

## User manual

# Access Point

WL-APDB733P48-077 | WL-APDB1200P48-078 | WL-APW6DB1800-082  
WL-APODB1200P48-083 | WL-APW6DB1800-087

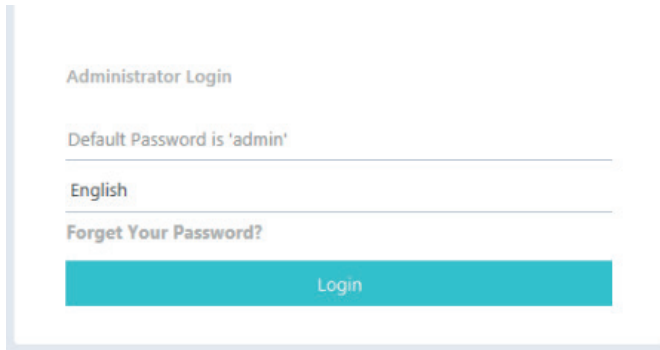


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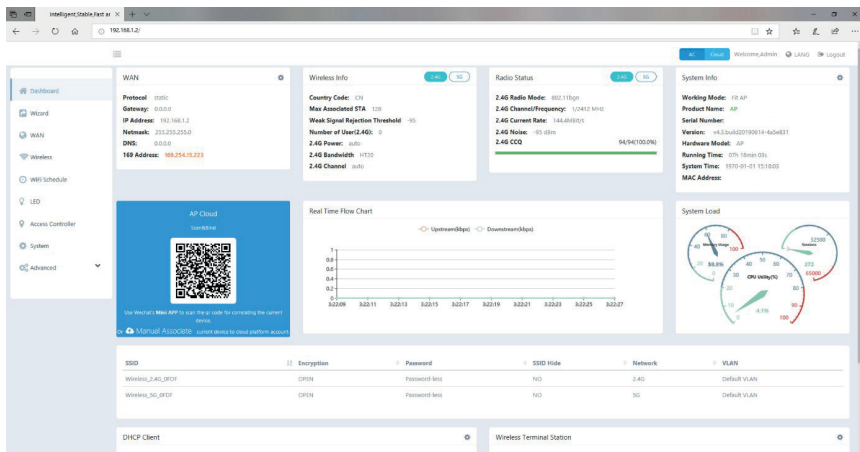
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## 1. Access to the AP interface

Set the computer's IP address: 192.168.1.23 (example), subnet mask: 255.255.255.0 The default IP address of the AP is 192.168.1.2, the default password is admin.



## 2. Network Status (Dashboard)

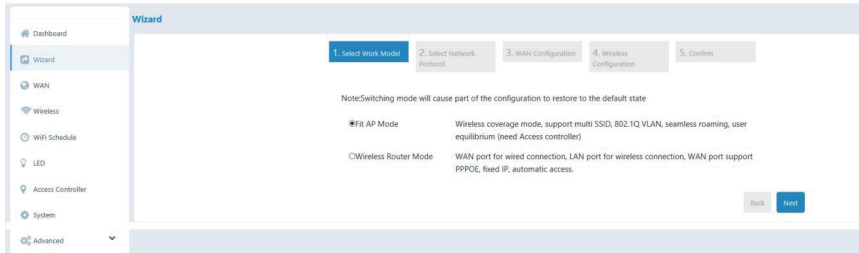


- **WAN:** Shows information about the AP's network configuration, WAN and LAN ports IP address, gateway address, subnet mask and DNS. (Address 169: it is the IP address automatically assigned to the AP when DHCP is not assigned).
- **Wireless info:** Shows the 2.4G and 5G wireless information of different countries, the maximum number of connections, the handover roaming threshold, the power, the bandwidth and the channel.
- **Radio status:** Show 2.4G and 5G wireless protocol mode, channel / frequency, wireless speed, noise and link quality.
- **System info:** Shows the operating mode, the device model, the firmware version, the execution time and the MAC address.
- **Real Time Flow Chart:** Indicates the current upstream and downstream speed of the AP.
- **System load:** Indicates the use of the CPU and memory, the use of the session

- **SSID:** Shows the information of different configurations of multiple SSIDs
- **DHCP client:** Shows a list of IP addresses assigned by the AP to the terminal. Available only for wireless routing modes.
- **Wireless terminal station:** Displays the list of clients currently connected to the AP.

### 3. Wizard

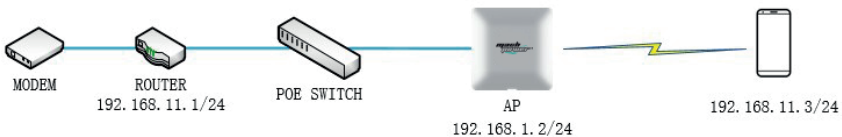
Step by step guide to configure your AP



#### 3.1 First step

Select the working mode for your AP ("Fit AP") is the default mode. \* Note: DHCP service cannot be enabled in this mode. DHCP will be handled by your router.

- **In AP Mode (default mode):** The AP is connected to the router and will act as a wireless access point. For better performance and control options, you can connect to an AC controller (sold separately). For more details, refer to the gateway manual.



- Select the network protocol (DHCP or Static).

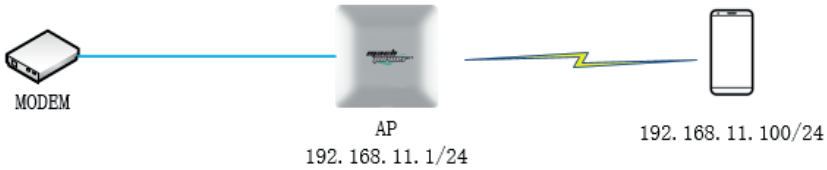
**Note:** The default IP address of the AP (192.168.1.2) will be changed to the IP address selected during this step.

- **WAN Configuration:** You can set the DNS.
- **Wireless setup:** You can change the SSID name and encryption mode and go to "Wireless Settings" to change the detailed setup
- Confirm that the setup is complete.

**Note:** Once you have changed the default IP of the AP, you will need to log in with the newly assigned IP. If the settings were "static", use the static IP address assigned to the unit. If the settings were "DHCP", log in to the router which is assigning the IP to this AP unit and search the IP assigned to the AP by searching the MAC address of the AP from the router's connected device list.

### 3.2 Wireless router mode (If supported)

The WAN port of the AP will be connected directly to the MODEM. Start the DHCP service of the AP.



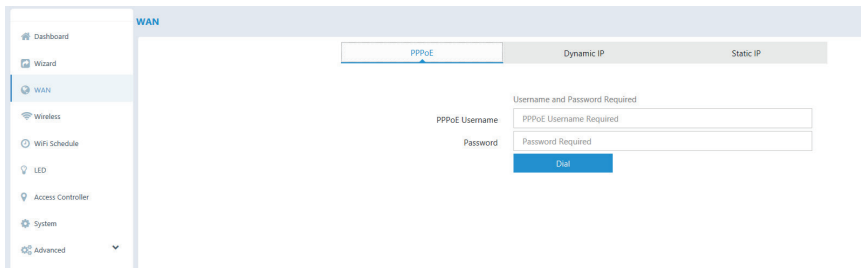
- **Select the network connection mode:** select the type of Internet service to which you have subscribed with the ISP (DHCP, Static, PPPoE).
- **Configure the external network:** DHCP: IP, subnet and Gateway will be assigned automatically by your ISP. Static IP: Enter the IP, subnet and gateway information provided by your ISP. PPPoE: Enter the ID and password provided by your ISP.
- **Configure the wireless network:** Change the SSID name and encryption mode and go to "Wireless Settings" to change the detailed configuration.
- Confirm that the setup is complete.

**Note:** When wireless routing mode is selected, the IP address of the AP will be changed to 192.168.11.1 and the DHCP service will be enabled.

### 4 WAN settings

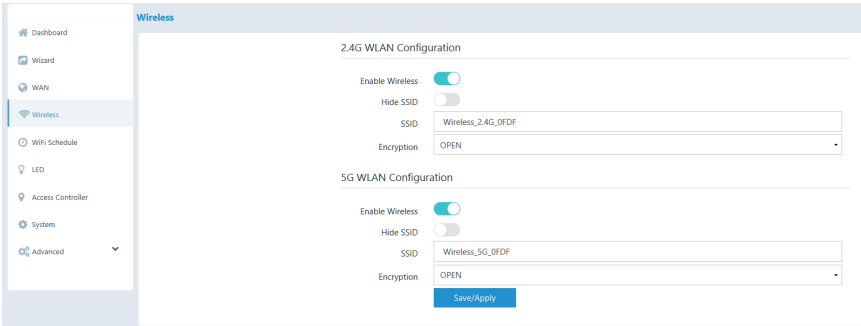
Configure the AP to connect to the WAN: DHCP, static IP, PPPoE are supported.

**Note:** If you have previously followed the configuration process using the wizard, you do not need to configure these options again.



