Quick Installation Guide

EAI2001S

Enterprise Access Point

Copyright Notice

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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:

- **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.

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 5.25GHz and 5.725 to 5.825GHz frequency range.

※ FCC requires this product to be used indoors for the frequency range 5.15 to 5.25GHz and 5.725 to 5.825GHz 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.

CE CAUTION

Declaration of Conformity with Regard to the 1999/5/EC (R&TTE Directive) for

European Community, Switzerland, Norway, Iceland, and Liechtenstein

Model: EAI2001S

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 Askey Inc. The use of software or firmware not provided and supported by Askey 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.

Taiwan NCC Statement

以下警語適用台灣地區

(1) 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

(2) 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

(3) 無線資訊傳輸設備必須具備安全功能，以保護未經授權之一方任意更改軟體進而避免發射機操作於非經認證之頻率、輸出功率、調變形式或其他射頻參數設定。

(4) 無線資訊傳輸設備避免影響附近雷達系統之操作。

(5) 無線資訊傳輸設備高增益指向性天線只得應用於固定式點對點系統。

(6) MPE 標準值及送測產品實測值:電磁波暴露量 MPE 標準值 1mW/cm2，送測產品實測值為：0.43927 mW/cm2

Preface

Askey EAI2001S 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.

EAI2001S 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 EAI2001S supports multiple point-to-point wireless links to form wider wireless network coverage.

EAI2001S 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 Askey EAI2001S.

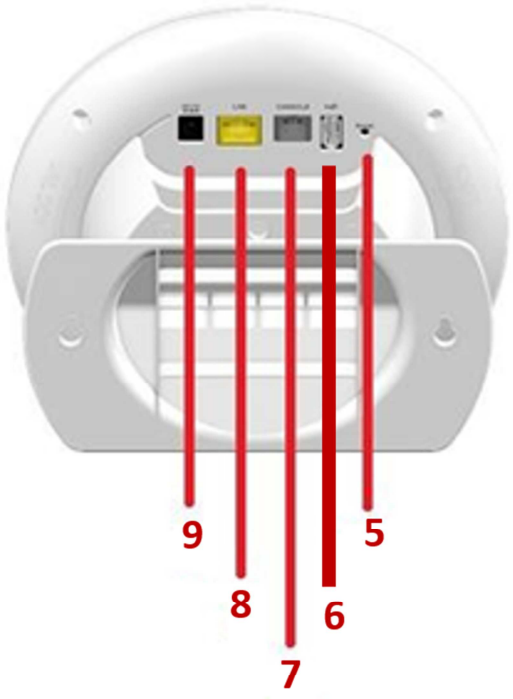
Package Contents

1. Askey EAI2001S x 1
2. Quick Installation Guide (QIG) x 1
3. Mounting Kit x 1
4. Power Adaptor (12V/1A) x 1 (Optional)

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

System Overview

EAI2001S's Front Panel



EAI2001S's Rear Panel

1	**RUN/ALARM_LED**	An LED indicator to show the system status
2	**LAN_LED**	An LED indicator to show the LAN status
3	**2.4G_LED**	An LED indicator to show the 2.4G status
4	**5G_LED**	An LED indicator to show the 5G status
5	**Reset**	Press once to restart the system; to reset the system to factory default settings, hold for more than 5 seconds.
6	**USB**	The USB port for development engineers access.
7	**Console**	Console port for debugging
8	**LAN (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
9	**12V ⎓ 1.0 A**	Attach power adaptor here

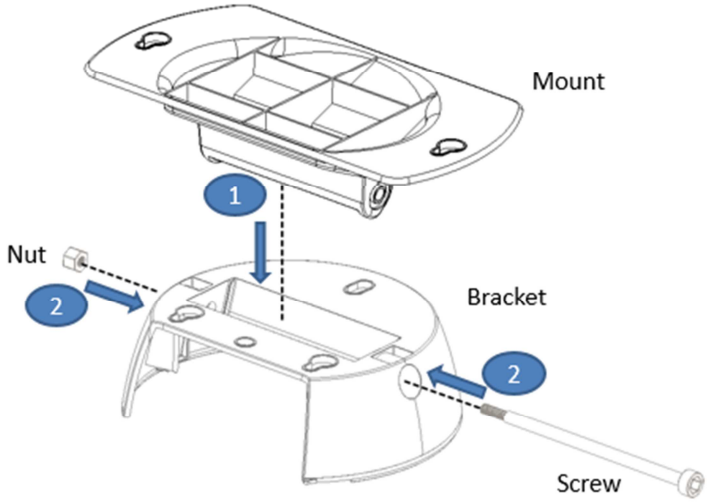
Hardware Installation

Please follow the steps mentioned below to install the hardware of EAI2001S:

