EKSELANS BY ITS

USER MANUAL

CPE 1200-O

333002

Wireless Outdoor CPE

V02

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INDICE

Hardware.

- RESET: Reset Button, it make AP revert to default data after press it 15 seconds.
- WAN: WAN Port, connect with ADSL modem or Internet mainly. It will be LAN port under Wireless AP and Wireless Repeater operation mode.
- 5.8G Connector: Connect 5.8 GHz antenna ANT 58-12
- 2.4G Connector: Connect 2.4 GHz antenna ANT 24-12.

ATTENTION: IT IS IMPORTANT TO NOTE THAT TWO ANTENNAS MUST BE USED PER BAND. ONLY ONE 2.4GHZ OR ONE 5GHZ ANTENNA CANNOT BE INSTALLED, 2 MUST BE ALWAYS INSTALLED. TWO 2.4GHZ OR 5GHZ ANTENNAS OR BOTH IF WE WANT TO HAVE 2.4GHZ AND 5GHZ.

Installation diagram.

1. PoE Injector Power Supply.

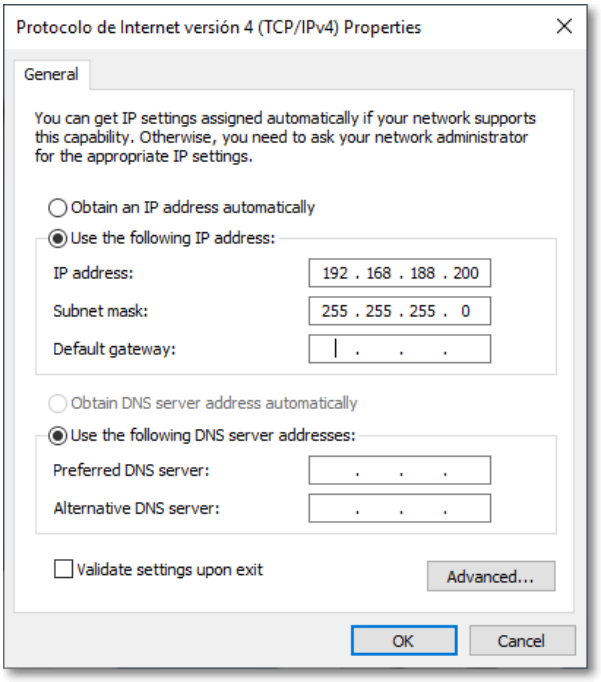
2. Powered by PoE Switch.

Conexión.

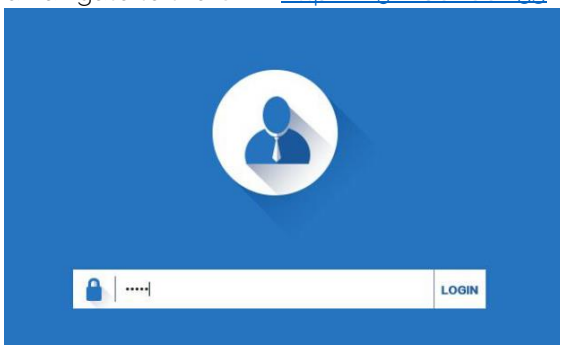
Note: The default SSID is **Ek_2.4G** with password **12345678**.

To connect to **CPE 1200-O** please follow these steps:

1- Connect to AP 300 with Ethernet cable or wireless.
2- Configure the PC's network adapter with a static IP as shown in the image. To facilitate the configuration in EK we have the Ek NET Adapter application, with which we can easily configure the network adapter. It can be downloaded for free from https://ek.plus/software/, in the section "EK NET ADAPTER":



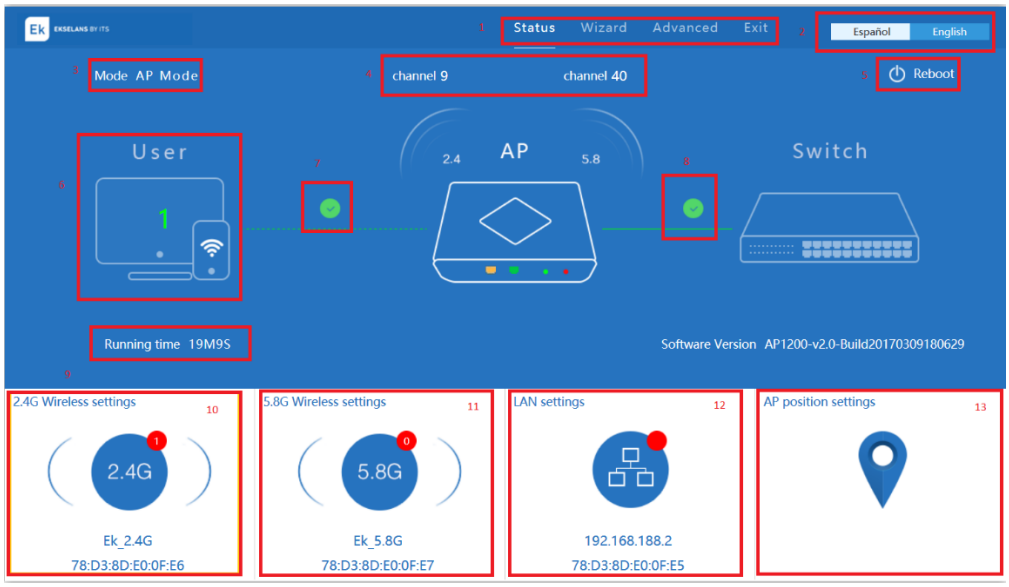
3- Open a Web browser and navigate to the URL: http://192.168.188.253



4- To enter use the password: admin.

Web interface.

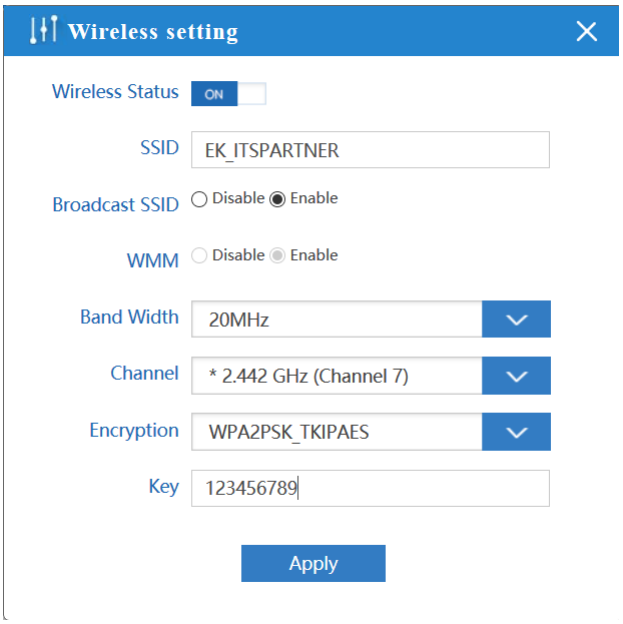
After entering, the password will appear the main interface.



1- Displays the Menu.
2- Language Selector can be English / Spanish.
3- Displays the Operational mode (AP Mode, Gateway Mode, and Repeater).
4- Displays the channel that the wireless is broadcasting.
5- To reboot the device
6- Shows the number of users connected to the device.
7- Displays if the user connection to the device is good or bad.
8- Displays if the device connection to the external network is good or bad.
9- Shows the running time of the device.
10- Displays Wireless information such as Wireless SSID and Wireless MAC for 5.8G. Also by doing click on it will open the fast configuration menu for Wireless
11- Displays Wireless information such as Wireless SSID and Wireless MAC for 2.4G. Also by doing click on it will open the fast configuration menu for Wireless
12- Displays LAN information such as device IP and LAN MAC. Also by doing click on it will open the fast configuration menu for LAN network.
13- Displays the AP position information, by doing click on it will open the fast configuration menu for AP position.