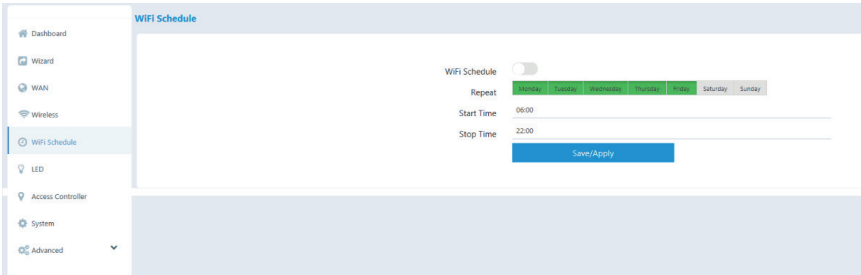
### 5 Wireless settings

Configure the 2.4GHz and 5GHz wireless settings by entering SSID and encryption methods. Note: If you have previously followed the configuration process using the wizard, you do not need to configure these options again. If you need more SSIDs, you can go to the "Advanced" tab and set the additional SSID names.



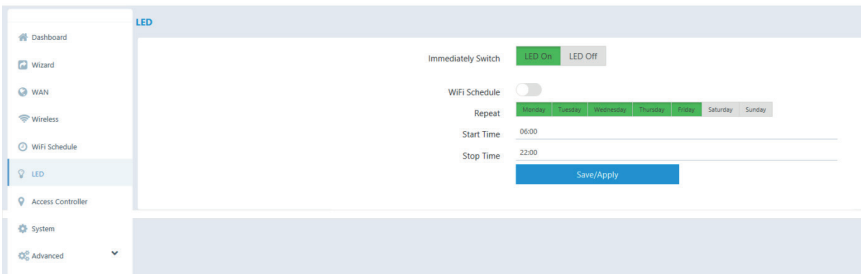
### 6 WiFi planning

You can set up a WiFi availability schedule by entering the start and end times for each day of the week by enabling the "WiFi Schedule" option. If not enabled, WiFi will always be available



### 7 LED

The LED light on the AP can be "ON" or "OFF"

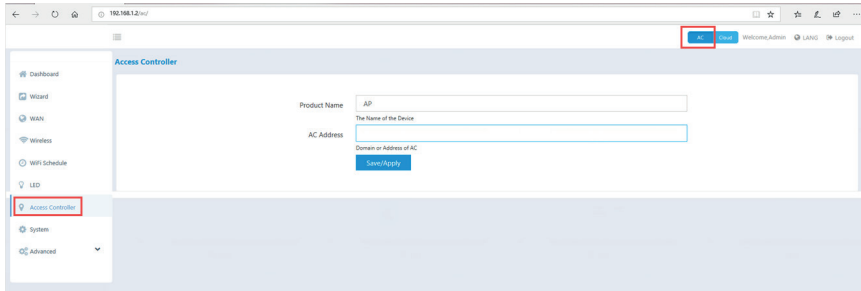


## 8 AC Management (Controller)

Cloud Direct or Cloud Managed Centralized Gateway Options

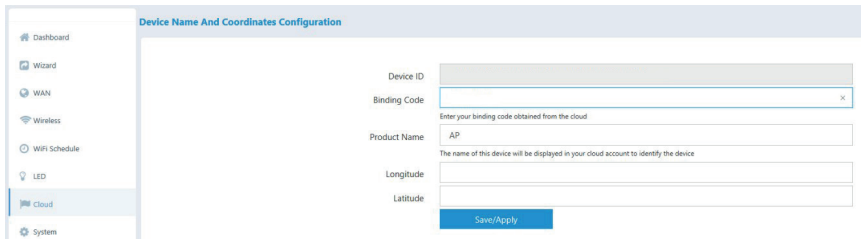
### 8.1 Centralized Management

By default, the AP is managed through a Gateway Appliance which offers centralized and quick management of multiple AP units. Refer to the AP Management section of the Gateway User Manual.



### 8.2 Cloud Management

When this option is checked, the AP is registered directly on the cloud server (<http://165.22.140.64>). Once you have created your user account on the site, you will be assigned a binding code which must be used to associate the AP with your cloud account. You will now be able to manage your APs via the Cloud account. For a detailed explanation, refer to the Cloud Account Guide.



## 9 System Settings

**9.1 Change password:** to change the password, enter the old password, enter the new password, confirm the new password and click "Save / Apply" to make the changes.

**9.2 System update:** In this section you can update the firmware (manually from a local file or via the cloud update), save and import configuration files and restore factory settings.

### 9.2.1 Firmware update

- Click "Select" to manually update from a downloaded firmware file.
- Click "Check Upgrade" to check and upgrade from a cloud server when new firmware is available.

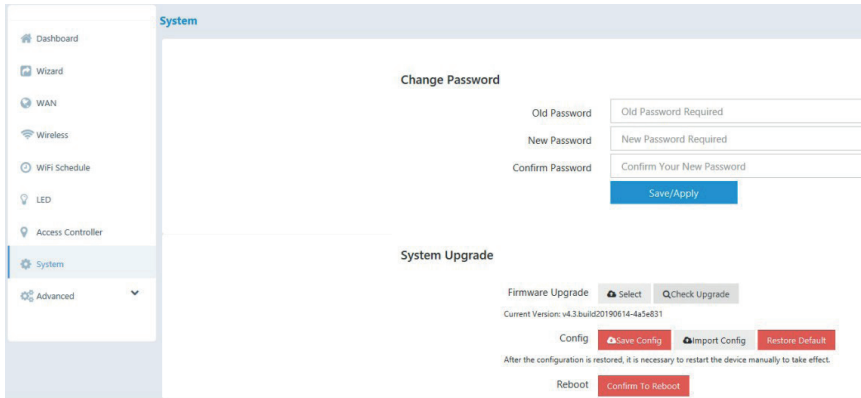
### 9.2.2 Configuration Management

- Click on "Save Config" to save the current AP configuration on a local PC.
- Click on "Import Config" to restore a configuration saved in the AP.
- Click "Restore Default" to restore all settings to the factory default state on the AP



### 9.2.3 AP reboot

Click "Confirm to Reboot" to reboot the AP

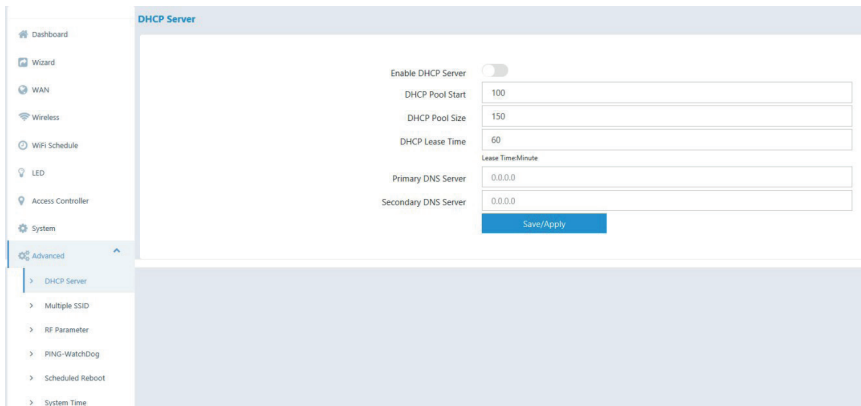


## 10 Advanced Settings

### 10.1 DHCP Server

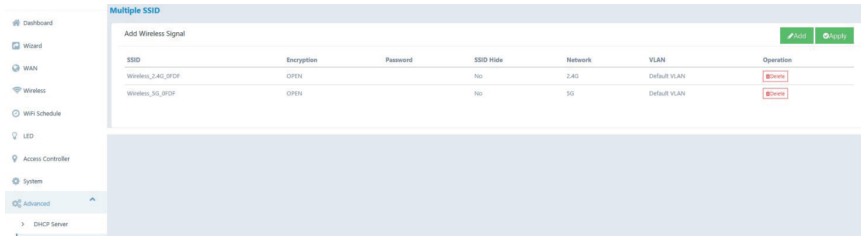
If enabled, it will automatically assign IP addresses to connected devices.

(Feature available on supported models and applicable only when the AP mode is set to "Wireless Router Mode")



## 10.2 Multiple SSID Settings

Ability to create or delete multiple SSIDs for the AP in the 2.4GHz or 5GHz bands



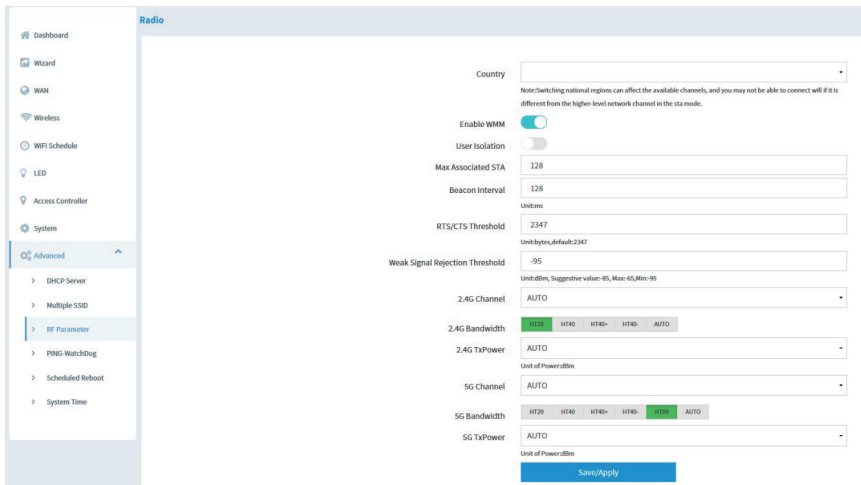
Click on "Add", select the 2.4G or 5G network channel, enter the required SSID and password, select "YES" or "NO" in "Hide SSID" to display or not the SSID and fill in the "VLAN Bind" if necessary, then click "Submit".