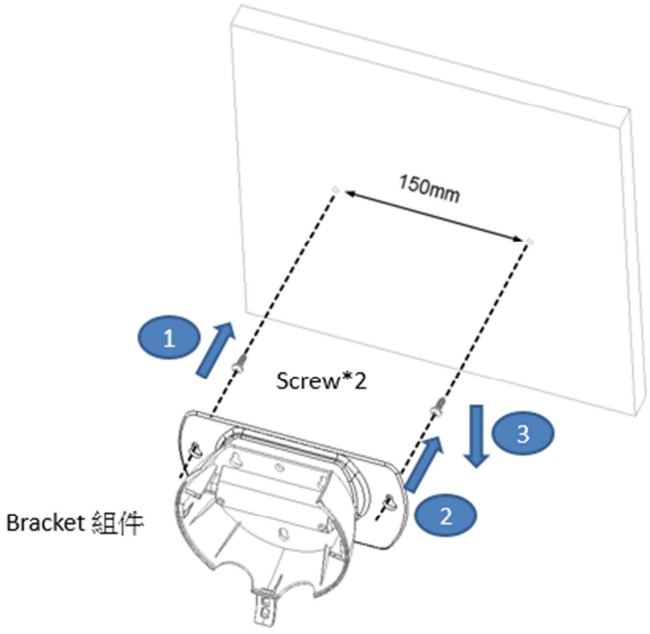
1. Place the EAI2001S at the best location.

The best location for EAI2001S is usually at the center of your intended wireless network.

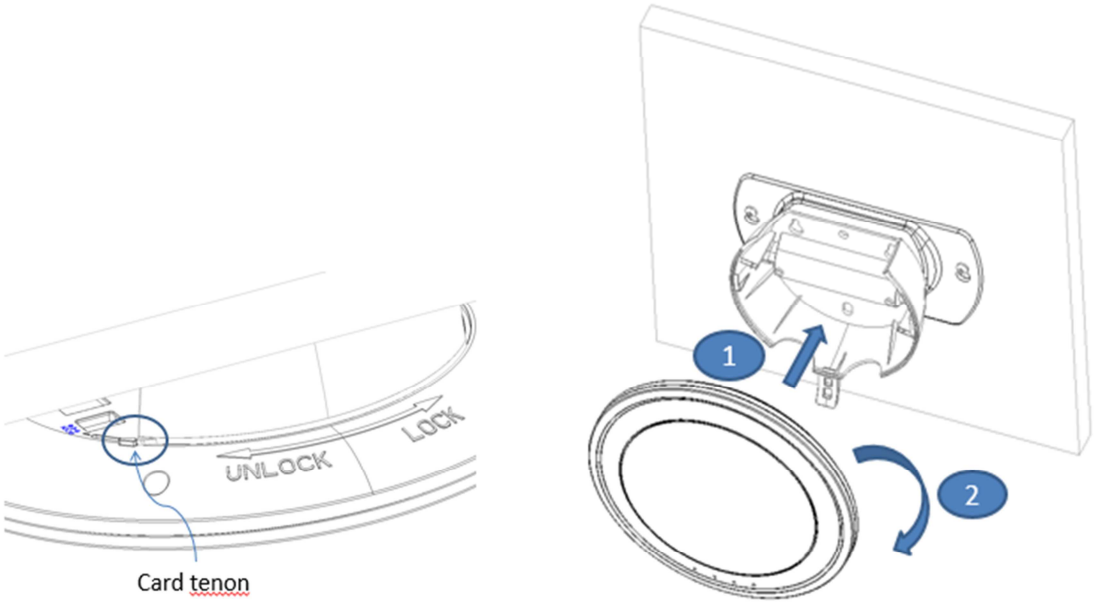
Bracket assembly installation:
Step1:
(1) Place Mount in Bracket.
(2) Mount & Bracket with Screw & Nut.