Wireless setting (Main Window 10 and 11).

Clicking in the Wireless section will open the fast configuration menu for Wireless.

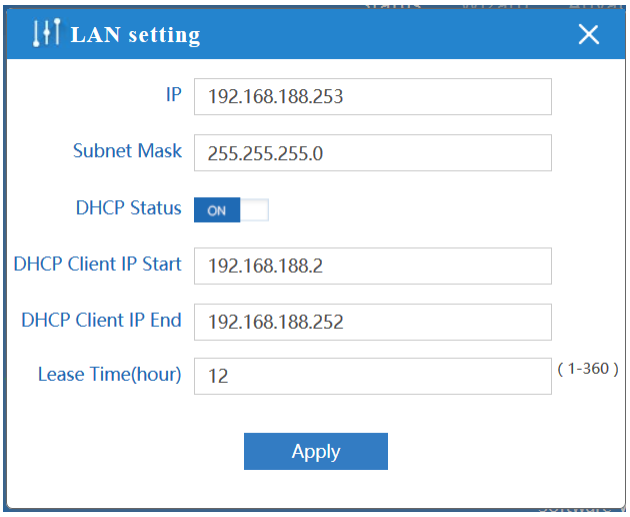


- **Wireless Status:** ON / OFF.
- **SSID:** Name of the wireless.
- **Broadcast SSID**: Enable - Show SSID, Disable – Hide SSID,
- **WMM:** Enable or Disable WMM.
- **Band Width:** The width that Wireless will use 20MHz, 40MHz or 80MHz.
- **Channel:** The channel that Wireless will use.
- **Encryption:** Select the encryption wanted for the wireless SSID.
- **Key:** The password for the SSIDUna vez indicados los valores deseados, pulsar "Aplicar" para aplicar los cambios.

After filling the above value as we want, we can press "Apply" to save the changes for our Wireless.

LAN setting (Main Window 12).

Clicking in the Wireless section will open the fast configuration menu for Wireless.



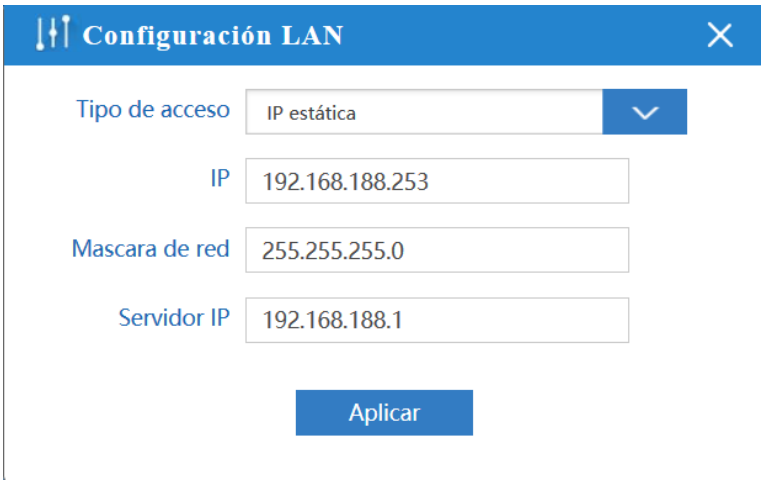
- **IP:** Set the IP for this device.
- **Subnet Mask:** Set the Subnet Mask for this device.
- **DHCP Status:** ON – To enable the DHCP, OFF – To disable the DHCP.
- **DHCP Client IP Start:** The starting IP for the DHCP range.
- **DHCP Client IP End:** The ending IP for the DHCP range.
- **Lease Time (hour):** The time to renew the IP for the connected devices.

After filling the above values as we want, we can press "Apply" to save the changes for our LAN settings.

Note: This window can change based on the Operational Mode our **CPE 1200-O** is using.

Location Information (Main Window 13).

Clicking in the Location section will open the fast configuration menu for Location Information.



- AP Location: Set the AP Location, this is just information for the user to know.
- AP Name: Set the identification name for our AP.

After filling the above values as we want, we can press "Apply" to save the changes for our Location information settings.

Wizard.

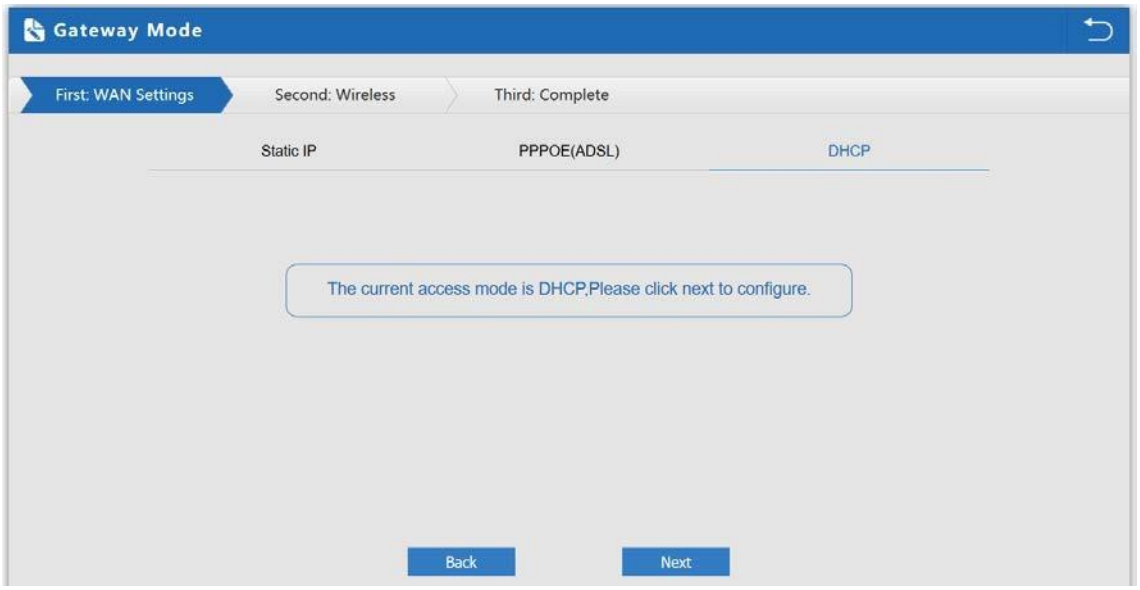
There are four-operation mode available. Putting the mouse over each mode will display a tip explaining the use of each mode.

- Gateway Mode: Connect to the network through LAN cable and operate CPE 1200-O as router.
- Repeater Mode: Connects to a SSID and broadcast a new SSID.
- WISP Mode: Connect to the provider SSID and get the connection through LAN.
- AP Mode: Connect to the network through LAN cable and operate CPE 1200- O as bridge mode (the device is transparent).

When you click in the desired operation mode, you will go to the wizard window for the selected mode. The wizard will guide you systematically to fully set it up.

Wizard: Gateway Mode.

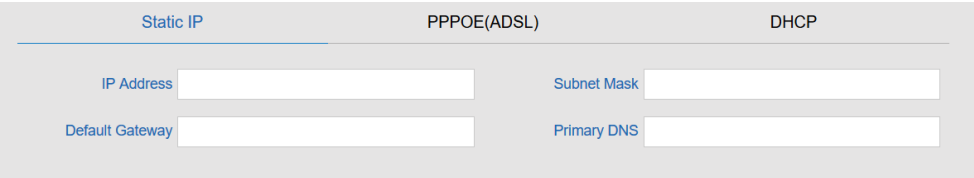
The Gateway Mode wizard will guide you through few step and few options to properly configuring the device.