The screenshot shows the 'StartOS' configuration form for adding a new wireless signal. The form fields are:

- Network: 2.4G
- SSID: SSID Required
- Encryption: WPA2-AES
- Password: Length of password is at least 8
- Hide SSID: NO
- VLAN Bind: 0

Below the fields, it says "0 means to add to the default VLAN". There are 'Cancel' and 'Submit' buttons at the bottom.

## 10.3 RF parameters



- **Country:** Select the corresponding country where the device is located.
- **WMM:** Wi-Fi Multimedia, when "Enabled", will provide the basic Quality of Service (QoS) functions. WMM prioritizes traffic based on four access categories (AC): voice (AC\_VO), video (AC\_VI), best effort (AC\_BE), and background (AC\_BK). However, it does not provide the guaranteed bandwidth range. It is suitable for well-defined applications that require QoS, such as Voice over IP (VoIP) on Wi-Fi phones.
- **User Isolation:** It is recommended to activate this function only if necessary, as if activated, all terminal devices connected via Wi-Fi will not be able to access each other after connection.
- **Max Associated STA:** Limit the number of devices that can connect to this AP, 40-50 is recommended.
- **Beacon Interval:** The Beacon Interval could help your WiFi network maintain connection with other devices. It is recommended to keep the default values.
- **RTS/CTS Threshold:** The wireless AP sends request to send (RTS) frames to a particular receiving device and negotiates the sending of a data frame. After receiving an RTS, the device responds with a Clear to Send (CTS) frame to acknowledge the right to initiate transmission. It is recommended to keep the default values.
- **Weak Signal Rejection Threshold:** The AP will reject the connection to any wireless device that tries to connect with a signal strength lower than the set value.
- **2.4G / 5G Channel:** 2.4G / 5G frequencies support automatic adaptation to allowed wifi channels according to the selected country code.
- **2.4G Bandwidth:** Support 20/40/40 + / 40- MHz
- **5G Bandwidth:** 20/40/40 + / 40- / 80MHz
- **2.4 / 5G TxPower:** 2.4G supports up to 27dBm and 5G supports up to 23dBm.

## 10.4 PING-WatchDog

After the function has been enabled, the AP can perform line detection and perform preset actions.

The screenshot shows the 'PING-WatchDog' configuration page. On the left is a navigation menu with options: Dashboard, Wizard, WAN, Wireless, WiFi Schedule, LED, Access Controller, System, and Advanced. The 'Advanced' section is expanded to show 'PING-WatchDog', 'Scheduled Reboot', and 'System Time'. The main configuration area includes:

- Enable Ping Watchdog:** A toggle switch that is turned on.
- Address:** A text input field containing '192.168.11.1'.
- Interval of checking:** A text input field containing '60'. Below it, a note says 'Interval, unit:sec, suggest:60'.
- Number of Failure:** A text input field containing '3'. Below it, a note says 'Selected action initiated after number of failures indicated.Suggested value 3'.
- Ping Timeout:** A text input field containing '2'. Below it, a note says 'Ping Timeout, Suggested value:2'.
- Action:** A row of buttons: 'Reboot', 'Close wireless', 'Restart network', 'Enable Rescue SSID', and 'Close'. The 'Reboot' button is highlighted in green.

Below the action buttons, there is a warning: 'If the monitored address can not be pinged, the corresponding action will be performed.RESCUE SSID format:RESUE 99 XXXX, RESCUE password: 99999999.' At the bottom of the form is a blue 'Save/Apply' button.

- **Watchdog monitoring address:** The AP performs the PING test on the address or domain name
- **Interval of checking:** Ping test interval (unit: second)
- **Number of failure:** Ping checks the number of consecutive failures and takes actions. The suggested value is 3.
- **Ping Timeout:** maximum ping time (unit: second)

### • Watchdog monitoring action:

- Reboot: Reboot the device

- Turn off wireless: 2.4G and 5G wireless signals are turned off
- Restart the network: Restart the network ports
- Open RESCUE SSID: Increase the wireless RESCUE SSID, name format: RESCUE\_99\_XXXX, password: 99999999
- No action: No action

### 10.5 Scheduled Reboot:

When this feature is on, the AP can be set to auto reboot daily, weekly or monthly according to the schedule created.

Scheduled Reboot

Reboot Cycle: Every Day

Reboot Time: 00:00

Save/Apply

### 10.6 System time

When "NTP (Network Time Protocol)" is enabled, the AP will synchronize the system time installed based on the geographical location. Internet connection required.

PING-WatchDog

Enable Ping Watchdog

Address: 192.168.11.1

Interval of checking: 60

Number of Failure: 3

Ping Timeout: 2

Action: No Action

Save/Apply



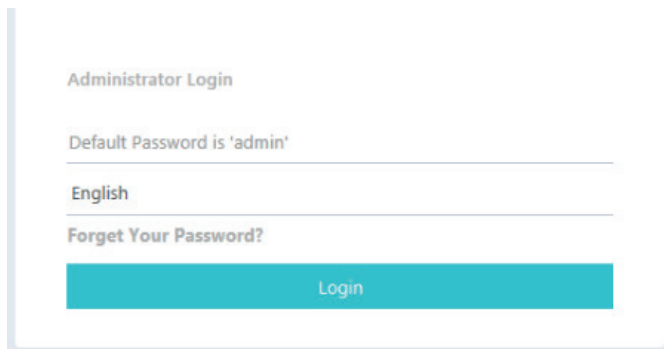


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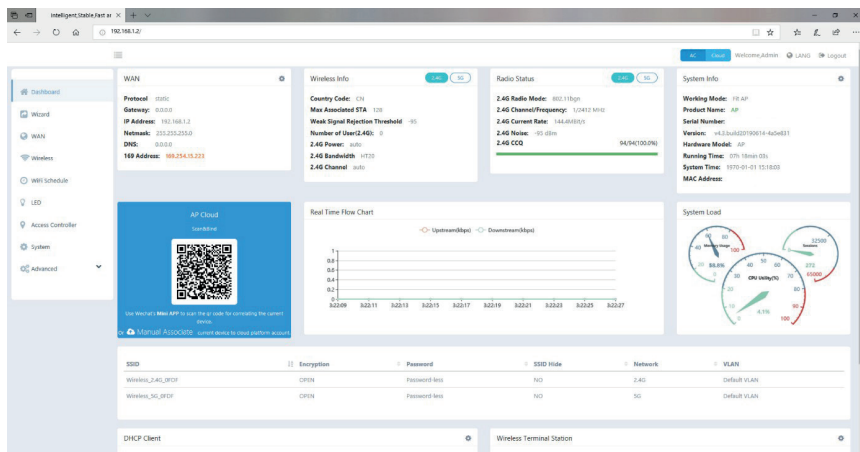
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## 1. Accesso all'interfaccia dell' AP

Impostare l'indirizzo IP del computer: 192.168.1.23 (esempio), subnet mask: 255.255.255.0 L'indirizzo IP predefinito dell'AP è 192.168.1.2, la password predefinita è admin.



## 2. Stato della rete (dashboard)



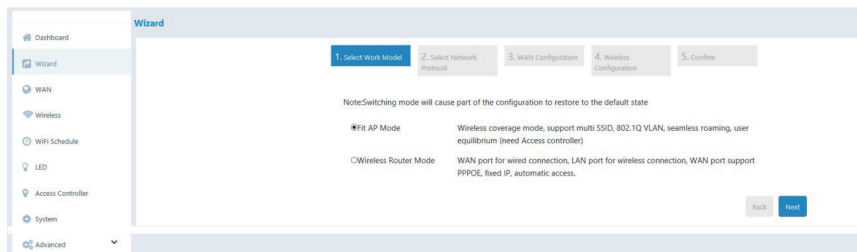
- **WAN:** Mostra le informazioni sulla configurazione di rete dell'AP, l'indirizzo IP delle porte WAN e LAN, l'indirizzo del gateway, la subnet mask e il DNS. (Indirizzo 169: è l'indirizzo IP assegnato automaticamente all'AP quando non avviene l'assegnazione del DHCP).
- **Wireless info:** Mostra le informazioni wireless 2.4G e 5G dei diversi paesi, il numero massimo di connessioni, la soglia di handover roaming, la potenza, la larghezza di banda ed il canale.
- **Radio status:** Mostra la modalità del protocollo wireless 2.4G e 5G, il canale / frequenza, la velocità wireless, il rumore e la qualità del collegamento.
- **System info:** Mostra la modalità in funzione, il modello del dispositivo, la versione del firmware, il tempo di esecuzione e l'indirizzo MAC
- **Real Time Flow Chart:** Indica la velocità attuale upstream e downstream dell'AP.
- **System load:** Indica l'utilizzo della CPU e della memoria, l'utilizzo della sessione.
- **SSID:** Mostra le informazioni delle diverse configurazioni degli SSID multipli.



