



# FGW5500

## User Guide



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# Introduction

## Product Overview

- ① Power Input
- ② Power on/off Switch
- ③ 2.5GbE LAN Port
- ④ 1GbE LAN Port
- ⑤ USB Port (Reserve)
- ⑥ FXS Port
- ⑦ WPS button
- ⑧ SIM Slot
- ⑨ Reset button (press 5 sec for reset to default)



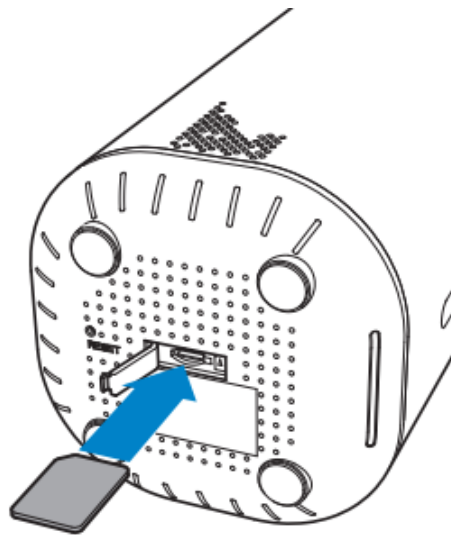
## LED Indicators

LED Indication	Color	Status	Description
<b>Bottom LED - 5G/LTE/3G/Ethernet Wan/Alarm</b>	Blue	5G (SA/NSA) On	Device connects to 5G network
	Green	LTE/3G On	Device connects to LTE/3G network
	Orange	Ethernet WAN	Device connects to Internet via Ethernet WAN
	Red	Alarm	System Alarm ON <ul style="list-style-type: none"> <li>No SIM card detect</li> <li>No Internet available</li> <li>Failed to boot up system</li> </ul>
	OFF		Power OFF
<b>Middle LED – WiFi/WPS enabled</b>	Blue	On	<ul style="list-style-type: none"> <li>LED ON for either 2.4GHz, 5GHz, or Both have been activated</li> <li>While UE connects to 5G network (SA/NSA) or Ethernet WAN mode, the WiFi LED color is Blue.</li> <li>While UE connects to 4G network (LTE/3G), the WiFi LED color is Green.</li> <li>Blinking, WiFi WPS process, (1 sec on, 1 sec off)</li> </ul>
		Blinking	
	Green	On	
		Blinking	
	OFF		Both 2.4GHz AND 5GHz are disabled
<b>Top LED – Voice SIP or VoLTE enabled</b>	Blue	On	<ul style="list-style-type: none"> <li>LED ON for either SIP or VoLTE has been activated</li> <li>While UE connects to 5G network (SA/NSA) or Ethernet WAN mode, the Voice LED color is Blue.</li> <li>While UE connects to 4G network (LTE/3G), the Voice LED color is Green.</li> <li>Blinking, SMS/Missed process. (2 sec on, 2 sec off)</li> </ul>
		Blinking	
	Green	On	
		Blinking	
	OFF		Both Voice SIP AND VoLTE didn't register
<b>Booting</b>	Blue		<ul style="list-style-type: none"> <li>10 seconds initial setup on bottom LED with solid BLUE</li> <li>Then 2 mins 40 sec for LED chasing on 3 LEDs chasing with BLUE</li> </ul>
<b>Firmware Upgrade</b>	Blue		All LEDs in Chasing Pattern with blue color
<b>Reset</b>	Blue		All LEDs in Blinking with blue color



# Installation

Please follow the steps below to install the router:

- Step1:** Insert SIM card into the router with direction shown below until it clicks.
- Step2:** Connect one of the **LAN** ports (any will do) on the router to your PC with a RJ-45 Ethernet cable provided.
- Step3:** Insert the power cord into the **DC-12V** power jack of the router; and insert the correct plug into your home's power outlet.
- Step4:** Switch the power ON. The router will start the booting process. After a few seconds, the LED lights will start blinking with blue color.
- Step5:** When the router has booted up, you will see the following LED lights on in solid color: the LTE (Green) or 5G (Blue). You can now connect your devices to the router via Ethernet or over WiFi. The network name (**SSID**) and password (**Key**) can be found on the label underneath the router.



Note:

1. To remove the SIM card, press the card in until it clicks and it will pop out automatically.
2. 5G/LTE signal strength can be referred on Web GUI, five bars (  ) ON means the strongest signal while one bar (  ) ON means the weakest signal that your device received.
3. Do not remove the SIM card when the router is operating.