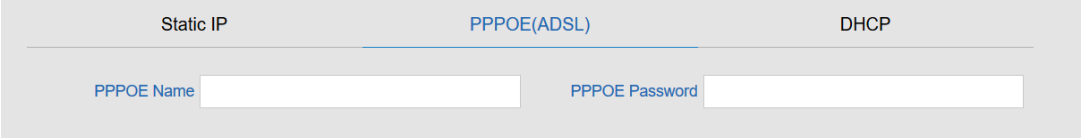
1- First Step.

Select the WAN connection mode:

- DHCP: The WAN connection will get the IP value from a DHCP server.
- IP estática: You can set the WAN IP manually; you will need to fill IP Address, Subnet Mask, Default Gateway and Primary DNS.



- PPPoE: You can also connect through PPPoE it will ask username and password.

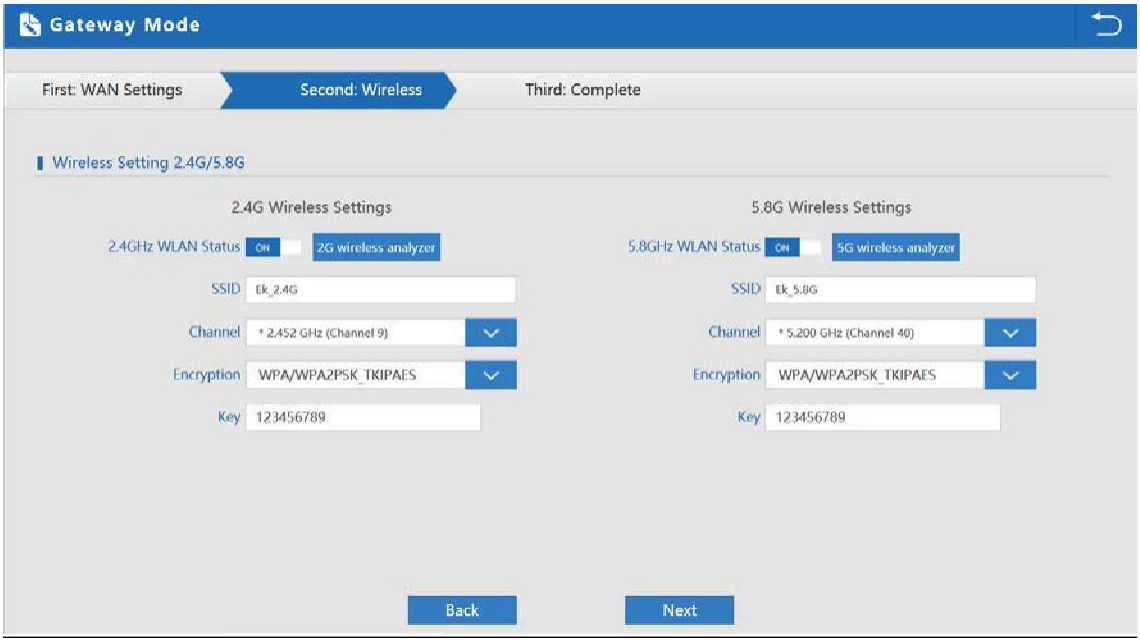


When you are done, press Next to continue.

2- Second Step.

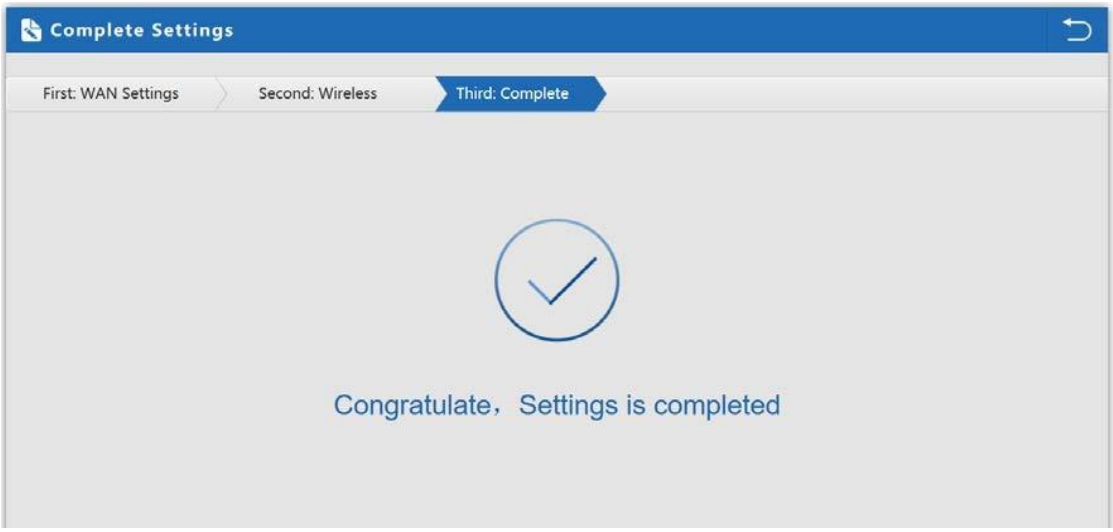
Configure both Wireless settings for 2.4G and 5.8G.

- **Wireless Status:** ON / OFF.
- **SSID:** Name of the wireless.
- **Channel:** The channel that.
- **Encryption:** Select the encryption wanted for the wireless SSID.
- **Key:** The password for the SSID.



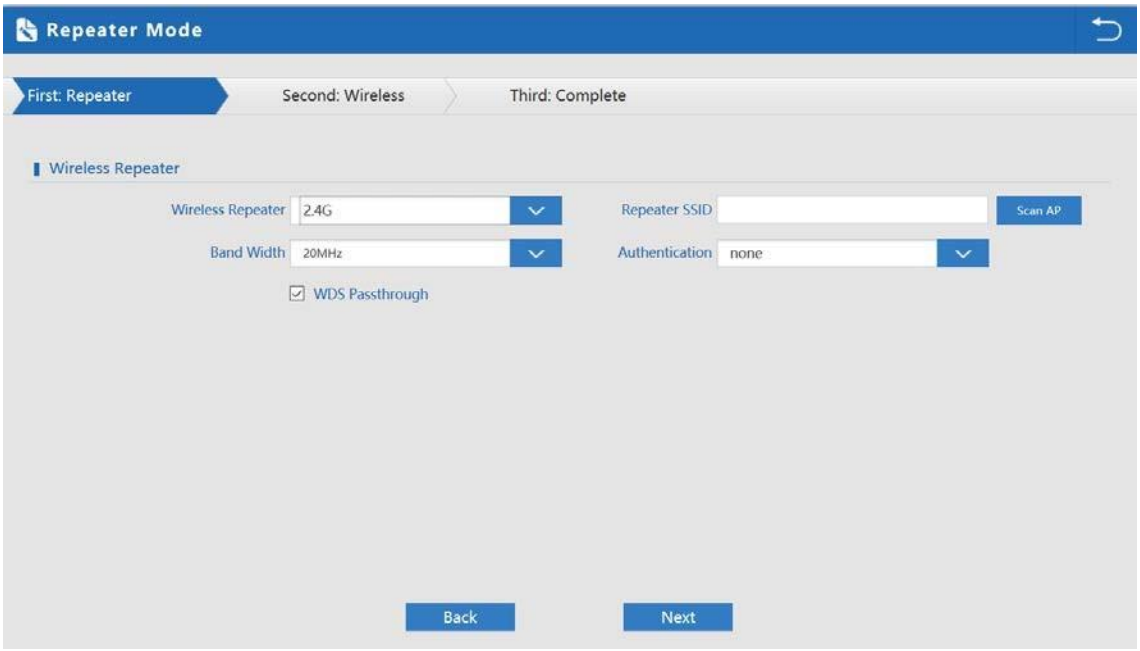
When you are done, press Next to continue. It will guide you to the third step.