- **DHCP client:** Mostra un elenco di indirizzi IP assegnati dall'AP al terminale. Disponibile solo per modalità di routing wireless.
- **Wireless terminal station:** Visualizza l'elenco dei client attualmente connessi all'AP.

### 3. Procedura guidata

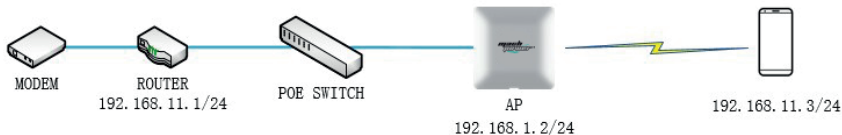
Guida passo passo per configurare il tuo AP.



#### 3.1 Primo passo

Seleziona la modalità di lavoro per il tuo AP ("Fit AP") è la modalità predefinita. \* Nota: il servizio DHCP non può essere abilitato in questa modalità. Il DHCP verrà gestito dal tuo router.

• **In Modalità AP (modalità predefinita):** l'AP è connesso al router e fungerà da punto di accesso wireless. Per prestazioni e opzioni di controllo migliori, è possibile connettersi a un controller AC (venduto separatamente). Per ulteriori dettagli, fare riferimento al manuale del gateway.



- Seleziona il protocollo di rete (DHCP o Statico).

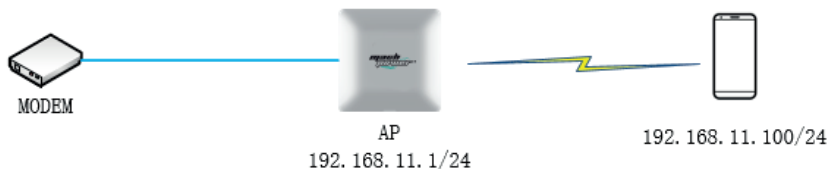
**Nota:** l'indirizzo IP predefinito dell'AP (192.168.1.2) verrà modificato nell'indirizzo IP selezionato durante questo passaggio.

- **Configurazione WAN:** è possibile impostare il DNS.
- **Configurazione wireless:** è possibile modificare il nome SSID e la modalità di crittografia e andare su "Impostazioni wireless" per modificare la configurazione dettagliata.
- Confermare che la configurazione è stata completata.

**Nota:** una volta modificato l'IP predefinito dell'AP, sarà necessario accedere con l'IP appena assegnato. Se le impostazioni erano "statiche", utilizzare l'indirizzo IP statico assegnato all'unità. Se le impostazioni erano "DHCP", accedere al router che sta assegnando l'IP a questa unità AP e cercare l'IP assegnato all'AP cercando l'indirizzo MAC dell'AP dall'elenco dei dispositivi collegati del router.

### 3.2 Modalità router wireless (Se supportata)

La porta WAN dell'AP sarà connessa direttamente al MODEM. Avviare il servizio DHCP dell'AP.



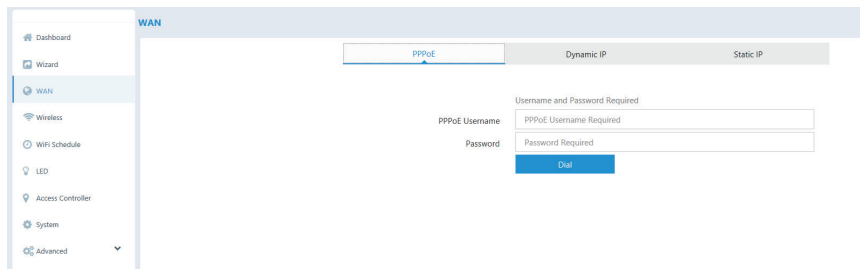
- **Selezionare la modalità di connessione di rete:** selezionare il tipo di servizio Internet a cui si è abbonati con l'ISP (DHCP, Statico, PPPoE).
- **Configurare la rete esterna:** DHCP: IP, subnet e Gateway verranno assegnati automaticamente dal tuo ISP. IP statico: inserire le informazioni su IP, subnet e gateway fornite dal proprio ISP. PPPoE: inserisci l'ID e la password forniti dal tuo ISP.
- **Configurare la rete wireless:** modificare il nome SSID e la modalità di crittografia e andare su "Impostazioni wireless" per modificare la configurazione dettagliata.
- Confermare che la configurazione è stata completa.

**Nota:** quando è selezionata la modalità Routing wireless, l'indirizzo IP dell'AP verrà modificato in 192.168.11.1 e il servizio DHCP sarà abilitato.

## 4 Impostazioni WAN

Configurare l'AP per connettersi alla WAN: DHCP, IP statico, PPPoE sono supportati.

Nota: se in precedenza hai seguito il processo di configurazione utilizzando la procedura guidata, non è necessario configurare nuovamente queste opzioni.



## 5 Impostazioni Wireless

Configurare le Impostazioni wireless 2.4GHz e 5GHz inserendo SSID e metodi di crittografia. Nota: se in precedenza hai seguito il processo di configurazione utilizzando la procedura guidata, non è necessario configurare nuovamente queste opzioni. Se hai bisogno di più SSID, puoi andare alla scheda "Avanzate" ed impostare i nomi SSID aggiuntivi.

**Wireless**

**2.4G WLAN Configuration**

Enable Wireless

Hide SSID

SSID Wireless\_2\_4G\_DFDF

Encryption OPEN

**5G WLAN Configuration**

Enable Wireless

Hide SSID

SSID Wireless\_5G\_DFDF

Encryption OPEN

Save/Apply

## 6 Pianificazione WiFi

È possibile impostare una pianificazione della disponibilità del WiFi inserendo gli orari di inizio e fine per ogni giorno della settimana abilitando l'opzione "WiFi Schedule". Se non è abilitata, il WiFi sarà sempre disponibile.

**WiFi Schedule**

WiFi Schedule

Repeat  Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Sunday

Start Time 06:00

Stop Time 22:00

Save/Apply

## 7 LED

La luce LED sull'AP può essere "accesa" o "spenta"

**LED**

Immediately Switch

WiFi Schedule

Repeat  Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Sunday

Start Time 06:00

Stop Time 22:00

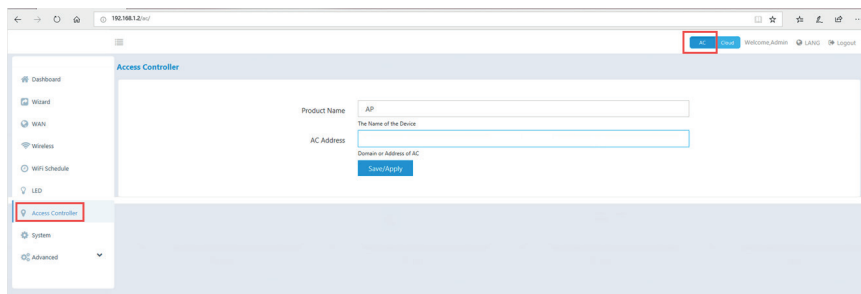
Save/Apply

## 8 Gestione AC (Controller)

Opzioni di Gateway centralizzato Cloud Direct o Cloud Managed.

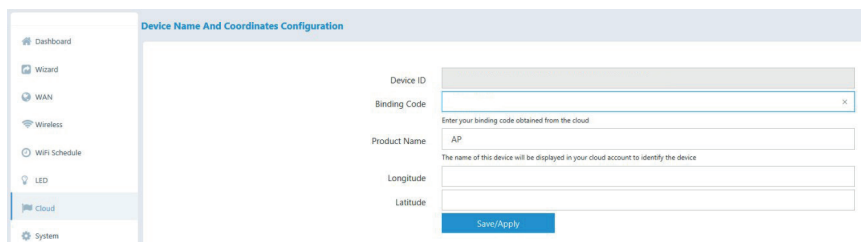
### 8.1 Gestione centralizzata

Per impostazione predefinita, l'AP è gestito tramite un Apparato Gateway che offre una gestione centralizzata e rapida di più unità AP. Fare riferimento alla sezione relativa alla gestione degli AP del Manuale utente del gateway.