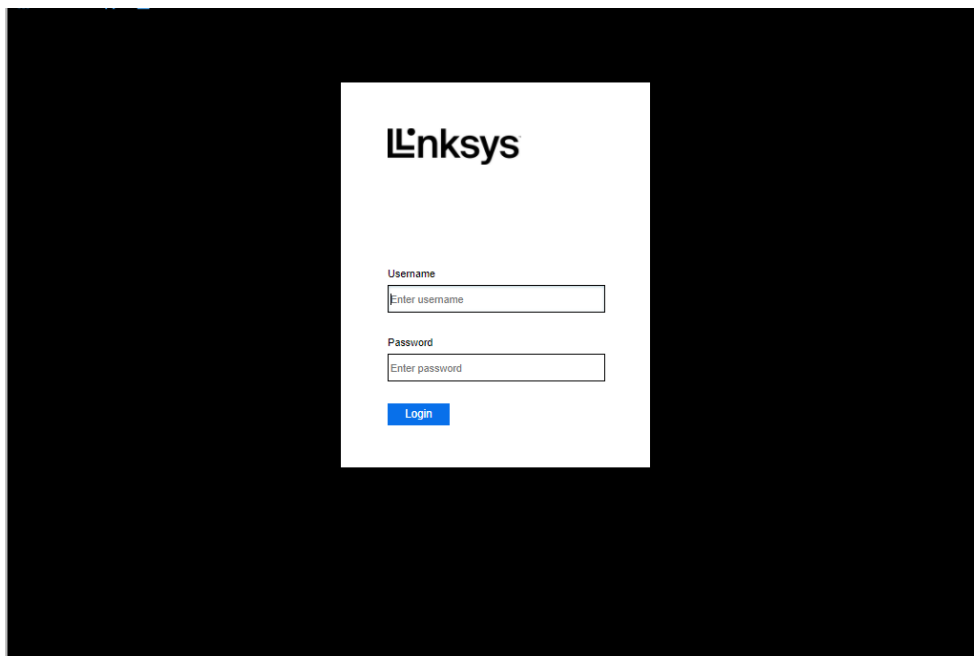
## Web Interface

### Login to Web-GUI

Users' devices are assumed in CPE LAN side. Please follow the steps below to configure your device through the web interface:

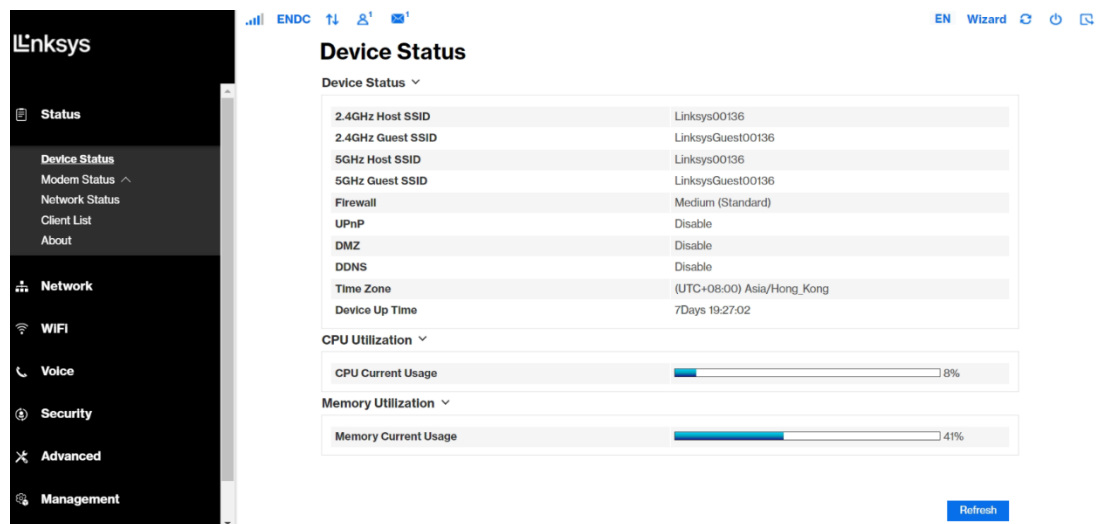
**Step1:** Open the Web browser (Ex: Internet Explorer, Firefox or Chrome) and enter the default IP address of CPE, which is : <https://192.168.15.1>

**Step2:** Enter USERNAME/PASSWORD to access the web management interface. The default USERNAME is **user**, and PASSWORD is mentioned on the bottom of the unit.



*Web management interface*

**Step3:** After successful login, you can see “Brief Summary Page”. Brief Summary Page is composed of many blocks and each block contains its own feature. A concise description is presented in the block. Users can click on it to enter “Detailed Configuration Page” to see the complete settings or tweak the configuration. Detailed information about this page will be stated below