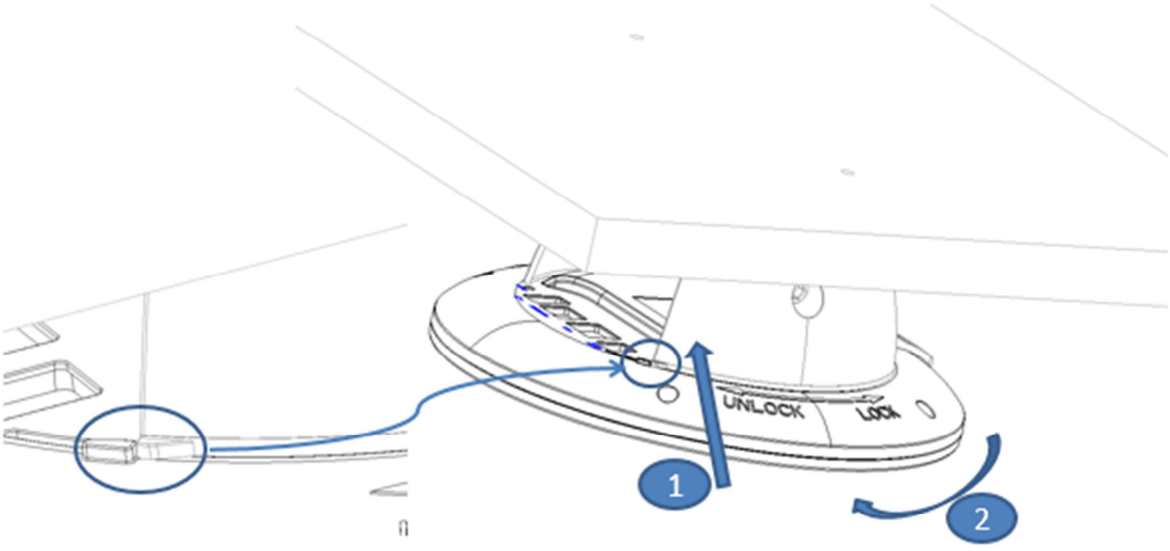
Step2:
(1) First drill two holes in the wall or ceiling, and then screw on the wall or ceiling. The distance between the two screws is 150mm. (Noted: Two screws must be purchased by the user.)
(2) Hang the Bracket on the screw.



Device assembly installation:
Step1:
(1) Put the device into the Bracket component.
(2) Device clockwise rotation of the fixing tenon.



Device disassemble:
Step1: Press Bracket as shown in the figure to remove the latch
Step2: Device counter-clockwise to remove.



2. Connect the EAI2001S to your network device.

Connect one end of the Ethernet cable to the Uplink port of EAI2001S and the other end of the cable to a switch, a router, or a hub. EAI2001S is then connected to your existing wired LAN network.

There are two ways to supply power over to EAI2001S.

3. Connect the DC power adapter to the EAI2001S power socket.

EAI2001S 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 EAI2001S 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 EAI2001S and you switch / router / hub, please also check the LED status indicator of the respective network devices.*

Getting Started

Askey EAI2001S supports web-based configuration. When hardware installation is complete, EAI2001S 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 EAI2001S are:

IP Address: *192.168.1.1*

Subnet Mask: *255.255.255.0*

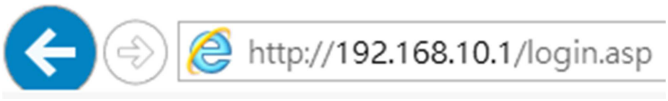
Steps:

1. To access the Web Management Interface, connect the administrator PC to the Uplink port of EAI2001S via an Ethernet cable. Then, set a static IP address on the same subnet mask as EAI2001S in TCP/IP of your PC, such as the following example:

   IP Address*: 192.168.1.100*

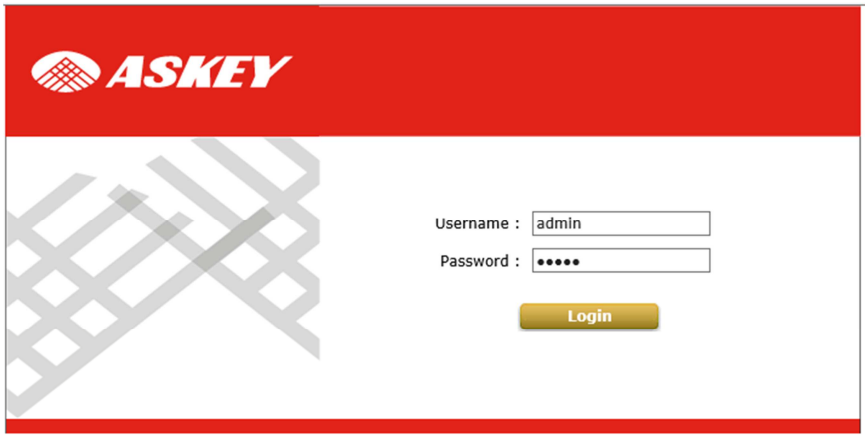
   Subnet Mask*: 255.255.255.0*

2. Launch the web browser on your PC by entering the IP address of EAI2001S (**http://192.168.1.1**) in the address field, and then press ***Enter***.