### 8.2 Gestione cloud

Quando questa opzione è selezionata, l'AP viene registrato direttamente sul server cloud (<http://165.22.140.64>). Dopo aver creato il tuo account utente sul sito, ti verrà assegnato un codice vincolante che dovrà essere utilizzato per associare l'AP al tuo account cloud. Ora sarai in grado di gestire i tuoi AP tramite l'account Cloud. Per una spiegazione dettagliata, fare riferimento al Manuale dell'account cloud.



## 9 Impostazioni di Sistema

**9.1 Modifica password:** per cambiare la password, inserire la vecchia password, inserire la nuova password, confermare la nuova password e cliccare su "Save / Apply" per apportare le modifiche.

**9.2 Aggiornamento sistema:** In questa sezione è possibile aggiornare il firmware (manualmente da un file locale o tramite l'aggiornamento cloud), salvare e importare i file di configurazione e ripristinare le impostazioni di fabbrica.

### 9.2.1 Aggiornamento firmware

- Cliccare su "Select" per eseguire l'aggiornamento manuale da un file del firmware scaricato.
- Cliccare su "Check Upgrade" per verificare e aggiornare da un server cloud quando è disponibile un nuovo firmware.

### 9.2.2 Gestione Configurazione

- Cliccare su "Save Config" per salvare la configurazione corrente dell'AP su un PC locale.
- Cliccare su "Import Config" per ripristinare una configurazione salvata nell'AP
- Cliccare su "Restore Default" per ripristinare tutte le impostazioni allo stato predefinito di fabbrica sull'AP.

### 9.2.3 Riavvio AP

Fare clic su "Confirm to Reboot" per riavviare l'AP

The screenshot shows the 'System' configuration page. On the left is a navigation menu with options: Dashboard, Wizard, WAN, Wireless, WiFi Schedule, LED, Access Controller, System (selected), and Advanced. The main content area is divided into two sections:

- Change Password:** Contains three input fields: 'Old Password' (with placeholder 'Old Password Required'), 'New Password' (with placeholder 'New Password Required'), and 'Confirm Password' (with placeholder 'Confirm Your New Password'). A blue 'Save/Apply' button is located below the fields.
- System Upgrade:** Features a 'Firmware Upgrade' section with a 'Select' button and a 'Check Upgrade' button. Below this, the current version is listed as 'v4.3.build20190614-4x4e831'. There are three buttons: 'Save Config' (red), 'Import Config' (black), and 'Restore Default' (red). A note states: 'After the configuration is restored, it is necessary to restart the device manually to take effect.' At the bottom, there is a 'Reboot' section with a red 'Confirm To Reboot' button.

## 10 Impostazioni Avanzate

### 10.1 Server DHCP

Se abilitato, assegnerà automaticamente indirizzi IP ai dispositivi connessi.

(Funzione disponibile sui modelli supportati ed applicabile solo quando la modalità dell'AP è impostata su "Wireless Router Mode")

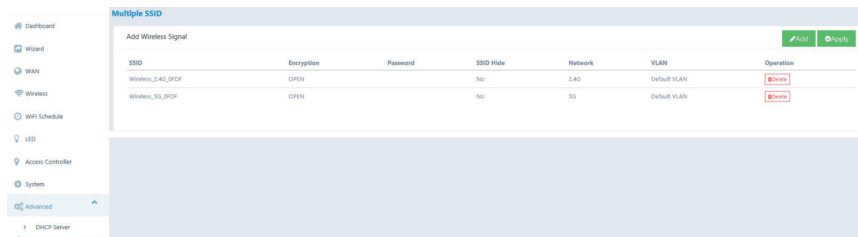
The screenshot shows the 'DHCP Server' configuration page. The left navigation menu includes: Dashboard, Wizard, WAN, Wireless, WiFi Schedule, LED, Access Controller, System, and Advanced (expanded to show DHCP Server, Multiple SSID, RF Parameter, PING-WatchDog, Scheduled Reboot, and System Time). The main content area contains the following settings:

- Enable DHCP Server:** A toggle switch that is currently turned off.
- DHCP Pool Start:** Input field with value 100.
- DHCP Pool Size:** Input field with value 150.
- DHCP Lease Time:** Input field with value 60.
- Lease Time:Minute:** Input field with value 0.0.0.0.
- Primary DNS Server:** Input field with value 0.0.0.0.
- Secondary DNS Server:** Input field with value 0.0.0.0.

A blue 'Save/Apply' button is located at the bottom of the configuration fields.

## 10.2 Impostazioni SSID multipli

Possibilità di creare o eliminare SSID multipli per l'AP nelle bande 2.4GHz o 5GHz



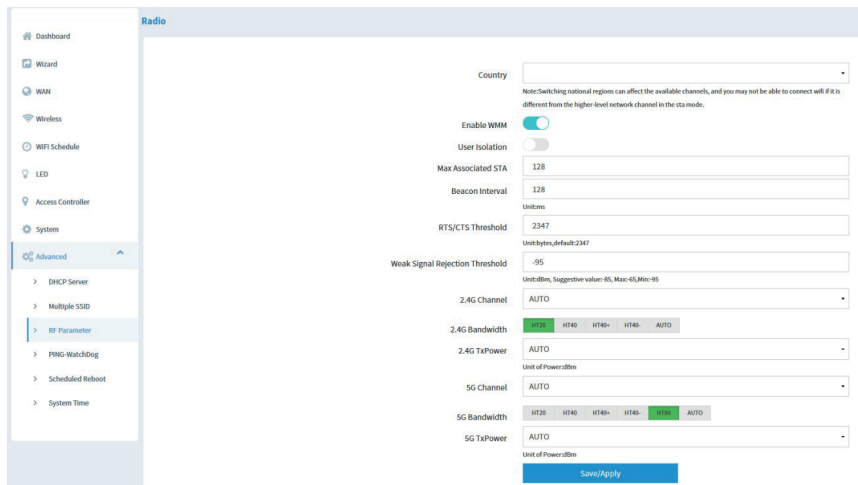
Cliccare su "Add", selezionare il canale di rete 2.4G o 5G, inserisci l'SSID e la password richiesti, seleziona "YES" o "NO" in "Hide SSID" per visualizzare o meno l'SSID e compilare il campo "VLAN Bind" se necessario, quindi cliccare su "Submit".

The form is titled 'StartOS Please Enter new wireless information'. It contains the following fields:

- Network: 2.4G
- SSID: SSID Required
- Encryption: WPA2-AES
- Password: Length of password is at least 8
- Hide SSID: NO
- VLAN Bind: 0

A note below the VLAN Bind field states: '0 means to add to the default VLAN'. At the bottom are 'Cancel' and 'Submit' buttons.

## 10.3 Parametri RF



- **Country:** Selezionare il paese corrispondente in cui si trova il dispositivo.
- **WMM:** Wi-Fi Multimedia, quando "Abilitato", fornirà le funzioni di base Qualità del servizio (QoS). WMM assegna la priorità al traffico in base a quattro categorie di accesso (AC): voce (AC\_VO), video (AC\_VI), massimo sforzo (AC\_BE) e background (AC\_BK). Tuttavia, non fornisce la portata di banda garantita. È adatto per applicazioni ben definite che richiedono QoS, come Voice over IP (VoIP) sui telefoni Wi-Fi.
- **User Isolation:** Si consiglia di attivare questa funzione solo se necessario, in quanto se attivata tutti i dispositivi terminali connessi tramite Wi-Fi non potranno accedere l'uno all'altro dopo collegamento.
- **Max Associated STA:** limita il numero di dispositivi che possono connettersi a questo AP, si consiglia l'impostazione di 40-50.
- **Beacon Interval:** L'Intervallo Beacon potrebbe aiutare la tua rete WiFi a mantenere la connessione con altri dispositivi. Si consiglia di mantenere i valori predefiniti.
- **RTS/CTS Threshold:** L'AP wireless manda frame di richiesta di invio (RTS) a un particolare dispositivo ricevente e negozia l'invio di un frame di dati. Dopo aver ricevuto un RTS, il dispositivo risponde con un frame Clear to Send (CTS) per riconoscere il diritto di iniziare la trasmissione. Si consiglia di mantenere i valori predefiniti.
- **Weak Signal Rejection Threshold:** L'AP rifiuterà la connessione a qualsiasi dispositivo wireless che tenta di connettersi con una potenza del segnale inferiore al valore impostato.
- **2.4G / 5G Channel:** Le frequenze 2.4G/5G supportano l'adattamento automatico ai canali wifi consentiti in base al codice del paese selezionato.
- **2.4G Bandwidth:** Supporta 20/40/40 + / 40- MHz
- **5G Bandwidth:** Supporta 20/40/40 + / 40- / 80 MHz
- **2.4 / 5G TxPower:** 2.4G supporta fino a 27 dBm e 5G supporta fino a 23dBm.

## 10.4 PING-WatchDog

Dopo che la funzione è stata abilitata, l'AP può eseguire il rilevamento della linea ed eseguire azioni preimpostate.