3- Third Step.



Wizard: Repeater Mode.

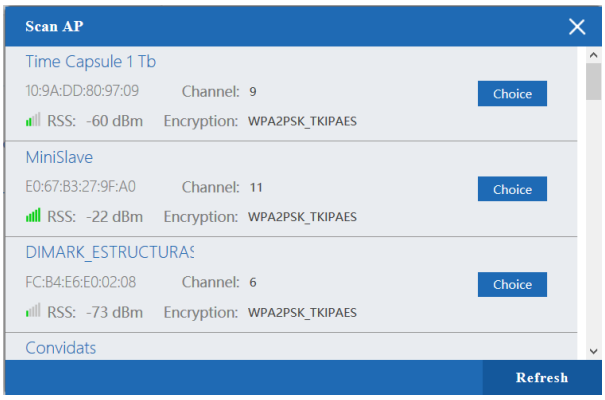
The Gateway Mode wizard will guide you through few step and few options to properly configuring the device.



1. First Step.

Select which band we will be using as repeater 2.4G or 5.8G:

Select the SSID that we want to connect to by pressing Scan AP button. It will load a list of all the SSID in ranges.



Select the desired SSID using the button Choice. It will load the values on the Wireless Repeater form .

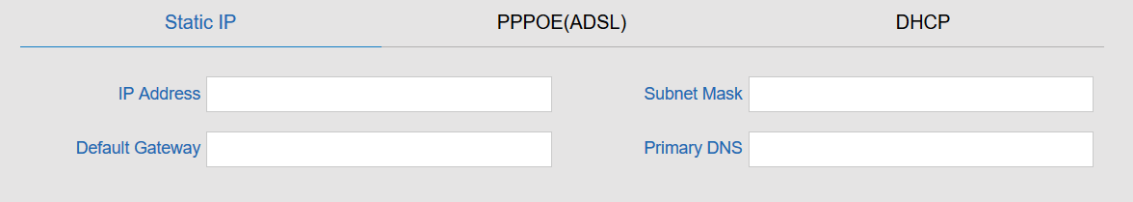
- **SSID Repeater:** The name of the SSID selected.
- **Authentication:** Encryption of the SSID selected.
- **Key:** Input the SSID key for the SSID selected.
- **Bandwidth:** The bandwidth of the SSID selected.

When you are done, press Next to continue. It will guide you to the second step.

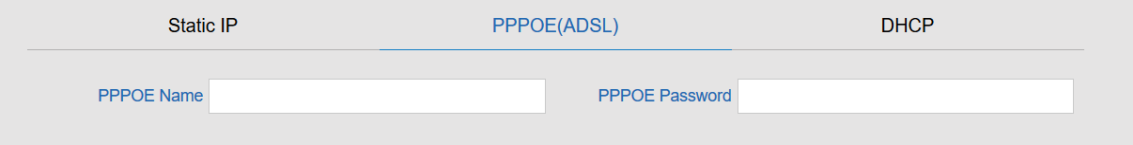
2. Second step.

Select the WAN connection mode:

- **DHCP:** The WAN connection will get the IP value from a DHCP server.
- **Static IP:** You can set the WAN IP manually; you will need to fill IP Address, Subnet Mask, Default Gateway and Primary DNS.

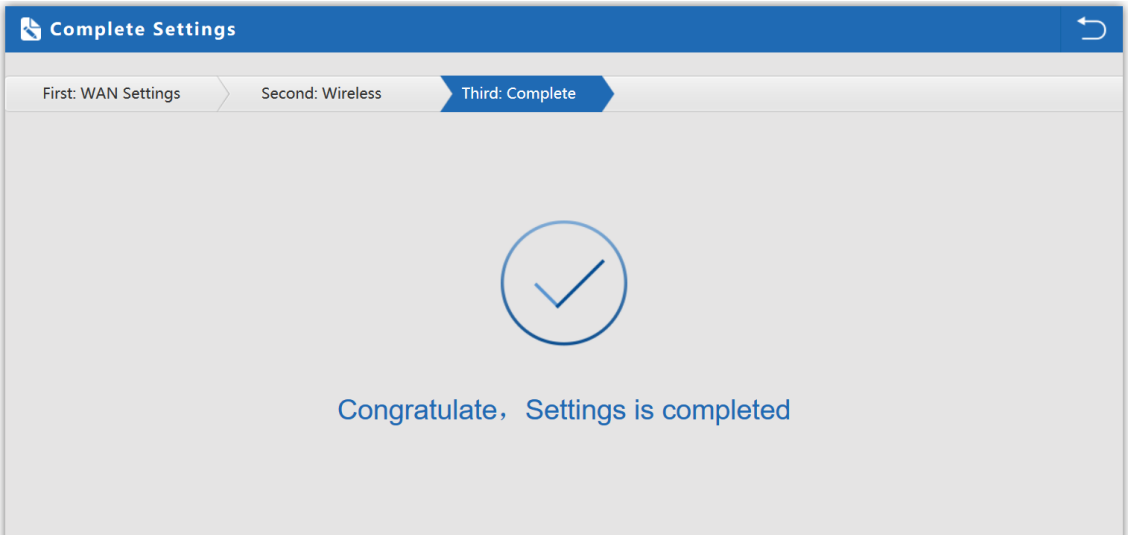


- **PPPoE:** You can also connect through PPPoE it will ask username and password.



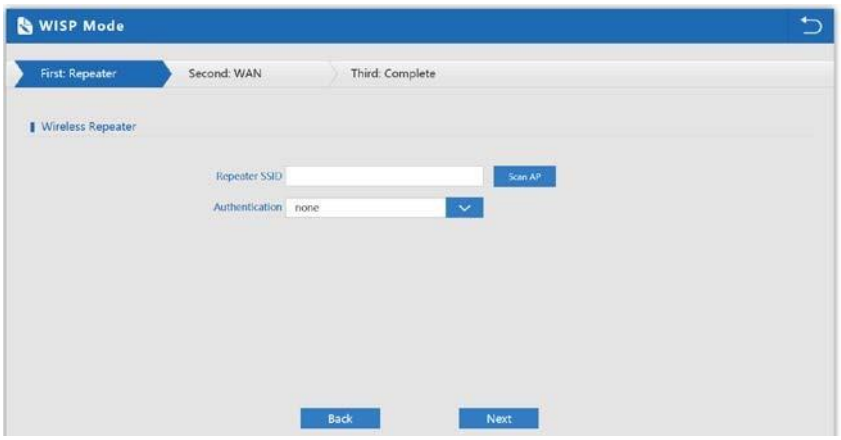
When you are done, press Next to continue.

3. Third step.



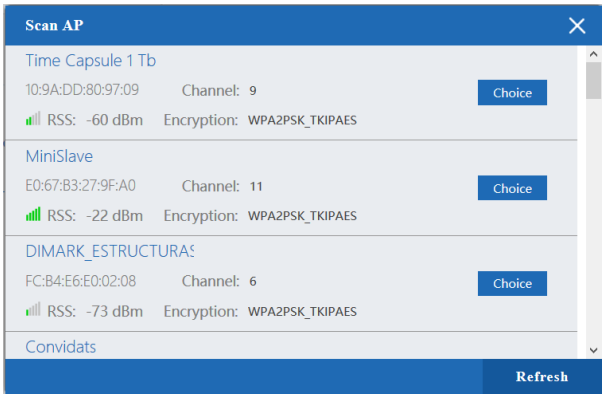
Wizard: WISP Mode.

The WISP Mode wizard will guide you through few step and few options to properly configuring the device.



1. First step.

   Select the SSID that we want to connect to by pressing Scan AP button. It will load a list of all the SSID in range.



Select the desired SSID using the button Choice. It will load the values on the Wireless Repeater form.