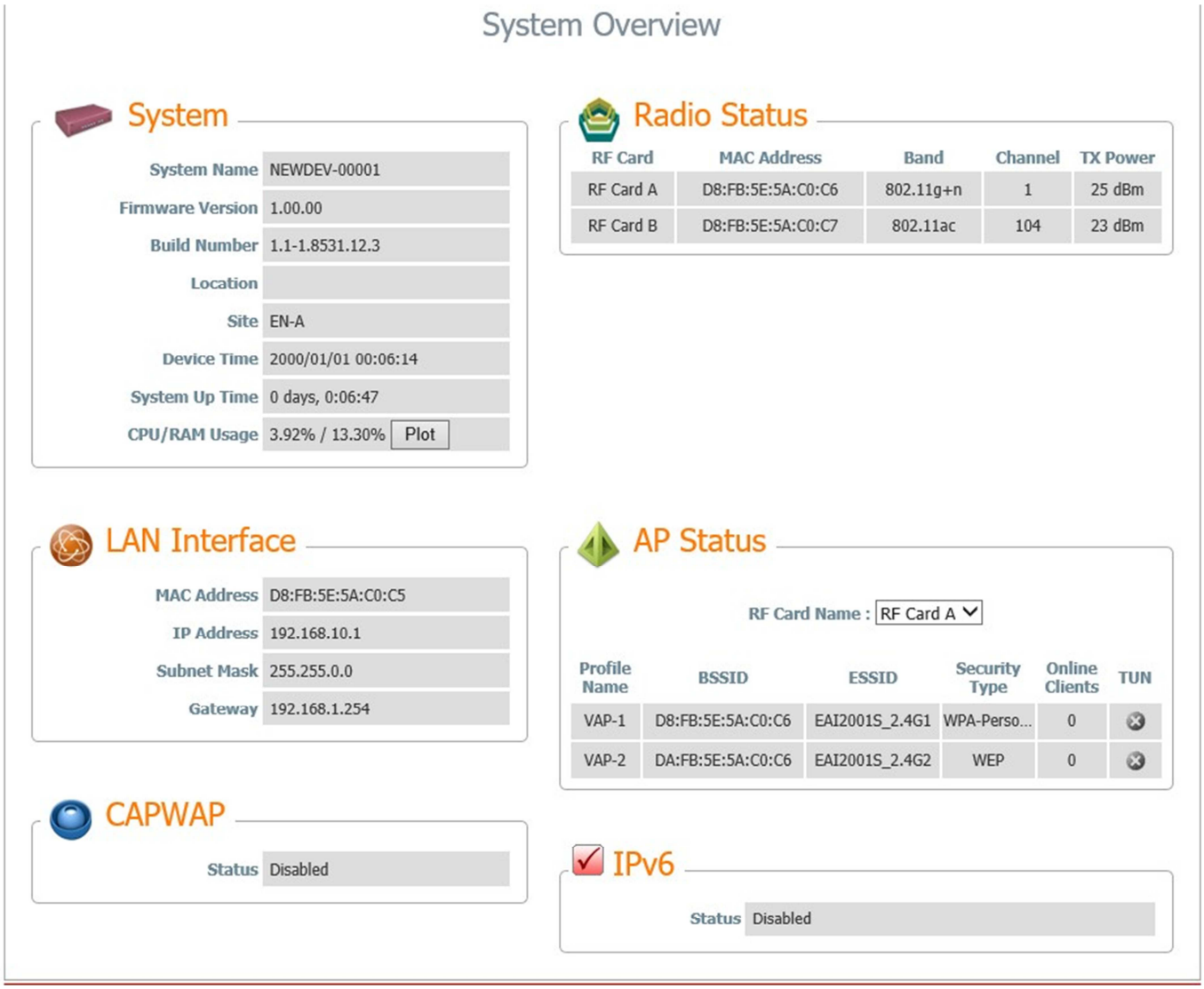
Example of entering EAI2001S's default IP Address via a web browser

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



Administrator Login Page

4. After a successful login to EAI2001S, a **System Overview** page of the Web Management Interface will appear, as depicted below.