The screenshot shows the configuration page for the PING-WatchDog feature. The interface includes a sidebar on the left with various system settings. The main configuration area is titled "PING-WatchDog" and contains the following settings:

- Enable Ping Watchdog:** A toggle switch that is currently turned on.
- Address:** A text input field containing "192.168.11.1".
- Interval of checking:** A text input field containing "60". Below it, a note reads "Interval, unit:sec, suggest:60".
- Number of Failure:** A text input field containing "3". Below it, a note reads "Selected action initiated after number of failures indicated.Suggested value:3".
- Ping Timeout:** A text input field containing "2". Below it, a note reads "Ping Timeout, Suggested value:2".
- Action:** A dropdown menu with "Reboot" selected. Other options include "Close wireless", "Restart Network", "Enable Rescue SSID", and "No Action".

Below the action dropdown, there is a warning message: "If the monitored address can not be pinged, the corresponding action will be performed.RESCUE SSID format:RESCUE 99 XXXX, RESCUE password:99999999". At the bottom of the form is a blue "Save/Apply" button.

- **Watchdog monitoring address:** L'AP esegue il test PING sull'indirizzo o sul nome di dominio
- **Interval of checking:** Intervallo di test del ping (unità: secondo)
- **Number of failure:** Ping controlla il numero di errori consecutivi ed esegue azioni. Il valore suggerito è 3.
- **Ping Timeout:** tempo di ping massimo (unità: secondo)

### • Watchdog monitoring action:

- Reboot: Riavvio del dispositivo
- Turn off wireless: I segnali wireless 2.4G e 5G sono disattivati
- Restart the network: riavvia le porte di rete
- Open RESCUE SSID: Aumenta l'SSID RESCUE wireless, formato nome: RESCUE\_99\_XXXX, password: 99999999
- No action: Nessuna azione

## 10.5 Riavvio programmato

Quando questa funzione è attiva, l'AP può essere impostato per il riavvio automatico giornaliero, settimanale o mensile in base alla pianificazione creata

The screenshot shows the 'Scheduled Reboot' configuration page. At the top, there is a toggle switch for 'Scheduled Reboot' which is turned on. Below it, the 'Reboot Cycle' is set to 'Every Day' and the 'Reboot Time' is set to '00:00'. A blue 'Save/Apply' button is located at the bottom of the form.

## 10.6 Orario di sistema

Quando "NTP (Network Time Protocol)" è abilitato, l'AP sincronizzerà l'orario di Sistema installato in base alla localizzazione geografica. Connessione ad Internet necessaria.

The screenshot shows the 'PING-WatchDog' configuration page. On the left, there is a navigation menu with options like Dashboard, Wizard, WAN, Wireless, WiFi Schedule, LED, Access Controller, System, and Advanced. The 'Advanced' menu is expanded, showing sub-options: DHCP Server, Multiple SSID, RF Parameter, PING-WatchDog (selected), Scheduled Reboot, and System Time. The main content area is titled 'PING-WatchDog' and contains the following settings:

- 'Enable Ping Watchdog' is turned on.
- 'Address' is set to '192.168.11.1'.
- 'Interval of checking' is set to '60' (Interval: unit:sec, suggest:60).
- 'Number of Failure' is set to '3' (Selected action initiated after number of failures indicated.Suggested value 3).
- 'Ping Timeout' is set to '2' (Ping Timeout, Suggested value:2).
- 'Action' is set to 'No Action' (Other options: Reboot, Close wireless, Restart Network, Enable Rescue SSID).

A blue 'Save/Apply' button is at the bottom. A note at the bottom states: 'If the monitored address can not be pinged, the corresponding action will be performed.RESCUE SSID format:RESCUE 99 XXXX, RESCUE password: 99999999.'





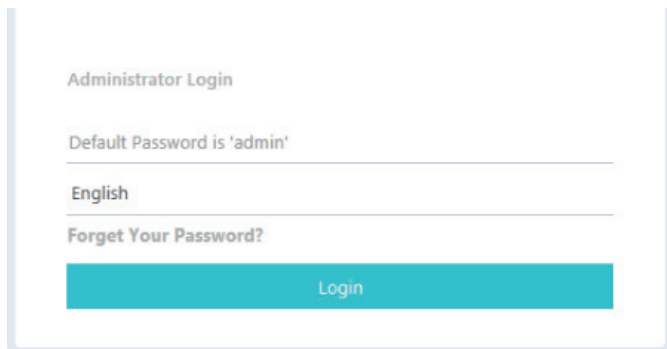


# INDICE

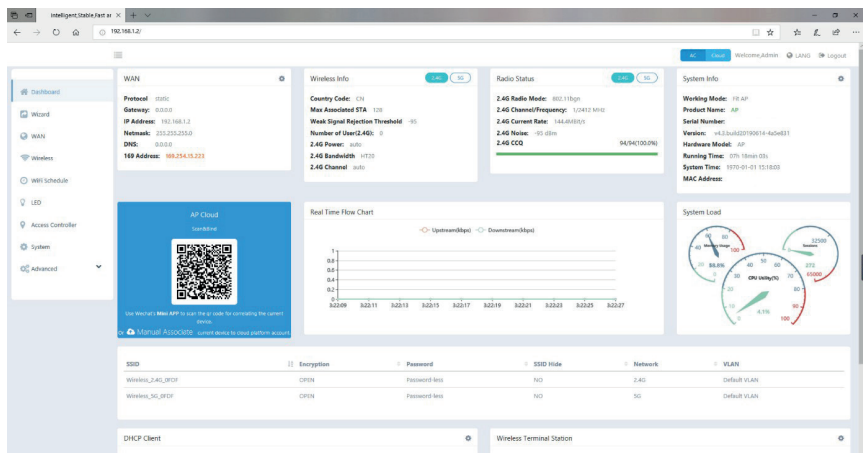
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## 1. Acceso a la interfaz AP

Configure la dirección IP de la computadora: 192.168.1.23 (ejemplo), máscara de subred: 255.255.255.0  
La dirección IP predeterminada del AP es 192.168.1.2, la contraseña predeterminada es admin.



## 2. Estado de la red (tablero)

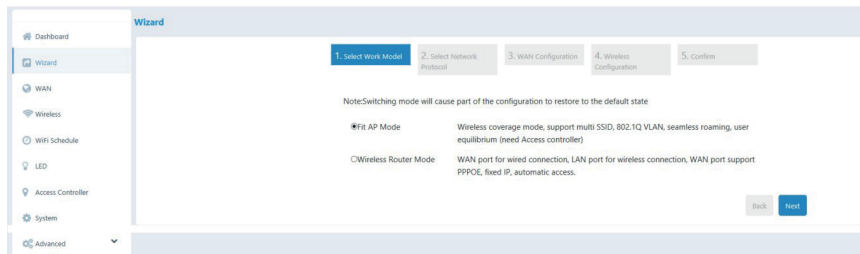


- **WAN:** muestra información sobre la configuración de red del AP, la dirección IP de los puertos WAN y LAN, la dirección de la puerta de enlace, la máscara de subred y el DNS. (Dirección 169: es la dirección IP asignada automáticamente al AP cuando no se asigna DHCP).
- **Wireless info:** muestra la información inalámbrica 2.4G y 5G de diferentes países, el número máximo de conexiones, el umbral de transferencia de roaming, la potencia, el ancho de banda y el canal.
- **Radio status:** muestra el modo de protocolo inalámbrico 2.4G y 5G, canal / frecuencia, velocidad inalámbrica, ruido y calidad del enlace
- **System info:** muestra el modo de funcionamiento, el modelo del dispositivo, la versión del firmware, el tiempo de ejecución y la dirección MAC.
- **Real Time Flow Chart:** : indica la velocidad actual aguas arriba y aguas abajo del AP.
- **System load:** Indica el uso de la CPU y la memoria, el uso de la sesión.

- **SSID:** muestra la información de diferentes configuraciones de múltiples SSID.
- **DHCP client:** muestra una lista de direcciones IP asignadas por el AP al terminal. Disponible solo para modos de enrutamiento inalámbrico.
- **Wireless terminal station:** muestra la lista de clientes actualmente conectados al AP.

### 3. Asistente

guía paso a paso para configurar su AP.

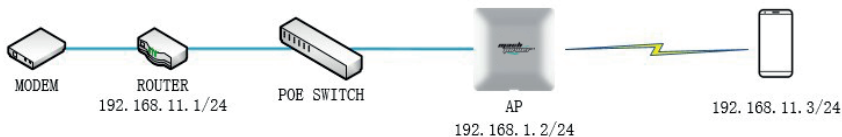


#### 3.1 Primer paso

Seleccione el modo de trabajo para su AP ("Fit AP") es el modo predeterminado. \*

**Nota:** el servicio DHCP no se puede habilitar en este modo. DHCP será manejado por su enrutador.

• **En modo AP (modo predeterminado):** el AP está conectado al enrutador y actuará como un punto de acceso inalámbrico. Para un mejor rendimiento y opciones de control, puede conectarse a un controlador de CA (se vende por separado). Para obtener más detalles, consulte el manual de la puerta de enlace.



- Seleccione el protocolo de red (DHCP o estático).

**Nota:** La dirección IP predeterminada del AP (192.168.1.2) se cambiará a la dirección IP seleccionada durante este paso.

