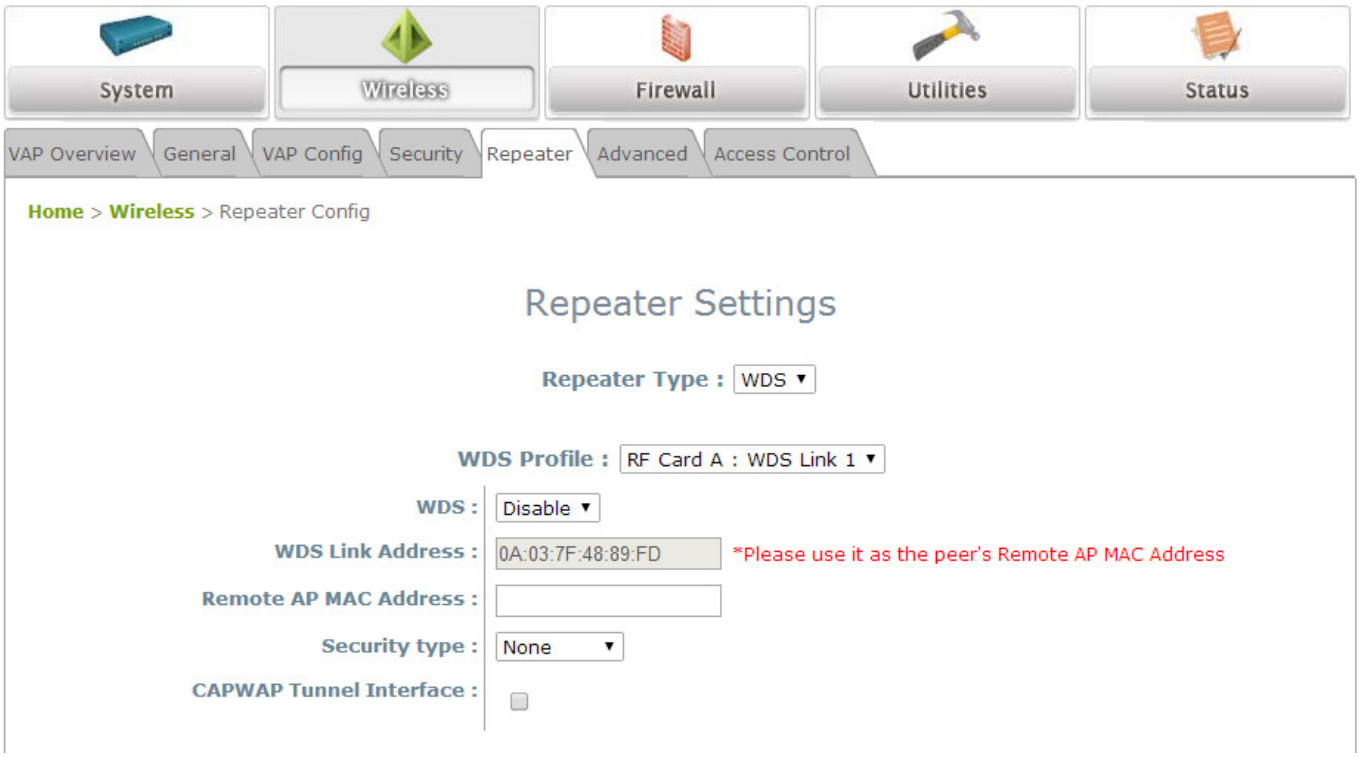
Step 4. Configure WDS (Wireless Distribution System) Settings (Optional)



To extend the wireless coverage, EAP760 supports up to 8 WDS links for connecting wirelessly to other WDS-capable APs (peer APs). By default, all WDS profiles are disabled.

- Click on the **Wireless** button on the main menu.
- Select the **Repeater Settings** tab.
- Choose **WDS** as the **Repeater Type**.
- Choose the desired WDS profile:
  (a) Enable **WDS**.
  (b) Enter the **MAC Address** (peer AP) and then Click **SAVE**.

If you are using another EAP760 as the peer AP, simply repeat the above-mentioned steps to configure another peer AP(s).

Note: On each and every configuration page, you may click ***SAVE*** to save the changes of your configured settings, but you must reboot the system for the changes to take effect. After clicking ***SAVE***, the following message will appear: **"Some modifications have been saved and will take effect after Reboot."**

Congratulations!

Now, 4ipnet EAP760 is installed and configured successfully.

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After EAP760's network configuration is completed, please remember to change the IP Address of your PC Connection Properties back to its original settings in order to ensure that your PC functions properly in its real network environments.

- ***It is strongly recommended to make a backup copy of your configuration settings.***
- ***For further configuration and backup information, please refer to the User's Manual.***

P/N: V10020140703

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