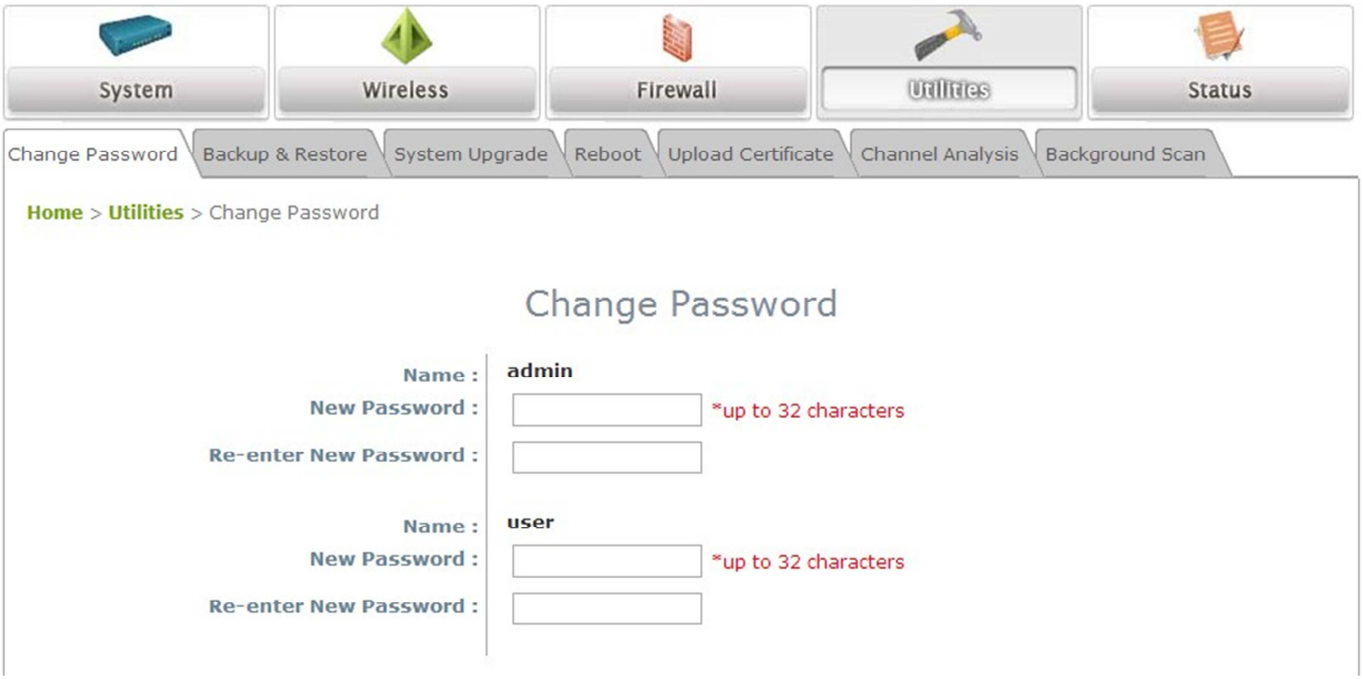


The Web Management Interface - System Overview Page

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.