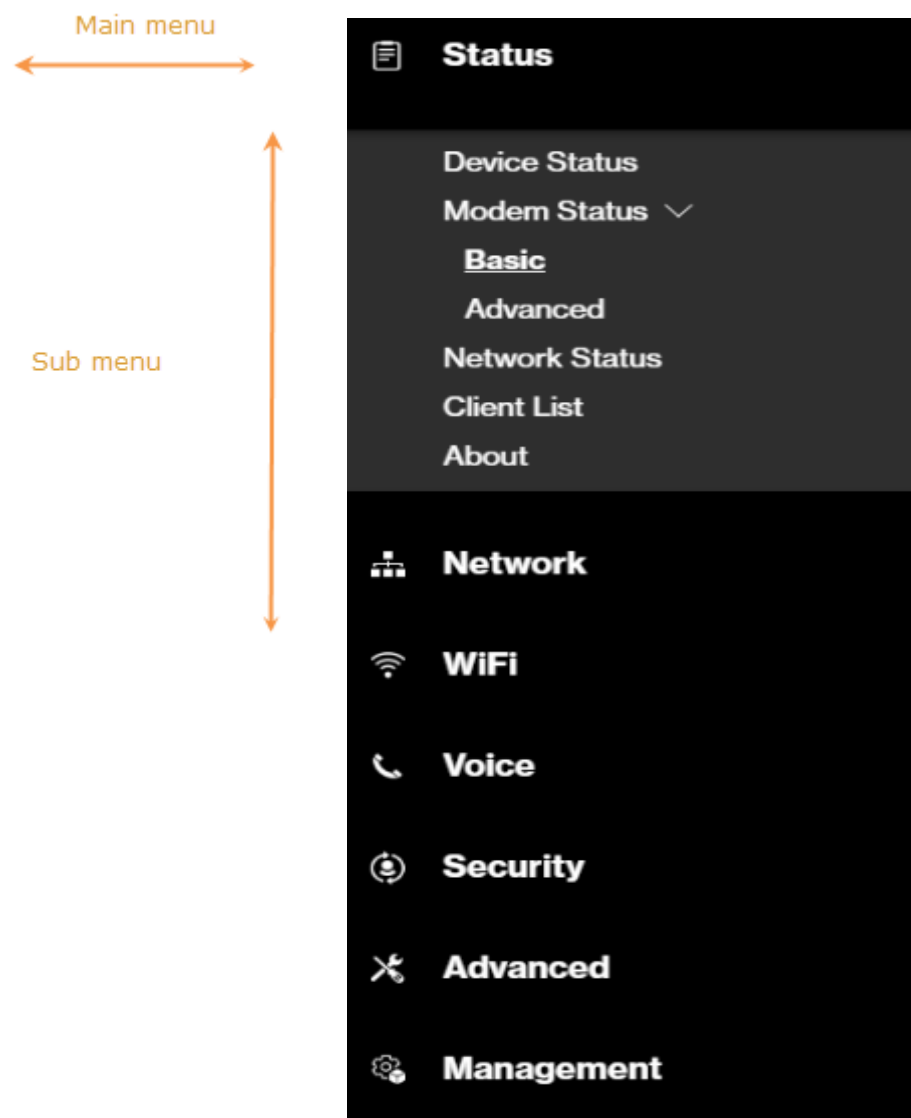
*Brief Summary Page*

After login, users can see a “**Brief Summary Page**” about all functions of FGW5500, each block is a link to “**Detailed Configuration Page**”.

(Ex: Click “**Network**”, you can go to “**Network**” main menu with sub-menu like WAN Setting or Port Management and other settings about Network)

Detailed Configuration Page

After clicking any block in “Brief Summary Page”, the webpage would be switched to the “Detailed Configuration Page”. (Take “Mobile Network” block for example)



Detailed Configuration Page

Main Menu	Show the current main menu
Sub Menu	Clickable, can jump to another <u>Sub Menu</u> under the same <u>Main Menu</u>



## Status | Device Status

### Device Status ▾

2.4GHz Host SSID	Linksys00136
2.4GHz Guest SSID	LinksysGuest00136
5GHz Host SSID	Linksys00136
5GHz Guest SSID	LinksysGuest00136
Firewall	Medium (Standard)
UPnP	Disable
DMZ	Disable
DDNS	Disable
Time Zone	(UTC+08:00) Asia/Hong_Kong
Device Up Time	7Days 19:35:51

*Status > Device Status*

- ◆ **Host SSID:** As titled.
- ◆ **Guest SSID:** As titled.
- ◆ **Firewall:** Three possible states, **LOW Filtering (Filtering Disabled)**, **Medium (Standard)** and **High**.
- ◆ **UPnP:** Possible states are **Enable** and **Disable**.
- ◆ **DMZ:** Possible states are **Enable** and **Disable**.
- ◆ **DDNS:** Possible states are **Enable** and **Disable**.
- ◆ **Time Zone:** As titled.

**Refresh button**

Click the “Refresh” button to trigger refresh manually.

## Status | Modem Status

Common			
Network	ENDC	Connection Status	Registered
Connection Time	3Days 20:22:02	Operator Name	1010
Uplink Current Speed	16.68 Kbps	Downlink Current Speed	17.28 Kbps
Data Uplink/Downlink Traffic	1.24 GB / 4.37 GB		<a href="#">Clear Traffic</a>
PIN Remain	3	PUK Remain	10
USIM Status	USIM ready	Roaming Status	Home Network
PLMN	45400	ICCID	8985200012677464742F

*Status > Modem Status*

- ◆ **Network:** Network mode, possible state is **5G/4G**, **ENDC/4G**, **5G**, or **4G**.
- ◆ **Connection Status:** If CPE anchored to the base station successfully, the status will be **Registered**. Otherwise, the status will be **No Service**.
- ◆ **Connection Time:** As titled.
- ◆ **Operator Name:** As titled.
- ◆ **Uplink Current Speed:** As titled.
- ◆ **Downlink Current Speed:** As titled.
- ◆ **Data Uplink/Downlink Traffic:** The data here is the accumulated.
- ◆ **PIN Remain:** 3 times remain.
- ◆ **PUK Remain:** 10 times remain.
- ◆ **USIM Status:** As titled.

## Status | Network Status

Operation Mode	Dynamic IP
IPv4	
WAN IP Address	10.89.42.252
Default Gateway	10.89.42.253
Primary DNS Server	210.241.208.1
Secondary DNS Server	139.175.1.2
IPv6	
WAN IP Address	2401:e180:8d52:50ad:50:f4ff:fe00:1
Default Gateway	fe80::2849:c0a8:4d1f:2537
Primary DNS Server	2401:e180:7fff::210:241:208:1
Secondary DNS Server	2001:cd8:103::139:175:1:1
LAN Link-Local Address	fe80::daec:5eff:feab:d32b
LAN Prefix Address	2401:e180:8d52:50ad::
Autoconfiguration Type	SLAAC DHCPv6
DHCP Server PD Prefix	N/A



*Status > Network Status*

- ◆ **Operation Mode:** As titled.
- ◆ **IPv4:** This section shows IPv4 WAN IP Address, Default Gateway, and DNS Servers of NR indoor CPE.
- ◆ **IPv6:** This section shows IPv6 WAN IP Address, Default Gateway, DNS Servers, LAN Link-Local Address, LAN Prefix Address, Autoconfiguration Type and DHCP Server PD Prefix of NR indoor CPE.