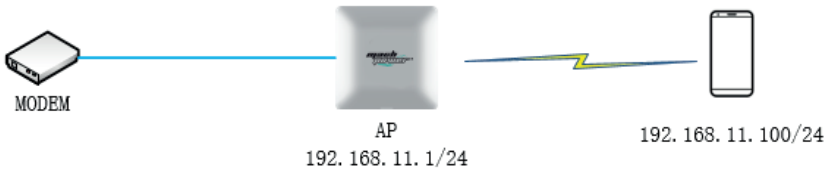
- **Configuración WAN:** puede configurar el DNS.
- **Configuración wireless:** puede cambiar el nombre SSID y el modo de encriptación e ir a "Configuración inalámbrica" para cambiar la configuración detallada.
- Confirme que la configuración esté completa.

**Nota:** Una vez que haya cambiado la IP predeterminada del AP, deberá iniciar sesión con la IP recién asignada. Si la configuración era "estática", utilice la dirección IP estática asignada a la unidad. Si la configuración era "DHCP", inicie sesión en el enrutador que asigna la IP a esta unidad AP y busque la IP asignada al AP buscando la dirección MAC del AP en la lista de dispositivos conectados del

enrutador

### 3.2 Modo enrutador inalámbrico (si es compatible)

El puerto WAN del AP se conectará directamente al MODEM. Inicie el servicio DHCP del AP.



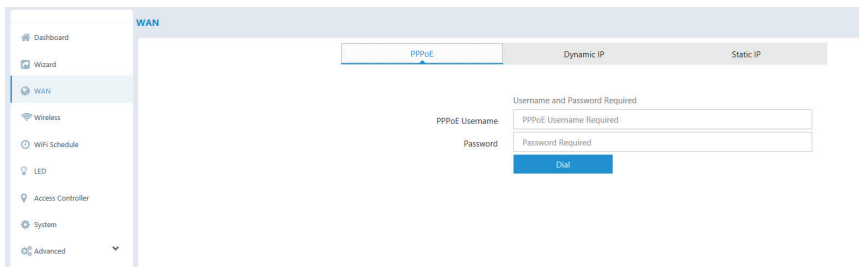
- **Seleccione el modo de conexión de red:** seleccione el tipo de servicio de Internet al que se ha suscrito con el ISP (DHCP, Estático, PPPoE).
- **Configure la red externa:** DHCP: su ISP asignará automáticamente la IP, la subred y la puerta de enlace. IP estática: ingrese la información de IP, subred y puerta de enlace proporcionada por su ISP. PPPoE: ingrese el ID y la contraseña proporcionados por su ISP.
- **Configure la red inalámbrica:** cambie el nombre SSID y el modo de cifrado y vaya a "Configuración inalámbrica" para cambiar la configuración detallada.
- Confirme que la configuración esté completa.

**Nota:** cuando se selecciona el modo de enrutamiento inalámbrico, la dirección IP del AP se cambiará a 192.168.11.1 y se habilitará el servicio DHCP.

## 4 Configuración de WAN

Configure el AP para conectarse a la WAN: DHCP, IP estática, PPPoE son compatibles.

**Nota:** Si ha seguido previamente el proceso de configuración mediante el asistente, no es necesario que vuelva a configurar estas opciones.



## 5 Configuración inalámbrica

Configure los ajustes inalámbricos de 2.4GHz y 5GHz ingresando SSID y métodos de encriptación.

Nota: Si ha seguido previamente el proceso de configuración mediante el asistente, no es necesario que vuelva a configurar estas opciones. Si necesita más SSID, puede ir a la pestaña "Avanzado" y configurar los nombres de SSID adicionales.

**Wireless**

**2.4G WLAN Configuration**

Enable Wireless

Hide SSID

SSID

Encryption

**5G WLAN Configuration**

Enable Wireless

Hide SSID

SSID

Encryption

## 6 Planificación WiFi

Puede configurar un programa de disponibilidad de WiFi ingresando las horas de inicio y finalización para cada día de la semana habilitando la opción "WiFi Schedule". Si no está habilitado, WiFi siempre estará disponible.

**WiFi Schedule**

WiFi Schedule

Repeat  Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Sunday

Start Time

Stop Time

## 7 LED

La luz LED del AP puede estar "encendida" o "apagada"

**LED**

Immediately Switch  LED On  LED Off

WiFi Schedule

Repeat  Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Sunday

Start Time

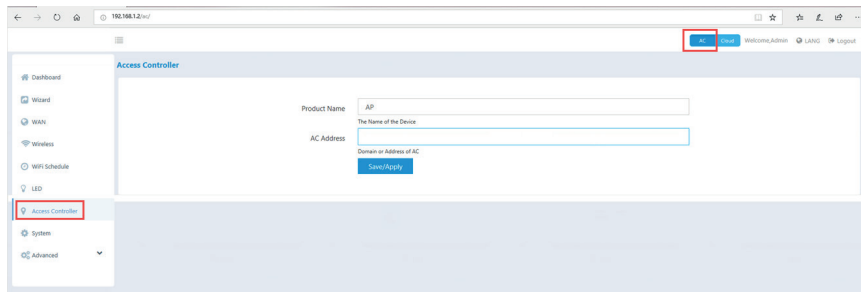
Stop Time

## 8 Administración de CA (controlador)

Opciones de puerta de enlace centralizada administrada en la nube o directa en la nube.

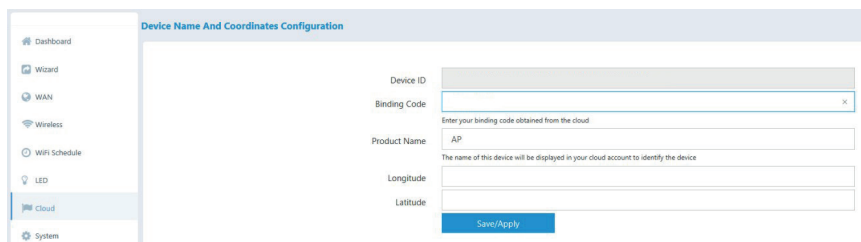
### 8.1 Administración centralizada

de forma predeterminada, el AP se administra a través de un dispositivo Gateway que ofrece una administración centralizada y rápida de múltiples unidades AP. Consulte la sección Administración de AP del Manual de usuario de Gateway.



### 8.2 Gestión de el Cloud

cuando esta opción está marcada, el AP se registra directamente en el servidor de Cloud (<http://165.22.140.64>). Una vez que haya creado su cuenta de usuario en el sitio, se le asignará un código vinculante que debe usarse para asociar el AP con su cuenta en el Cloud. Ahora podrá administrar sus puntos de acceso a través de la cuenta en el Cloud. Para obtener una explicación detallada, consulte la Guía de cuentas en el Cloud.



## 9 Ajustes del sistema

**9.1 Cambiar contraseña:** para cambiar la contraseña, ingrese la contraseña anterior, ingrese la nueva contraseña, confirme la nueva contraseña y haga clic en "Save / Apply" para realizar los cambios

**9.2 Actualización del sistema:** en esta sección puede actualizar el firmware (manualmente desde un archivo local o mediante la actualización en la nube), guardar e importar archivos de configuración y restaurar la configuración de fábrica.

### 9.2.1 Actualización de firmware

- Haga clic en "Select" para actualizar manualmente desde un archivo de firmware descargado.
- Haga clic en "Check Upgrade" para verificar y actualizar desde un servidor en la nube cuando haya nuevo firmware disponible.



### 9.2.2 Gestión de la configuración

- Haga clic en "Save Config" para guardar la configuración actual del AP en una PC local.
- Haga clic en "Import Config" para restaurar una configuración guardada en el AP.
- Haga clic en "Restore Default" para restaurar todas las configuraciones al estado predeterminado de fábrica en el AP.

### 9.2.3 Reinicio del AP

Haga clic en "Confirm to reboot" para reiniciar el AP

The screenshot shows the 'System' configuration page. On the left is a navigation menu with options: Dashboard, Wizard, WAN, Wireless, WiFi Schedule, LED, Access Controller, System (selected), and Advanced. The main content area is titled 'System' and contains two sections:

- Change Password:** Includes input fields for 'Old Password' (with a 'Required' label), 'New Password' (with a 'Required' label), and 'Confirm Password' (with a 'Confirm Your New Password' label). A blue 'Save/Apply' button is at the bottom.
- System Upgrade:** Includes a 'Firmware Upgrade' section with a 'Select' button and a 'Check Upgrade' button. Below it, the current version is listed as 'v4.3.build20190614-4x4e831'. There are three buttons: 'Save Config' (red), 'Import Config' (black), and 'Restore Default' (red). A note states: 'After the configuration is restored, it is necessary to restart the device manually to take effect.' At the bottom, there is a 'Reboot' section with a red 'Confirm To Reboot' button.