Common Settings

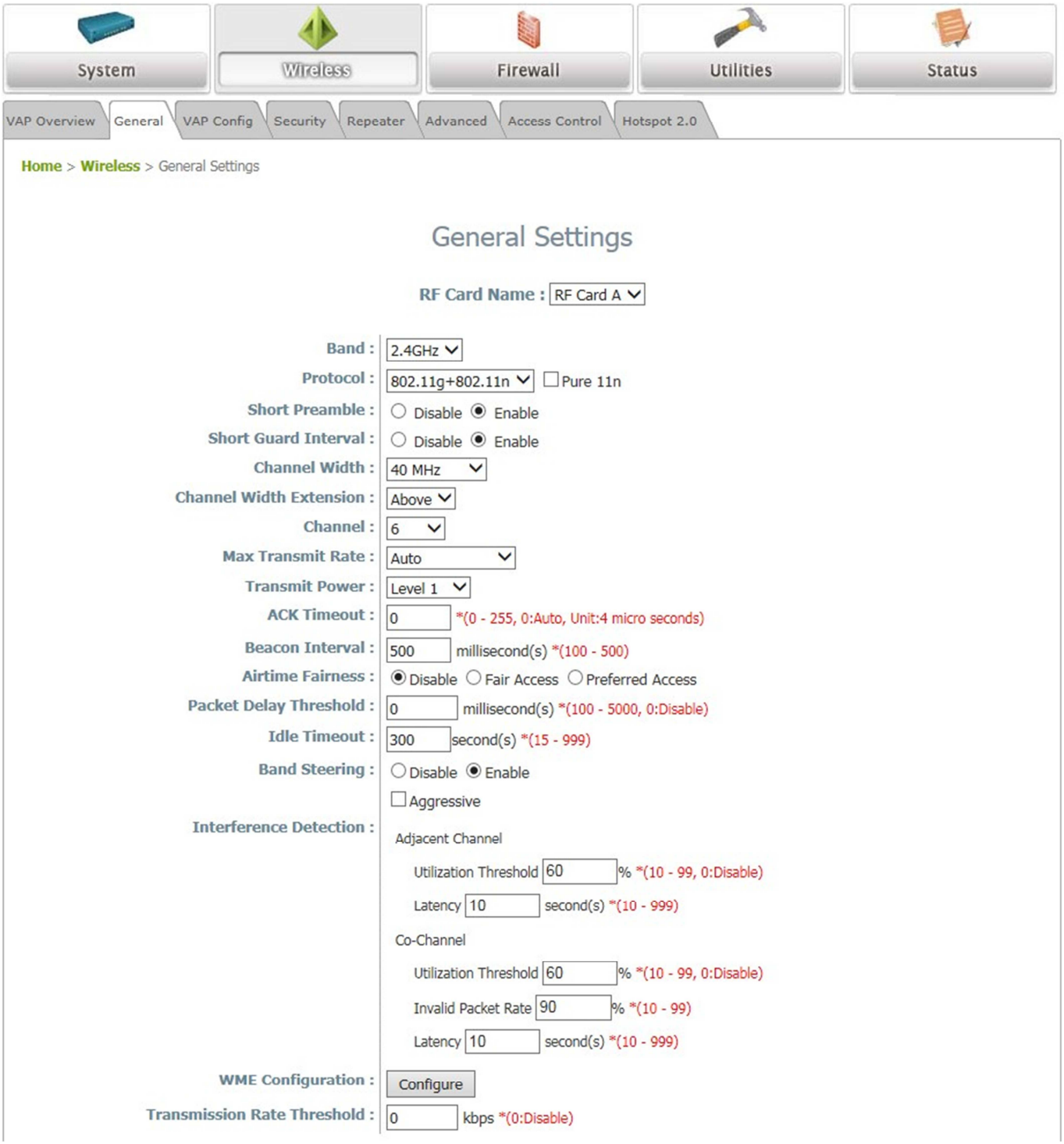
Step 1. Change Administrator's Password



Change Password Page

- Click on the **Utilities** icon on the main menu, and select the **Change Password** tab.
- Enter 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.