## Status | Client List

### Client List

#### Connected Devices ▾

Icon	Host Name	IP Address	MAC Address	Connected via	Action
	ASTWP-0283...	192.168.15.140	6C:6A:77:37:28:CD		<a href="#">BLOCK</a>

#### Blacklist ▾

Icon	Host Name	IP Address	MAC Address	Connected via	Action
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*Status > Client List*

- ◆ **Connected Devices:** It displays that how many clients connected to the CPE, including wired and wireless devices.
- ◆ **BLOCK:** Click the “BLOCK” button will block the device immediately.
- ◆ **Blacklist:** It displays that the devices have been blocked after clicking the “BLOCK” button. Click “UNBLOCK” button to release the devices.

## Network

The “Network” page allows user to configure network function such as Modem settings, Internet settings, LAN setting, and IPv6 settings.

### Network | Modem Settings

Network Mode	ENDC/4G ▼
Enable Auto Connection	<input checked="" type="checkbox"/>
Enable Roaming	<input type="checkbox"/>
Enable Voice APN	<input type="checkbox"/>

*Network > Modem Settings*

- ◆ **Network Mode:** Possible to state **5G/4G**, **ENDC/4G**, **5G**, or **4G**.
  - The CPE will automatically detect a SIM card for data APN configuration, and it also supports manual mode for configuration, such as authentication methods (NONE, PAP, CHAP) if service required.
- ◆ **Enable Auto Connection:** As titled. Default setting is enabled (checked).
- ◆ **Enable Roaming:** The CPE is a fixed wireless access point, and the default setting is disabled (unchecked).
- ◆ **Enable Voice APN:** While enabled (checked) Voice APN, the CPE will create a dedicated route for Voice service.
  - Some fields such as PDP type, APN setting, APN name, and username/password for authentication are required to input. Please contact your service provider to enable this service.

## Network | Internet Settings

Operation Mode	Dynamic IP ▾
Set DNS Server Manually	<input type="checkbox"/>
MTU Size	1500 (576-1500)

Operation Mode	PPTP ▾
Default Gateway	WAN ▾
Connection Type	Dynamic IP
Set DNS Server Manually	<input type="checkbox"/>
Server IP Address	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Username	<input type="text"/>
Password	<input type="password"/>
MTU Size	1500 (576-1500)

Operation Mode	L2TP ▾
BCP	Disable ▾
NAT Support	Enable ▾
Default Gateway	VPN ▾
Connection Type	Dynamic IP
Set DNS Server Manually	<input type="checkbox"/>
Server IP Address	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Username	<input type="text"/>
Password	<input type="password"/>
Host Name	<input type="text"/>
Tunnel Password	<input type="password"/>
MTU Size	1500 (576-1500)

Operation Mode	IP Passthrough ▾
IP Passthrough Type	<input checked="" type="radio"/> Auto <input type="radio"/> Manual
MTU Size	1500 (576-1500)

Network > Internet Settings

- ◆ **Operation Mode:** Possible to state **Dynamic IP**, **PPTP**, **L2TP**, or **IP Passthrough**.
  - **Dynamic IP:** The CPE behaves as DHCP client and receives WAN IP address from core network automatically.

- **PPTP:** A Virtual Private Network (VPN) protocol that uses a TCP control channel and a Generic Routing Encapsulation (GRE) tunnel to encapsulate PPP packets. Default Gateway, Server IP Address and login credential are required to input.
- **L2TP:** A layer 2 Virtual Private Network (VPN) protocol that uses encryption for its own control messages. Default Gateway, Server IP Address and login credential are required to input.
- **IP Passthrough:** IP Passthrough deactivates the functionality of the CPE and assigns the cellular WAN address straight to any of your desired devices connected to the CPE.

## Network | LAN Settings

LAN IP Address	192 . 168 . 15 . 1
LAN IP Subnet Mask	255 . 255 . 255 . 0
Host Name	Linksys0013
Multicast Proxy	Disable ▾
DHCP Service Type	Server ▾

**DHCP Server** ▾

DHCP Starting IP Address	192 . 168 . 15 . 101
DHCP Ending IP Address	192 . 168 . 15 . 150
DHCP Lease Time	8 hour(s) 0 minute(s) 0 second(s)
Enable DNS Proxy	<input checked="" type="checkbox"/>

**DHCP Lease Reservation** ^  
**DHCP Lease Status** ^

Network > LAN Settings

### ◆ LAN Setting:


➤ **LAN IP Address / LAN IP Subnet Mask:** The IP address and subnet mask used by CPE in LAN

- ◆ If users choose other tunnel mode, this IP means LAN side domain and Web GUI IP addresses. (This IP will change IP prefix in “**DHCP Server**”, “**Port Forwarding**” and “**Port Trigger**”)

◆ **DHCP Server:** CPE has a built-in DHCP server to manage the distribution of IP addresses. A device connected to CPE through the Ethernet port or WiFi would obtain a dynamic IP address from CPE.


◆ **DHCP Starting IP Address:** The starting IP address assigned by DHCP server.

◆ **DHCP Ending IP Address:** The ending IP address assigned by DHCP server.

	Notice that WiFi and Ethernet share the same DHCP server, the range of IP addresses should not be narrow. Otherwise, clients cannot get LAN IP addresses.
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◆ **DHCP Lease Time:** The lifetime of the IP assigned by DHCP server.