- **Repeater SSID:** The name of the SSID selected.
- **Authentication:** Encryption of the SSID selected.
- **Key:** Input the SSID key for the SSID selected.

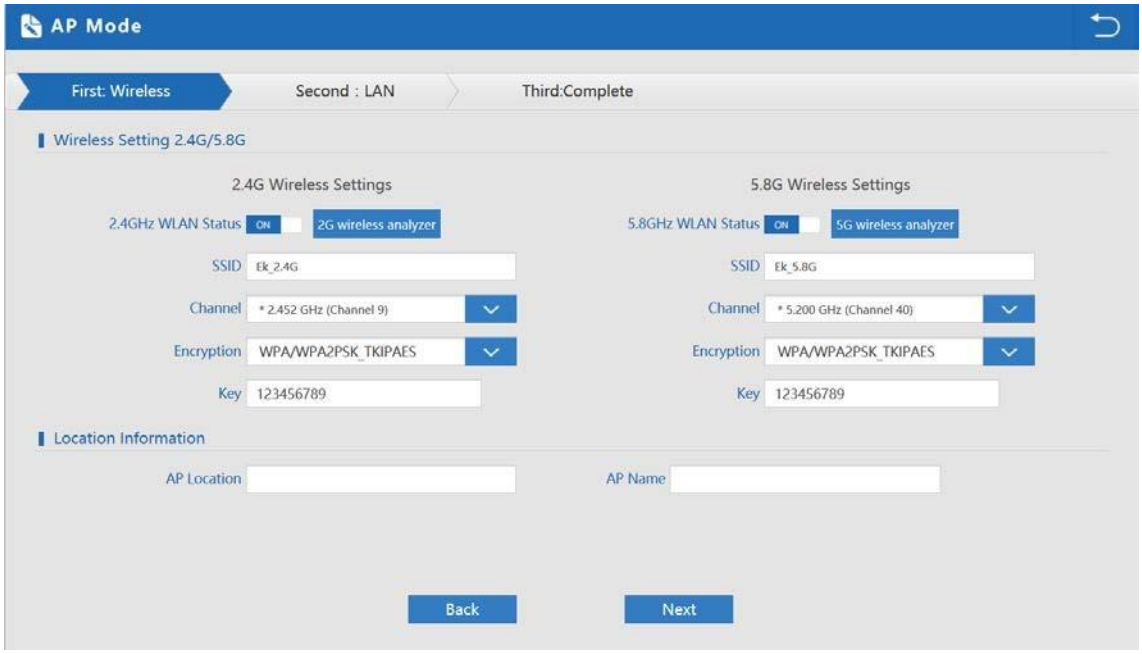
When you are done, press Next to continue. It will guide you to the second step.

2. Second step.

Once the first step is completed on this mode the SSID is disabled thus the window screen will not appear if we are connected through Wi-Fi.

Wizard: AP Mode .

The AP Mode wizard will guide you through few step and few options to properly configuring the device.



1. First step

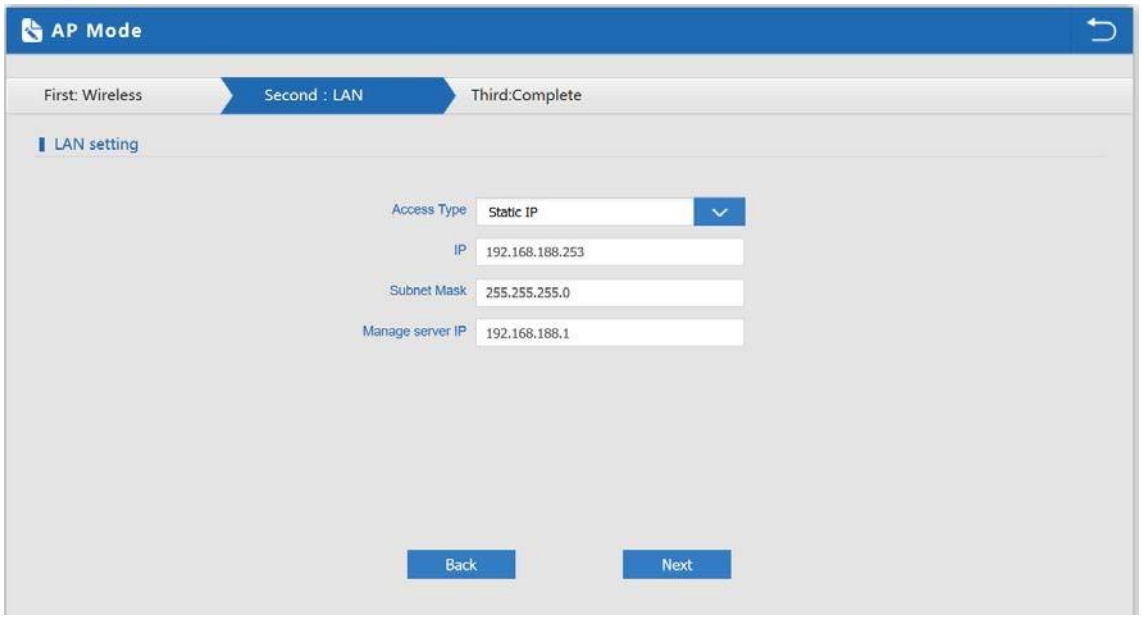
Set the values for the wanted SSID for 2.4G and 5.8G:

- Wireless Status:ON / OFF.
- SSID: Name of the wireless.
- Channel: The channel that Wireless will use from 1 to 13.
- Encryption: Select the encryption wanted for the wireless SSID.
- Key: The password for the SSID Set the location information values
- AP location: Set the AP Location, this is just information for the user to know.
- AP name: Set the identification name for our AP.

When you are done, press Next to continue. It will guide you to the second step.

2. Second step

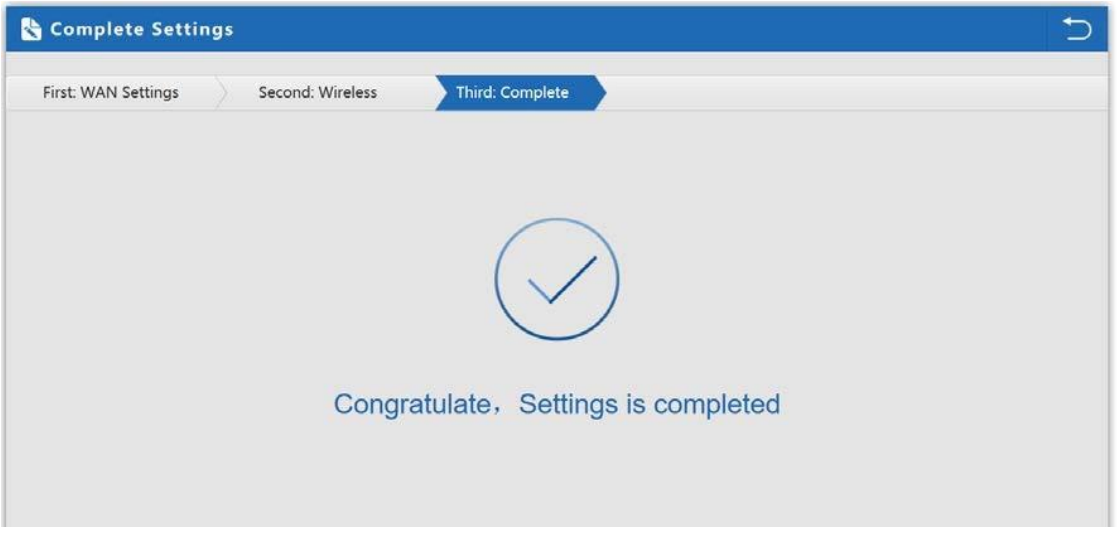
Specify how the CPE 1200-O is connected to your network red.