Step 2. Configure General AP (Access Point) Settings



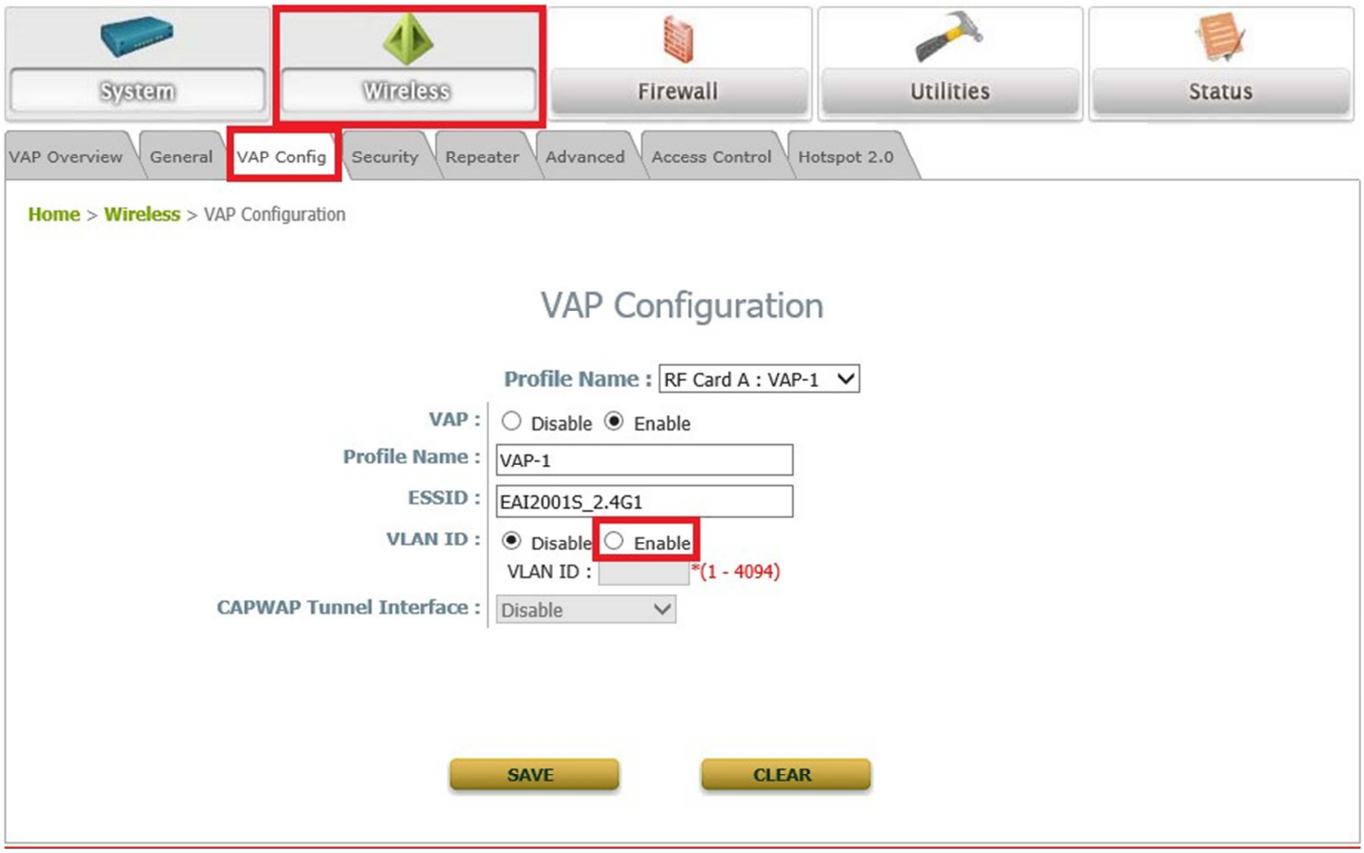
Wireless General Settings Page

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

  Select your preferred **Band**, **Protocol** and **Channel** for you wireless connection. For example, select **2.4GHz** for the band, **802.11g+802.11**n for the protocol and **6** for the channel.

  Noted: The wireless country code is preset for the system software, so user can't be changed it.

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



VAP Configuration Page (VAP-1 shown)

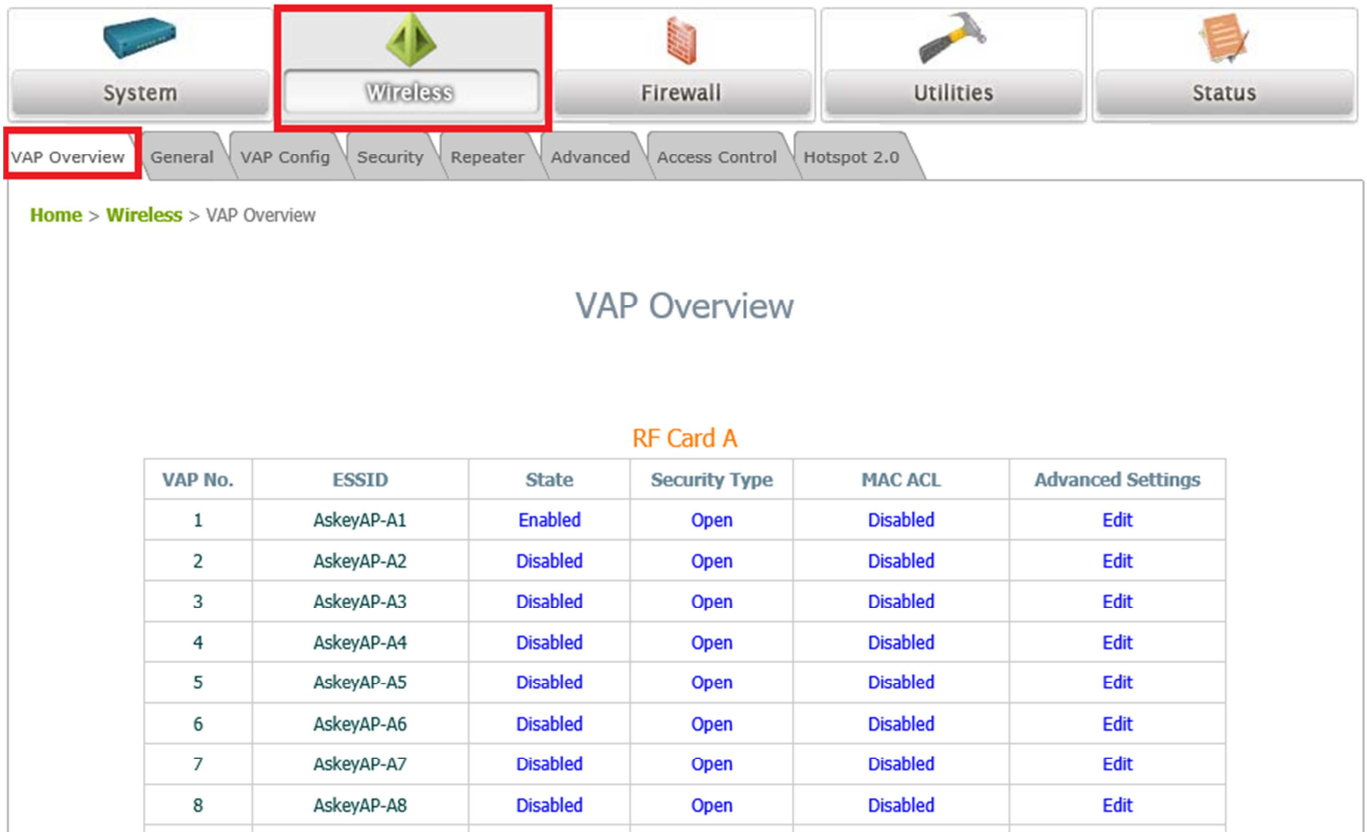
- EAI2001S supports up to 16 virtual APs (VAPs) per RF Card.
- Configure VAP profile settings：