◆ **Enable DNS Proxy:** When the checkbox is ticked, clients set CPE as DNS server, but CPE will only act as a “DNS relay”.

	If users want to know DNS Servers obtained from ISP, It can be found in “ <b>Status &gt; Network Status &gt; DNS Server</b> ”
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◆ **DHCP Lease Reservation:** Setup a mapping IP addresses with specified DHCP lease time.

◆ **DHCP Lease Status:** This table records the mapping of MAC and IP addresses. Clients with the specific MAC address in the table would get the corresponding IP address. An example is illustrated below.

<b>Cancel button</b>	Reset fields to the last saved values.
<b>Apply button</b>	Commit the changes made and save to the CPE device, some services will be reloaded.



## Network | IPv6 Settings

### WAN Setting ▾

IPv6 Type	Autoconfiguration
DNS Server Source	<input checked="" type="radio"/> Auto <input type="radio"/> Manual

### LAN Setting ▾

Autoconfiguration Type	SLAAC DHCPv6 ▾
IPv6 SLAAC DHCPv6 RA Lifetime(seconds)	28800

*Network > IPv6 Settings*

The “IPv6” page allows user to get IPv6 information such as WAN Connection Type and WAN IPv6 Address.

- ◆ **IPv6 Type:** Show IPv6 Connection Type with “Auto Configuration (SLAAC/DHCPv6).
- ◆ **DNS Server Source:** Get DNS from Auto or Static
- ◆ **Autoconfiguration Type:** Choose different configuration to assign IPv6 address
- ◆ **IPv6 SLAAC DHCPv6 RA Lifetime (seconds):** Set DHCPv6 renew time, default setting is 28800 seconds.

## WiFi

In WiFi main menu, you can display and configure WiFi settings. Users can see SSID, current channel and working mode as well as configure wireless setting, security, and access control list.

### WiFi | Basic

#### 2.4GHz WiFi ▾

##### Host

Enable SSID	<input checked="" type="checkbox"/>
Network Name(SSID)	<input type="text" value="Linksys00134"/>
Hide SSID	<input type="checkbox"/>
Encryption	<input type="text" value="WPA2-PSK/WPA3-SAE + AES"/>
Password	<input type="password" value="....."/> <input type="checkbox"/> display

##### Guest

Enable SSID	<input type="checkbox"/>
Network Name(SSID)	<input type="text" value="LinksysGuest00134"/>
Hide SSID	<input type="checkbox"/>
Encryption	<input type="text" value="NONE"/>

#### 5GHz WiFi ▾

Use the same settings as 2.4GHz	<input checked="" type="checkbox"/>
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WiFi > Basic


- ◆ **Enable SSID:** As titled.
- ◆ **Network Name (SSID):** SSID (service set identifier) is a label representing wireless AP. Wireless clients would see the SSID broadcasted by AP.
- ◆ **Hide SSID:** As titled.
- ◆ **Encryption:** It provides several encryption modes such as • NONE • WPA2 PSK + AES • WPA2-PSK/WPA3-SAE + AES • WPA3-SAE + AES

Authentication	Encryption	
Open Systems	NONE	
WPA3-Personal	CCMP	Pre-shared Settings - Key Pass Phrase
WPA2-Personal	AES TKIP	Pre-shared Settings - Rekey Interval

	TKIP/AES CCMP TKIP/CCMP	Key Pass Phrase <b>Wi-Fi Protected Setup (WPS)–</b> Enable WPS
<b>WPA2/WPA3-Personal Mixed Mode</b>	CCMP	<b>Pre-shared Settings -</b> Key Pass Phrase
<b>WPA/WPA2-Personal Mixed Mode</b>	TKIP/AES TKIP AES	<b>Pre-shared Settings -</b> Rekey Interval Key Pass Phrase <b>Wi-Fi Protected Setup (WPS)–</b> Enable WPS (only for AES and TKIP/AES.)

- ◆ **Guest Network:** The separated WiFi network can isolate all of your home devices and services from a “Guest”, which only provides access to the Internet but not to your home network.

<b>Refresh button</b>	Click the “Refresh” button to trigger refresh manually.
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	Radio channel, WiFi MAC and Network Name (SSID) are all examples here.
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## WiFi | Advanced

### 2.4GHz WiFi ▾

Working Mode	802.11b/g/n/axg ▾
Bandwidth	20MHz/40MHz auto ▾
Radio Channel	Auto ▾

### Host

Maximum Connection Number	32
AP Isolation	<input type="checkbox"/>

### 5GHz WiFi ▾

Working Mode	802.11a/an/ac/axa ▾
Bandwidth	20MHz/40MHz/80MHz/160MHz auto ▾
Radio Channel	Auto ▾

WiFi > Advanced

#### ◆ Working Mode:

- 2.4GHz WiFi: There are “802.11 b/g/n/axg”, “802.11 b/g/n”, “802.11 b/g”, and “802.11b”.
- 5GHz WiFi: There are “802.11 a/an/ac/axa”, “802.11 a/an/ac”, “802.11 a/an”, and “802.11a”.

#### ◆ Bandwidth: The setting is only available when the wireless protocol is used; select the bandwidth from the drop-down list.

- 20MHz – Set the bandwidth to 20M.
- 20MHz/40MHz Auto – The bandwidth setting will automatically be switched to either 20M or 40M by CPE based on the environment.
- 20MHz/40MHz/80MHz Auto – The bandwidth setting will automatically be switched to either 20M, 40M or 80MHz by CPE based on the environment.
- 20MHz/40MHz/80MHz/160MHz Auto – The bandwidth setting will automatically be switched to either 20M, 40M, 80MHz or 160MHz by CPE based on the environment.