You can select either DHCP or Static IPestática.

- IP: Set the IP for this device.
- Subnet Mask: Set the Subnet Mask for this device.
- Manage server IP:Set the network gateway for the device AP.

3. Third Step



Advanced settings.

Status:

This tab displays the information regarding Software Version, Hardware Version and the time that the device is online.

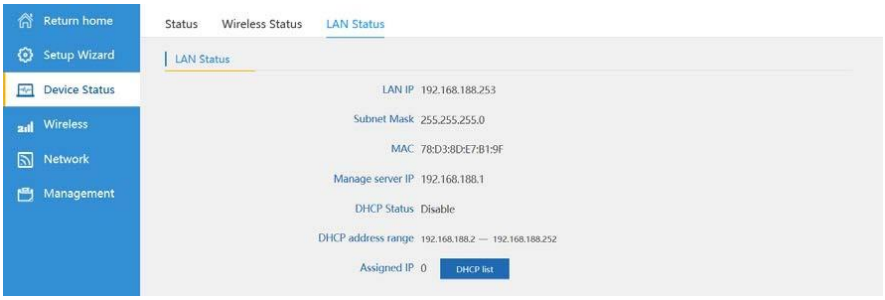
2.4G Wireless Status:

Shows the current configuration for the Wireless, it also displays the connected users. It is the same for 5.8G.

Client list button will show a pop up window showing the connected clients.

LAN status

Displays the current configuration for the LAN interface of the device. It also shows the configuration for the DHCP.

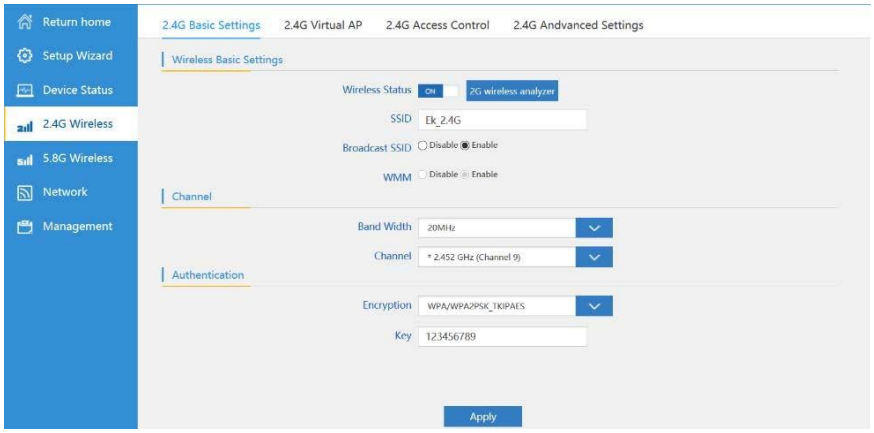


Wireless 2.4G and 5.8G.

NOTE: The pictures below are for 2.4G Wireless. The options for 5.8G are the same as for 2.4G.

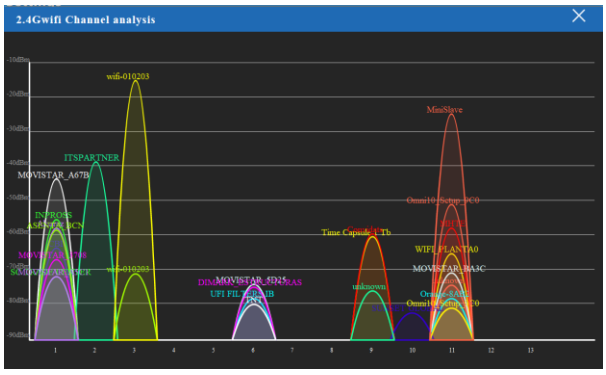
Basic Settings.

This tab is used to configure all the Wireless basic settings.



- Wireless status: ON / OFF.
- SSID: Name of the Wireless.
- Broadcast SSID: Enable - Show SSID, Disable – Hide SSID.
- WMM: Enable or Disable WMM.
- Bandwidth: The width that Wireless will use 20MHz, 40MHz or 80MHz.
- Channel: The channel that Wireless will use.
- Encryption: Select the encryption wanted for the wireless SSID.
- Key: The password for the SSID.

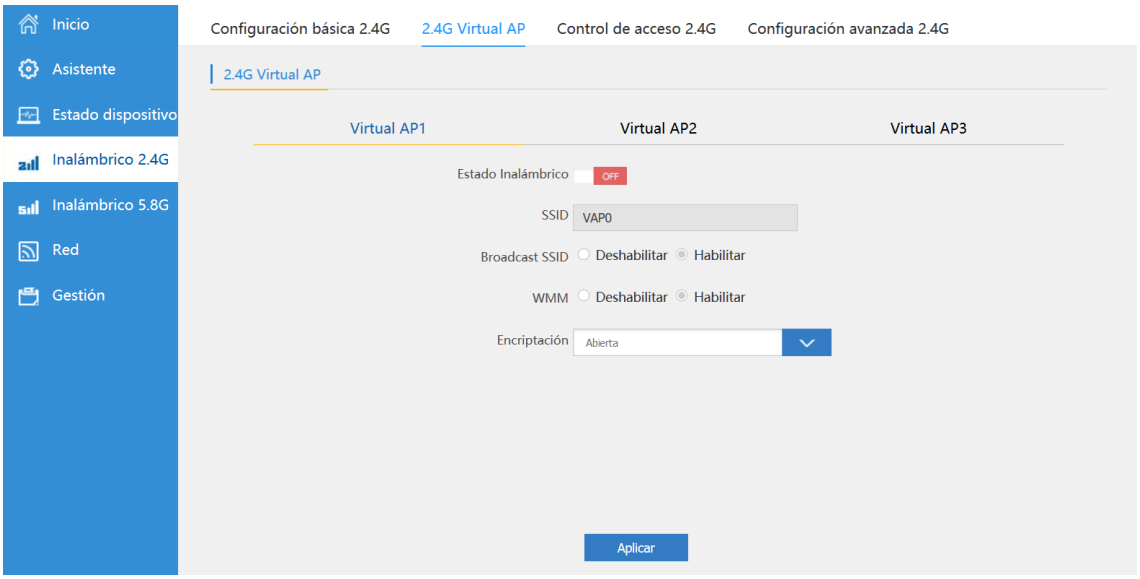
Wireless Analyzer will show open a window displaying all the SSID with its channel so you can properly select a channel for your SSID.



Press apply to save the changes.

Virtual AP.

In this tab we can create up to 3 more SSID, each Virtual AP 1 is a new SSID.

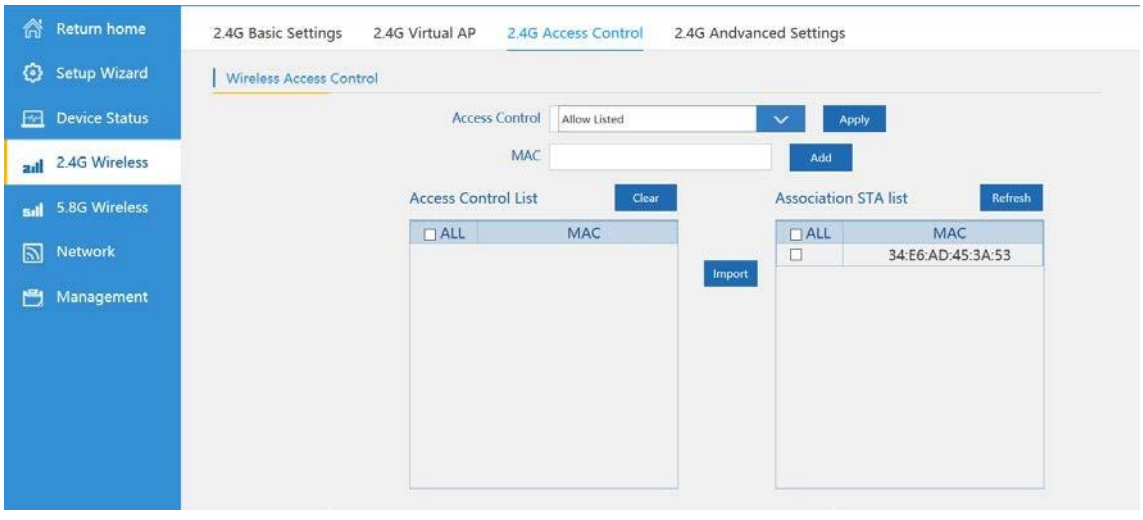


Press apply to save the changes.