  (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：

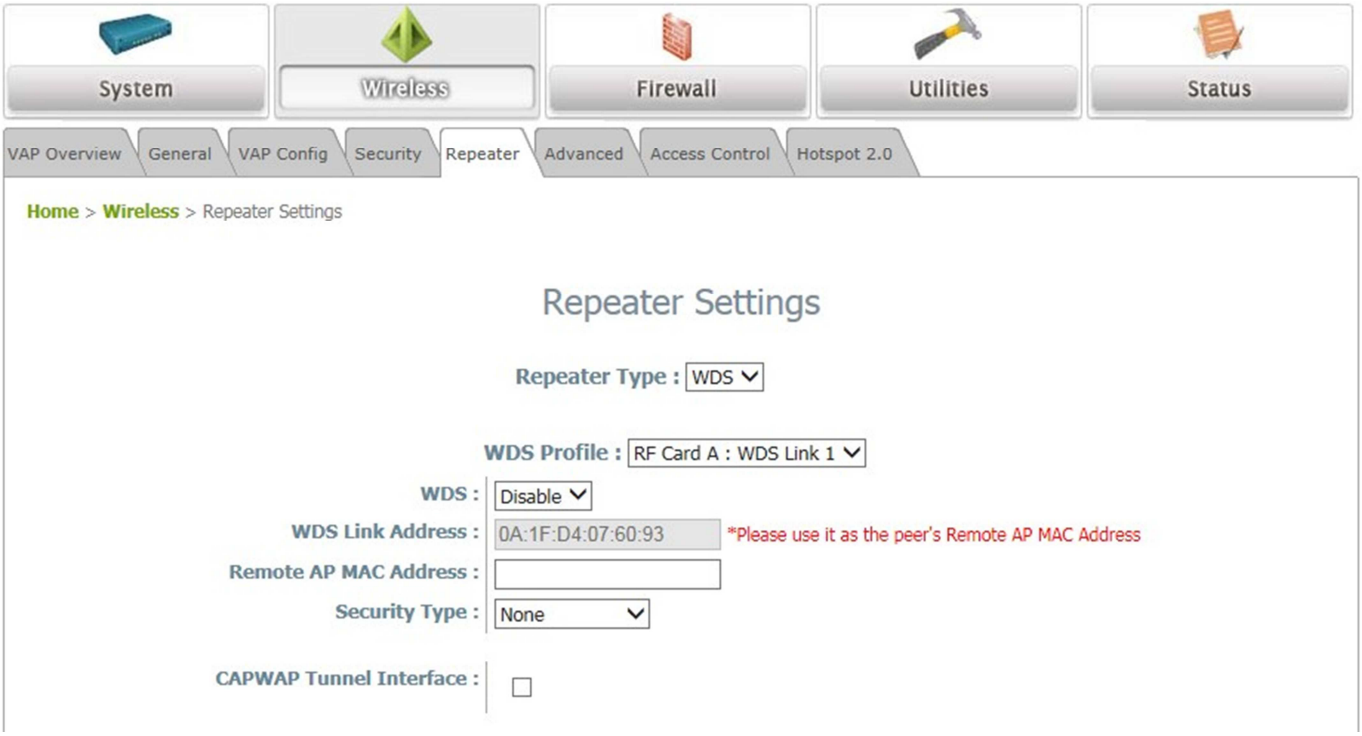
After finishing VAP configuration, the status of enabled Virtual APs shall be reflected on the VAP Overview page.



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

Virtual AP Overview Page

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



To extend the wireless coverage, EAI2001S 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 **Remote AP MAC Address** (peer AP) and then Click **SAVE**.

If you are using another EAI2001S 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 APPLY."**

Congratulations!

Now, Askey EAI2001S is installed and configured successfully.

After EAI2001S'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.***