#### ◆ Radio Channel: The channel to use. Selecting “Auto” will allow CPE to choose the best channel automatically.



To avoid the interference, “Radio Channel” will be automatically changed due to the selected “LTE Band”

- ◆ **Maximum Connection Number:** Configuring range 1 ~ 32, per radio.
- ◆ **AP Isolation:** Enable or disable AP Isolation feature.

<b>Cancel button</b>	Reset fields to the last saved values.
<b>Apply button</b>	Commit the changes made and save to the CPE device, some services will be reloaded.

	If you select “ <b>WhiteList</b> ” and have no MAC address in the list, no one can establish the connection.
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## WiFi | WPS

### 2.4GHz WiFi ▾

Host

Enable WPS

☐

### 5GHz WiFi ▾

Host

Enable WPS

☐

WiFi> WPS

- ◆ Wi-Fi Protected Setup (WPS)
  - **Enable WPS:** User can share their WiFi via WPS when this box is checked. This feature support for both 2.4GHz and 5GHz radios.

## WiFi | Connected Client

### 2.4GHz WiFi ▾

Host

Host Name	IP Address	MAC Address	Mode	RSSI	Speed
ASTWP-028345	192.168.15.140	6C:6A:77:37:28:CD	B/G/N/AXG	-52	206

### 5GHz WiFi ▾

Host

Host Name	IP Address	MAC Address	Mode	RSSI	Speed
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WiFi > Connected Client

- ◆ **Host:** It displays that how many clients connected to the CPE through both 2.4GHz and 5GHz radios.

## Voice | Voice Setting

### Voice Setting

Service Domain		VoIP ▼	
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Registration ▼

Account

Username	<input type="text"/>	User Account	<input type="text"/>
Password	<input type="text"/>	Password Confirm	<input type="text"/>
Display Name	<input type="text"/>		

Server Settings

IP Version	IPv4 ▼	
User Domain	<input type="text"/>	(Please enter domain name or IPv4 address)
Registrar Address	<input type="text"/>	(Please enter domain name or IPv4 address)
Outbound Proxy Address	<input type="text"/>	(Please enter domain name or IPv4 address)
Registrar Port	<input type="text" value="5060"/>	Outbound Proxy Port <input type="text" value="5060"/>
RTP Port Range Start	<input type="text" value="49152"/>	RTP Port Range End <input type="text" value="65535"/>

General Settings ^

Voice > Voice Setting

- ◆ **Service Domain:** VoIP
- ◆ **Registration:** This part includes “**Account**” for validation and “**Server Settings**” for services configuration.
- ◆ **Account:** Username, User Account, Password, Password Confirm and Display Name are for VoIP service registration. It requires to contact your service provider to get the credentials.
- ◆ **Server Settings:** Contact with your service provider to get the right configurations on IP Version, User Domain, Registrar Address, Outbound Proxy Address, Registrar Port, Outbound Proxy Port, RTP Port Range Start and RTP Port Range End.

## Advanced | MAC Filtering

MAC Filtering Mode	<input type="radio"/> Disable <input checked="" type="radio"/> Blacklist <input type="radio"/> Whitelist
v Rule #1 <span>✕</span>	
Enabled	<input checked="" type="checkbox"/>
MAC Address	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

MAC Filtering Mode	<input type="radio"/> Disable <input type="radio"/> Blacklist <input checked="" type="radio"/> Whitelist
v Rule #1 <span>✕</span>	
Enabled	<input checked="" type="checkbox"/>
MAC Address	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

*Advanced > MAC Filtering*

- ◆ **MAC Filtering Mode:** Users can block or allow clients with certain MAC addresses to access to CPE.
  - **Disable:** Any clients can establish the connection.
  - **Blacklist:** Only clients with MAC addresses in “Access Control List” will be blocked, other clients can establish the connection.
  - **Whitelist:** Only clients with MAC addresses in “Access Control List” can establish the connection, other clients will be blocked.



## Advanced | IP Filtering

IP Filtering Mode	<input type="radio"/> Disable <input checked="" type="radio"/> Blacklist <input type="radio"/> Whitelist
v Rule #1 <span>ⓧ</span>	
Enabled	<input checked="" type="checkbox"/>
IP Version	IPv4 v
IP Address	192.168.15 <input type="text"/> - <input type="text"/>

IP Filtering Mode	<input type="radio"/> Disable <input type="radio"/> Blacklist <input checked="" type="radio"/> Whitelist
v Rule #1 <span>ⓧ</span>	
Enabled	<input checked="" type="checkbox"/>
IP Version	IPv4 v
IP Address	192.168.15 <input type="text"/> - <input type="text"/>

*Advanced > IP Filtering*

- ◆ **IP Filtering Mode:** Users can block or allow clients with certain IP addresses to access to CPE.
  - **Disable:** Any clients can establish the connection.
  - **Blacklist:** Only clients with IP addresses in “Access Control List” will be blocked, other clients can establish the connection.
  - **Whitelist:** Only clients with IP addresses in “Access Control List” can establish the connection, other clients will be blocked.

## Advanced | Dynamic DNS

Enable DDNS	<input checked="" type="checkbox"/>
Service Provider	dyndns ▾
Username	<input type="text"/>
Password	<input type="password"/>
Domain Name	<input type="text"/>

*Advanced > Dynamic DNS*

- ◆ **Enable DDNS:** Users can enable or disable the Dynamic DNS service by clicking the check box.
  - **Service Provider:** Select either **dyndns**, **noip** or **Changelp** as the Dynamic DNS service provider for the CPE.
  - **Username:** Dynamic DNS service login credential.
  - **Password:** Dynamic DNS service login credential.
  - **Domain Name:** Enter the domain name that you want to create for your services.