Access Control.

The access control limits the devices that can connect to CPE 1200-O. We can set the access control to:

- MAC Access All: In this mode all the devices can connect to CPE 1200-O.
- Allow Listed: In this mode the all the MAC address on the Access Control List can access the CPE 1200-O.
- Deny Listed: In this mode all the MAC address on the Access Control List cannot access the CPE 1200-O.

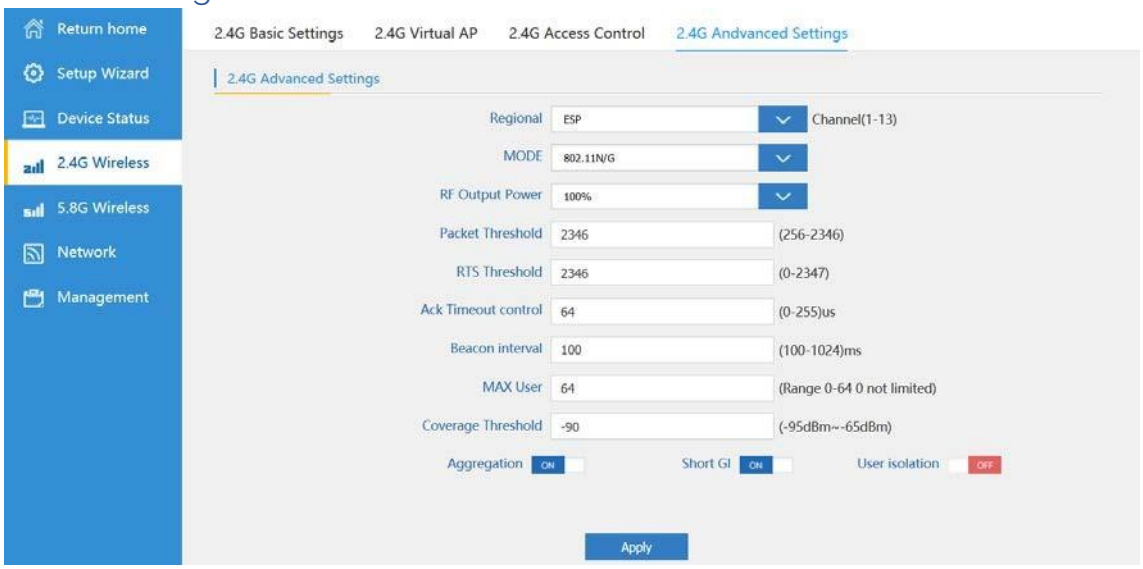


- Association STA list: In this list will appear the already connected MAC to the device. You can select them and press import to move them to the Access Control List.

How to add MAC to the list:

1. Pick Allow Listed or Deny Listed.
2. Input the MAC
3. Press Add
4. The added MAC will go to the Access Control List.
5. Press Apply

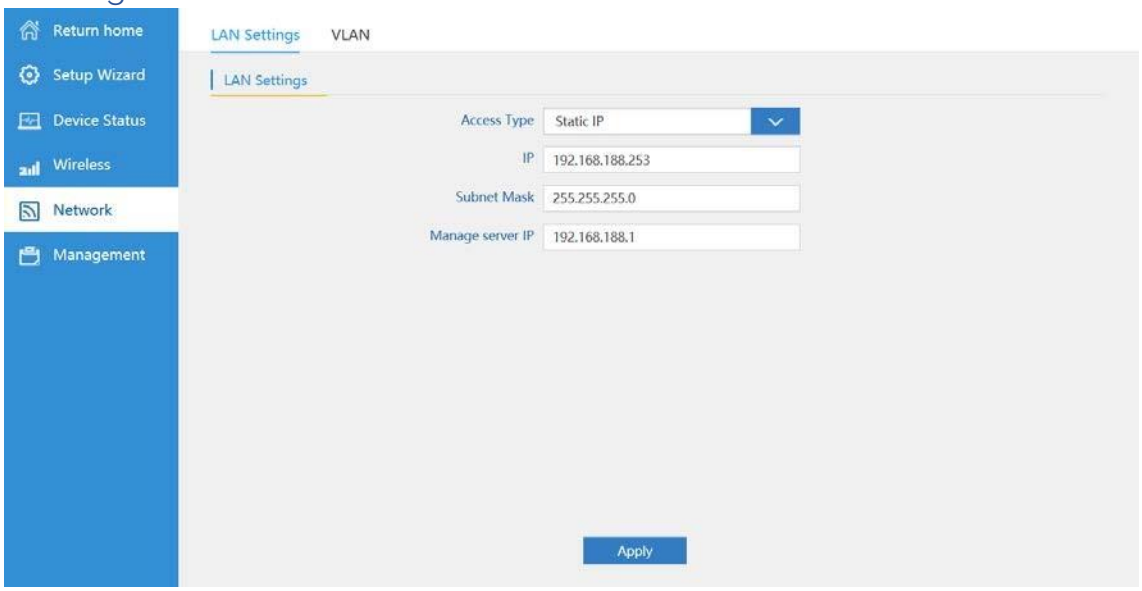
Advanced Settings.



- **Regional:** Select the region.
- **MODE:** Select the standard for the Wireless N/AC.
- **RF Output Power :** Control the wireless output power. This affects the coverage range. IMPORTANT: EKSELANS BY ITS RECOMMENDS FOLLOWING CURRENT MAXIMUM TRANSMISSION POWER REGULATIONS. EKSELANS BY ITS IS NOT RESPONSIBLE FOR THE IMPROPER USE OR CONFIGURATION OF THE ACCESS POINT AND ITS TRANSMISSION POWERS.
- **RTS Threshold:** Lower this value if you have problems with electromagnetic interface or overload of traffic on a network.
- **Ack Timeout control**: Interval for the ACK, the devices is waiting to get the ACK response from the device. Too long time might reduce a bit the bandwidth.
- **Beacon interval:** The time interval for the beacon. The beacon time is a packet sent to the client device to notify if the device is on. Reducing this time will sent more packets making the net a bit slower. Too high value will make the device disconnect more often.
- **MAX User:** Set the max client numbers that can connect to the device.
- **Aggregation:** Allows a higher throughput.
- **Short GI:** Help improve the throughput, use it only for N mode if used mixed mode please disable.
- **User isolation:** ON: The users cannot see each other in the network.

Network.