## 10 Ajustes avanzados

### 10.1 Servidor DHCP

si está habilitado, asignará automáticamente direcciones IP a los dispositivos conectados. (Función disponible en modelos compatibles y aplicable solo cuando el modo AP está configurado en "Wireless Router Mode")

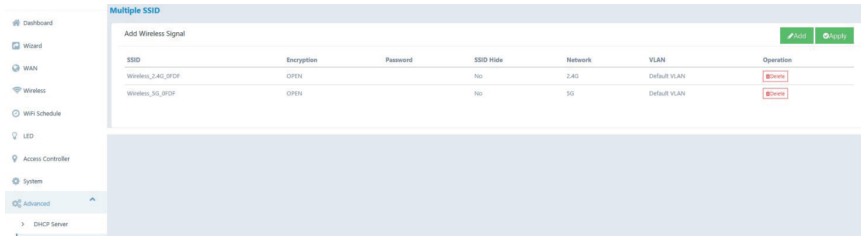
The screenshot shows the 'DHCP Server' configuration page. The left navigation menu includes: Dashboard, Wizard, WAN, Wireless, WiFi Schedule, LED, Access Controller, System, and Advanced (expanded to show DHCP Server, Multiple SSID, RF Parameter, PING-WatchDog, Scheduled Reboot, and System Time). The main content area is titled 'DHCP Server' and contains the following settings:

- Enable DHCP Server:** A toggle switch that is currently turned off.
- DHCP Pool Start:** Input field with the value 100.
- DHCP Pool Size:** Input field with the value 150.
- DHCP Lease Time:** Input field with the value 60.
- Lease Time:Minute:** Input field with the value 0.0.0.0.
- Primary DNS Server:** Input field with the value 0.0.0.0.
- Secondary DNS Server:** Input field with the value 0.0.0.0.

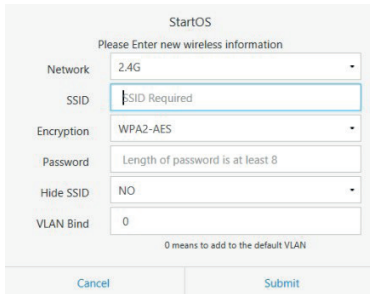
A blue 'Save/Apply' button is located at the bottom of the configuration area.

## 10.2 Múltiples configuraciones de SSID

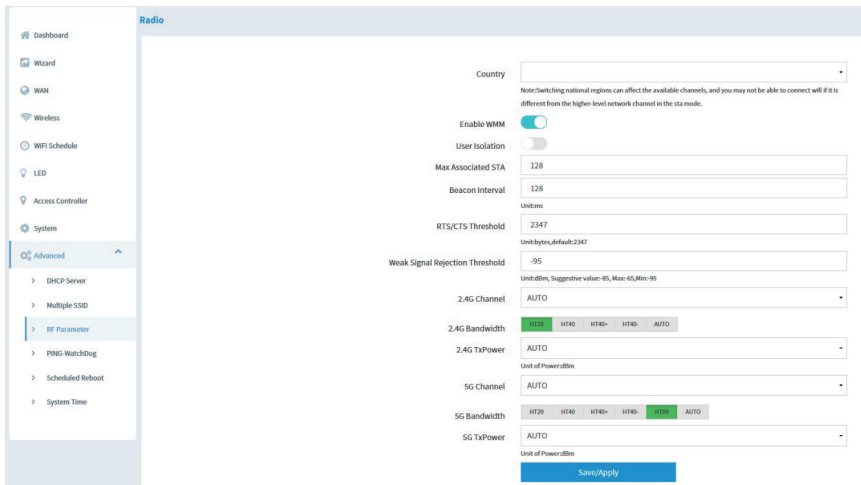
Capacidad para crear o eliminar múltiples SSID para el AP en las bandas de 2.4GHz o 5GHz



Haga clic en "ADD", seleccione el canal de red 2.4G o 5G, ingrese el SSID y la contraseña requeridos, seleccione "YES" o "NO" en "Hide SSID" para mostrar o no el SSID y complete el "VLAN Bind" si necesario, luego haga clic en "Submit".



## 10.3 RF parámetros



- **País:** seleccione el país correspondiente donde se encuentra el dispositivo.
- **WMM:** Wi-Fi Multimedia, cuando está "Enabled", proporcionará las funciones básicas de calidad de servicio (QoS). WMM prioriza el tráfico según cuatro categorías de acceso (AC): voz (AC\_VO), video (AC\_VI), mejor esfuerzo (AC\_BE) y fondo (AC\_BK). Sin embargo, no proporciona el rango de ancho de banda garantizado. Es adecuado para aplicaciones bien definidas que requieren QoS, como Voz sobre IP (VoIP) en teléfonos Wi-Fi.
- **Aislamiento de usuario:** se recomienda activar esta función solo si es necesario, ya que si estuviera activada, todos los dispositivos terminales conectados a través de Wi-Fi no podrán acceder entre sí después de la conexión.
- **Max Associated STA:** Limite la cantidad de dispositivos que se pueden conectar a este AP; se recomienda 40-50.
- **Beacon Interval:** El intervalo de beacon podría ayudar a su red WiFi a mantener la conexión con otros dispositivos. Se recomienda mantener los valores predeterminados.
- **Umbral RTS / CTS:** el AP inalámbrico envía una solicitud para enviar tramas (RTS) a un dispositivo receptor en particular y negocia el envío de una trama de datos. Después de recibir un RTS, el dispositivo responde con una trama Clear to Send (CTS) para reconocer el derecho a iniciar la transmisión. Se recomienda mantener los valores predeterminados.
- **Umbral de rechazo de señal débil:** el AP rechazará la conexión a cualquier dispositivo inalámbrico que intente conectarse con una intensidad de señal inferior al valor establecido.
- **Canal 2.4G / 5G:** las frecuencias 2.4G / 5G admiten la adaptación automática a los canales wifi permitidos según el código de país seleccionado.
- **Ancho de banda de 2.4G:** compatible con 20/40/40 + / 40- MHz
- **Ancho de banda 5G:** admite 20/40/40 + / 40- / 80MHz
- **TxPower 2.4 / 5G:** 2.4G admite hasta 27dBm y 5G admite hasta 23dBm.

## 10.4 PING-WatchDog

Después de que se haya habilitado la función, el AP puede realizar la detección de línea y realizar acciones preestablecidas.

The screenshot shows the configuration page for the PING-WatchDog feature. The left sidebar contains a navigation menu with items like Dashboard, Wizard, WAN, Wireless, WiFi Schedule, LED, Access Controller, System, and Advanced. The main area is titled 'PING-WatchDog' and includes the following settings:

- Enable Ping Watchdog:** A toggle switch that is turned on.
- Address:** A text input field containing '192.168.11.1'.
- Interval of checking:** A text input field containing '60'. Below it, a note says 'Interval: unit:sec, suggest:60'.
- Number of Failure:** A text input field containing '3'. Below it, a note says 'Selected action initiated after number of failures indicated.Suggested value: 3'.
- Ping Timeout:** A text input field containing '2'. Below it, a note says 'Ping Timeout, Suggested value:2'.
- Action:** A row of radio buttons with labels: 'Reboot', 'Close wireless', 'Restart Network', and 'Enable Rescue SSID'. The 'Enable Rescue SSID' option is selected.

At the bottom of the configuration area, there is a 'Save/Apply' button. A note at the bottom of the page reads: 'If the monitored address can not be pinged, the corresponding action will be performed.RESCUE SSID format:RESQUE 99 XXXX, RESCUE password: 99999999.'

- **Dirección de supervisión del perro guardián:** L'AP esegue il test PING sull'indirizzo o sul nome di dominio
- **Intervalo de verificación:** Intervallo di test del ping (unità: secondo)
- **Número de fallos:** Ping controlla il numero di errori consecutivi ed esegue azioni. Il valore suggerito è 3.

• **Ping Timeout:** tempo di ping massimo (unità: secondo)

• **Acción de supervisión del perro guardián:**

- Reiniciar: Riavvio del dispositivo
- Apague la conexión inalámbrica: segnali inalámbrico 2.4G e 5G sono disattivati
- Reiniciar la red: riavvia le porte di rete
- Abrir RESCUE SSID: Aumenta l'SSID RESCUE inalámbrico, formato nombre: RESCUE\_99\_XXXX, contraseña: 99999999
- Sin acción: Nessuna azione

### 10.5 Reinicio programado

Cuando esta función está activa, el AP se puede configurar para que se reinicie automáticamente a diario, semanalmente o mensualmente según el horario creado

Scheduled Reboot

Reboot Cycle Every Day

Reboot Time 00:00

Save/Apply

### 10.6 Hora del sistema

Cuando se habilita "NTP (Network Time Protocol)", el AP sincronizará la hora del sistema instalado según la ubicación geográfica. Requiere conexión a Internet.

**PING-WatchDog**

Enable Ping Watchdog

Address 192.168.11.1

Interval of checking 60

Number of Failure 3

Ping Timeout 2

Ping Timeout, Suggested value: 2

Action: Reboot, Close wireless, Restart network, Enable Rescue SSID

Save/Apply



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