## Advanced | Port Forwarding

Enabled	<input checked="" type="checkbox"/>
Application Name	<input type="text"/>
Protocol	TCP ▾
WAN Port	<input type="text"/> ~ <input type="text"/>
LAN Port	<input type="text"/>
LAN IP	192.168.15. <input type="text"/>

*Advanced > Port Forwarding*

- ◆ **Enabled:** Users can enable or disable the Port Forwarding service by clicking the check box.
  - **Application Name:** Create a name for the port forwarding service.
  - **Protocol:** Select which protocol that requires to forward, **TCP**, **UDP** or **Both**.
  - **WAN Port:** Setup a range of WAN port.
  - **LAN Port:** Setup LAN port.
  - **LAN IP:** Setup LAN IP address.

## Security

The “Firewall” page allows user to configure firewall to block and grant some network access.

### Security | Firewall

Current Firewall Level	Medium (Standard)
Firewall Level	Medium (Standard) ▼
	Stateful Packet Inspection (SPI) is enabled. Inbound (from Internet to LAN) policy: Dropped. Remote authorized access will override the inbound policy. Outbound (from LAN to Internet) policy: Accepted.
Filtering Strategy	The filtering rules you set will take precedence over the default inbound and outbound policies.
MAC Filtering	Disable/Blacklist/Whitelist
IP Filtering	Disable/Blacklist/Whitelist
Prevent DoS Attack	<input type="checkbox"/>
Block Anonymous Internet Requests	<input checked="" type="checkbox"/>
Filter Multicast	<input type="checkbox"/>
Enable Remote Web Management	<input type="checkbox"/> Port 8080

*Security > Firewall*

- ◆ **Firewall Level:** Three possible states, **LOW Filtering (Filtering Disabled)**, **Medium (Standard)** and **High**.
- ◆ **Prevent DoS Attack:** Enable (checked) this feature will prevent the CPE avoid DoS attack.
- ◆ **Block Anonymous Internet Requests:** Enable (checked) this feature will block someone unknown to request Internet access. It is highly recommended to keep it enabled for security reason.
- ◆ **Filter Multicast:** Enable (checked) this feature will prevent Multicast packets to WAN interface.
- ◆ **Enable Remote Web Management:** Enable (checked) this feature will allow someone access device webGUI from WAN interface. It is highly recommended to keep it disabled for security reason.

Cancel button	Reset fields to the last saved values.
Apply button	Commit the changes made and save to the CPE device, some services will be reloaded.

## Management

The “Management” page allows user to configure the main system parameters such as password, language, device time/name ...etc.

### Management | Configuration

#### Restore Factory Settings ▾

Restore Factory Settings

#### Backup/Restore Configuration Settings ▾

Backup/Restore Password

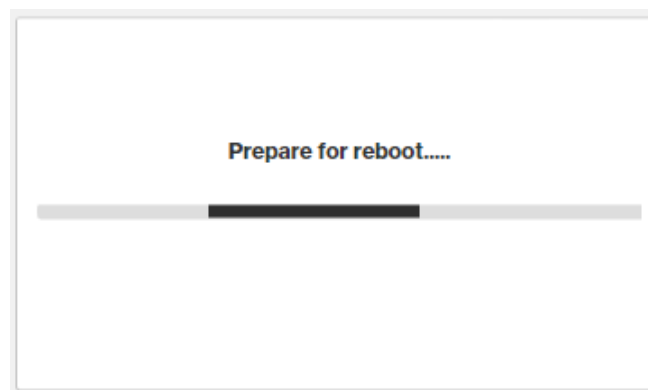
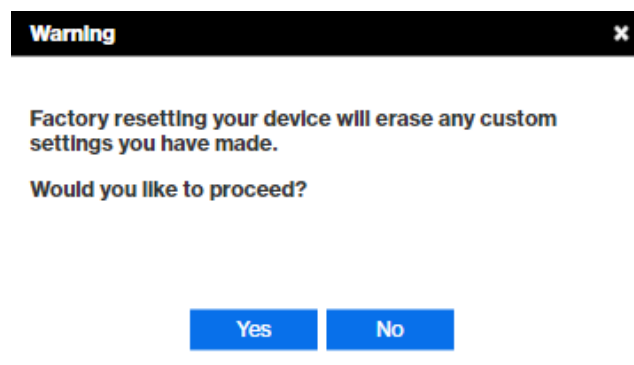
Backup Configuration Settings

Browse

Restore Configuration Settings

Select **Management > Configuration** to go back to the factory default settings.

- ◆ **Restore Factory Settings:** Click “Restore Factory Settings” button to clear all users’ configuration and restore to factory default settings.



*Restore to default settings Window*

## Management | Device Settings

### Password ▾

Old Login Password	<input type="password"/>	
New Login Password	<input type="password"/>	(length: 10-128 characters)
Confirm New Login Password	<input type="password"/>	

Management > Device Settings

The Device Settings page lets you change the default username and password.