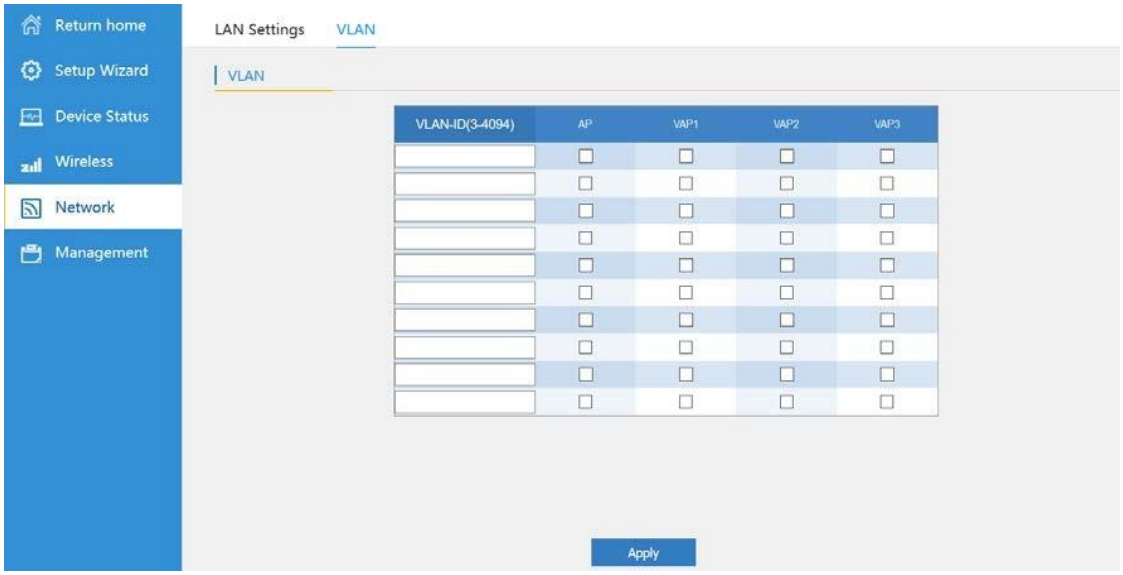
LAN Settings.



- Access Type: Use DHCP to get automatically IP, Subnet Mask and Manage server IP or use Static IP to manually set the values.
- IP: Set the IP for this device.
- Subnet Mask: Set the Subnet Mask for this device.
- Manage server IP (gateway): Set the gateway IP.

VLAN

Each SSID can be set to the wanted VLA.

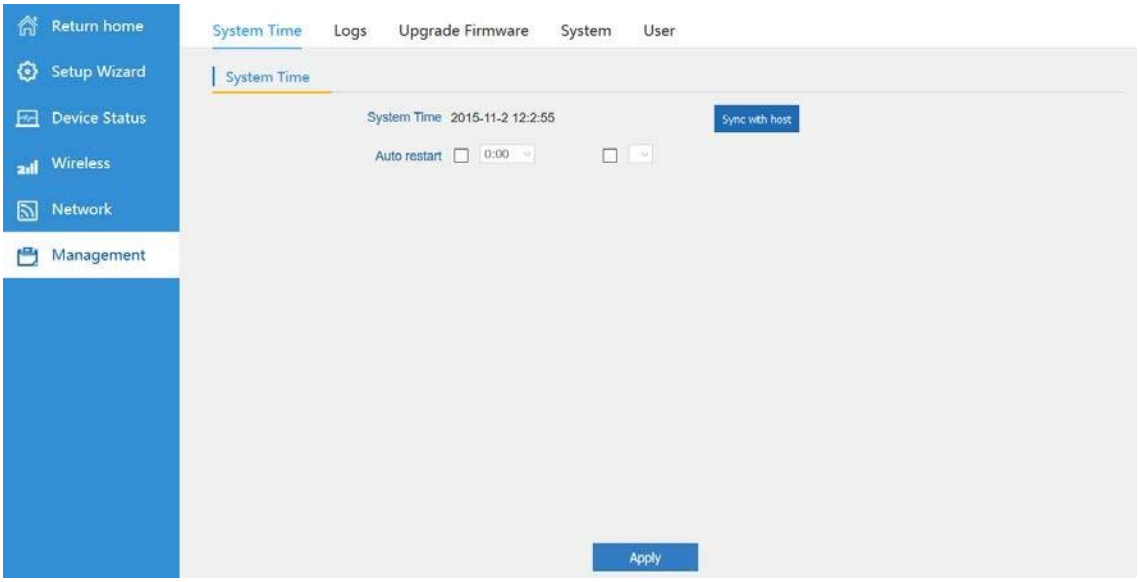


Management.

System Time.

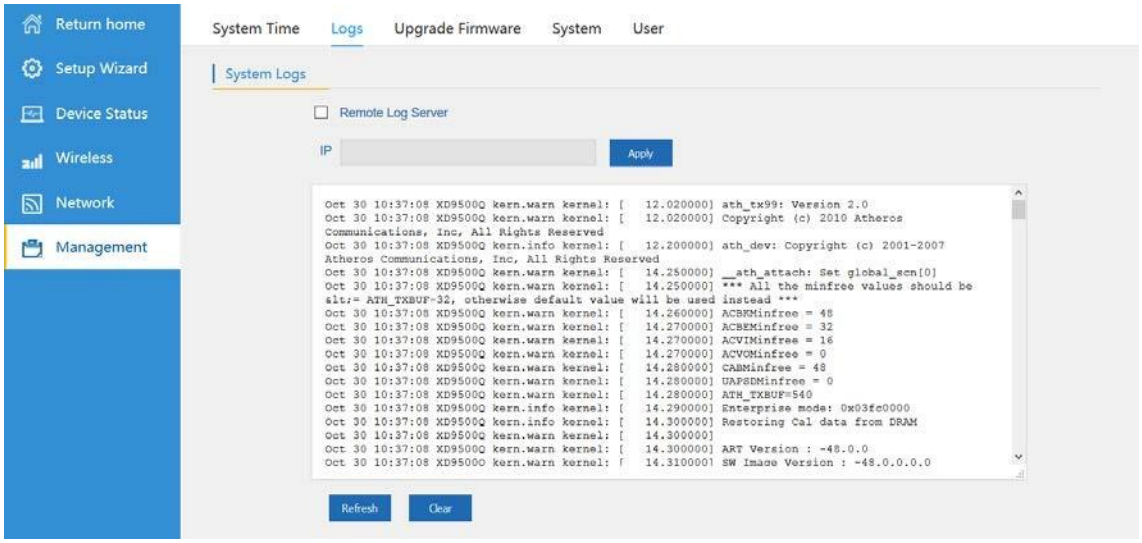
Manage the device timezone

Auto restart function enables the device to be rebooted at the setup time.



Logs

This tab will display all the logs related to the device.



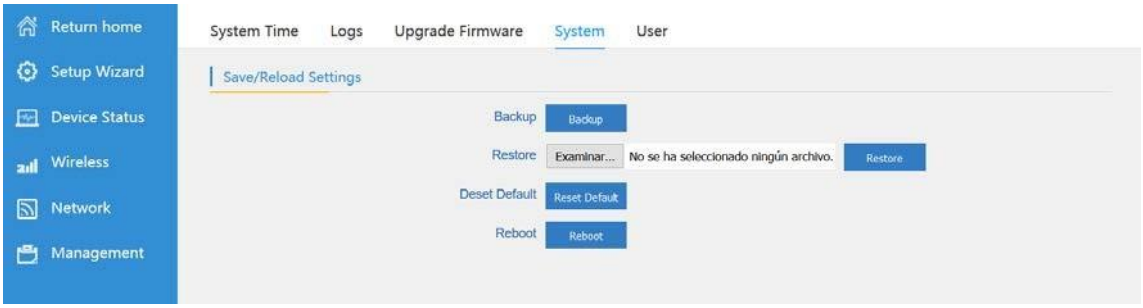
- Remote Log Server: Enable to register the logs to a remote server.
- IP: Set the IP where the logs will be saved.

Upgrade firmware

Select the new firmware version file and press "Upgrade" to upgrade the device firmware.

If selected restore factory setting the device will upgrade the firmware and also put the device back to factory default.

System



- **Backup:** Will save to disk the device configuration.
- **Restore:** Restaura un fichero de configuración.
- **Reset Default:** Restore all the device values to default.
- **Reboot:** Reboot the device.

User

Change the default admin password for the device.