- ◆ The minimum length of a password shall be 10, and shall meet all 4 of the following 4 complexity rules:
  - Minimally 1 uppercase character (A-Z)
  - Minimally 1 lowercase character (a-z)
  - Minimally 1 digit (0-9)
  - Minimally 1 special character (punctuation and/or space)
  - The password shall not have consecutive identical characters.
  - Values used in the login ID and password shall not be the same

<b>Apply button</b>	Commit the changes made and save them to the CPE device.
<b>Cancel button</b>	Reset fields to the last saved values

### Timeout / Refresh Settings ▾

Management Session Timeout	<input type="text" value="0"/>	minute(s)
GUI Refresh Time	<input type="text" value="60"/>	second(s)

### Device Time Settings ▾

Enable NTP	<input checked="" type="checkbox"/>
Current Local Time	Nov 02 2022 05:01
Primary NTP Server	<input type="text" value="clock.fmt.he.net"/>
Secondary NTP Server	<input type="text" value="clock.nyc.he.net"/>
Time Zone	<input type="text" value="(UTC) Coordinated Universal Time"/>

Management > Device Settings

◆ **Timeout/Refresh Setting**

- **Management Session Timeout:** Automatic logout after the period. (Range: 0-10 Minutes; 0 means never expired)
- **GUI Refresh Time:** When users press “**auto**” button in any page, the page refresh in every designated time. (Range: 5-60 Seconds)

◆ **Device Time Settings:** To enable NTP server for system time synchronization.

- **Enable NTP:** To enable NTP server for system time synchronization.
- **Current Local Time:** Display the current device name.
- **NTP Server:** Select a NTP server from 7 servers' candidate.
- **Time Zone:** UTC time zone selection.

<b>Apply button</b>	Commit the changes made and save them to the CPE device.
<b>Cancel button</b>	Reset fields to the last saved values

## Management | Software

Device Software Version : 01.99.01.1676 (10/28/2022)

Browse

Install Software

FOTA ▼

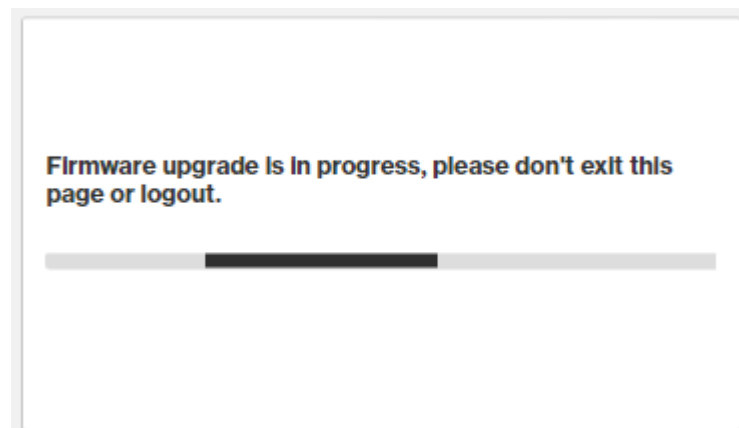
FOTA Enable	<input checked="" type="checkbox"/>
FOTA Schedule Time	00:00-04:00

Apply

Check New Version

Management > Software

- ◆ **Device Software Version:** Click **“Browse”** button to select the ipk file to upload, and then click **“Install Software”** to install the selected file. The Upgrading window will be shown as below and then the reboot process will be started to let the change taken effect. The ipk file you have uploaded will be shown in the table below the device software version.



After pressing the “Upgrade” button, it will automatically reboot the CPE and upgrade the firmware with the specified file. You will be prompted to re-login to the CPE after the upgrade is complete.

- ◆ **FOTA:** Click **“Check New Version”** button to get the latest firmware from Linksys cloud server.

## Management | Diagnostics

Diagnostic Tool	<input checked="" type="radio"/> Ping <input type="radio"/> Traceroute
IP Address/Domain Name	<input type="text"/> <input checked="" type="radio"/> IPv4 <input type="radio"/> IPv6
Ping Count	<input type="text" value="4"/> (range: 1-50)
Ping Packet Size	<input type="text" value="64"/> (range: 4-1472 Bytes)
WAN / APN Interface	<input type="text" value="Data APN"/> ▼

Run Stop Clear

*Management > Diagnostics*

Use system Diagnostics tools to set up parameters such as Diagnostics Type, Protocol Type, Ping Count, Packet Size, Ping Timeout, and get the Diagnostic Result afterward.

- ◆ **Diagnostic Tool:** Select **Ping** or **Traceroute** to check network connectivity.
  - **IP Address/Domain Name:** Enter the destination to check the CPE connectivity by IP address or Domain name, for both IPv4 and IPv6.
  - **Ping Count:** Setup how many ping packets you want to test.
  - **Ping Packet Size:** Setup the size of ping packet you want to test.
  - **WAN/APN Interface:** Setup which WAN interface you want to test.



# **Specification**

- Support 5G NR Sub 6GHz for both TDD & FDD
  - 5G NR TDD Bands : n40/n41/n77/n78/n79\*
  - 5G NR FDD Bands : n1/n3/n5/n7/n8/n28/n71
- Support LTE
  - TDD B38/B40/B41
  - FDD B1/B3/B7/B8/B20/B28
- Support USIM card
- Web-based configuration
- Support 1 RJ-11 FXS Port
- Support 1 RJ-45 2.5Giga Ethernet Port
- Support 2 RJ-45 Giga Ethernet Port
- Support 802.11ax/b/g/n (2x2) Wi-Fi 6 Technology @ 2.4GHz
- Support 802.11ax/ac/an/a (4x4) Wi-Fi Technology @ 5GHz

## **Operating Temperature**

The device is designed to work at ambient temperatures between 0°C (32°F) and 40°C (104°F). If the interior temperature exceeds normal operating temperatures, its performance and connectivity may be reduced.