

User Guide: FW 1.1.4





Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

FCC Caution: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment



RF Exposure Statement

To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons (indoor), and at least 48cm from all persons (outdoor). It must not be co-located or operating in conjunction with any other antenna or transmitter.

Safety Warnings

RF Exposure Statement

Do not use any other power adaptor except the one that accompanies this unit or a power adaptor identified in the list below.

The use of another adapter could result in damage to the unit.

The following power adaptor is qualified for use with this CPE-0001.

The unit must be powered by a model DCT18W120150US-A0 AC/DC adaptor.

Caution

Connect the power cord of the power adapter to a socket outlet with a grounding connection.



Chapter 1

Introduction

CPE-0001 provides customers with an improved solution for 4G LTE home service. The innovative design of the CPE-0001 allows customers to connect their favorite devices to 4G Networks.

1.1. Unboxing Information

Inside the product package for the CPE-0001, you should find the following items:

- CPE-0001 x 1
- Ethernet Cord x 1
- 2.4GHz WiFi antenna x 2
- 5.0GHz WiFi antenna x 2
- LTE Antenna x 2
- Power Adaptor x 1



1.2. Front and Rear Panel





WIFI ANTENNAS

-○ 4 External Antennas

- 2 x 2.4GHz
- 2 x 5.8GHz

ETHERNET PORTS

5 Ethernet Ports

- 4 x LAN
- 1 x WAN

LTE ANTENNAS

- 2 External Antennas

2 x LTE

INDICATOR LIGHTS

- Power
- VS (vSIM) Indicator
- LTE
- 2.4GHz Wi-Fi
- 5GHz Wi-Fi
- WPS
- LAN 1-4
- WAN
- LTE Signal Strength Levels 1-3

LED	STATE	FUNCTION		INTERFACE	DESCRIPTION
POWER ON Device power on.		Device power on.		WPS/Reset	Press and hold the button for about 1~5 seconds to activate WPS, and hold for more than 5 seconds to reset the device.
OFF Device	Device power off.		WAN	Connect to the Cable/xDSL Modem or the Ethernet.	
	ON	LTE is connected.	l		
LTE	Flash	Device is transmitting data over LTE.		LAN1-4	Connect to the user's PC or network devices.
	OFF	LTE is not working.		Power	Connect to the power adapter provided in the package.
	ON	The 2.4GHz/5GHz Wi-Fi is on.		<u> </u>	
2.4GHz/5GHz	Flash	Device is transmitting data			

LED	STATE	FUNCTION	
POWER		Device power on.	
POWER	OFF	Device power off.	
	ON	LTE is connected.	
LTE	Flash	Device is transmitting data over LTE.	
	OFF	LTE is not working.	
	ON	The 2.4GHz/5GHz Wi-Fi is on.	
2.4GHz/5GHz Wi-Fi	Flash	Device is transmitting data over 2.4GHz/5GHz Wi-Fi.	
	OFF	The 2.4GHz/5GHz Wi-Fi is off.	
WPS	Flash	WPS is activated and ready to connect.	
WFS	OFF	WPS is not activated.	
	ON	LAN port is connected.	
LAN 1-4	Flash	Device is transmitting data via the port.	
	OFF	LAN port is not connected.	
	ON	WAN port is connected.	
WAN	Flash	Device is transmitting data via WAN port.	
	OFF	WAN port is not connected.	
	All OFF	Device is not connecting over LTE.	
LTE Signal	1 LED	LTE signal strength is low.	
Strength	2 LED	LTE signal strength is medium.	
	3 LED	LTE signal strength is high.	
VS Indicator	ON	Virtual SIM mode is on.	
. 0	OFF	Physical SIM mode is on.	



Chapter 2

Self-Setup and Activation

When installing the CPE-0001, make sure that the front side of the device faces towards the direction of the 4G signal (window).

Front Side

This side should face the 4G signal (window)



This side should face inside the home





2.2. WPS Connection to a Wi-Fi Extender

WPS can be used to pair your CPE-0001 to a Wi-Fi Extender instead of connecting the Wi-Fi Extender via the SSID (network name) and password, by following these steps:

- 1. Press and hold the button for about 1 5 seconds to activate WPS.
- 2. Press and hold the WPS button on the Wi-Fi Extender, ensuring the device is in range of the CPE-0001.
- 3. The WPS will illuminate to indicate pairing success



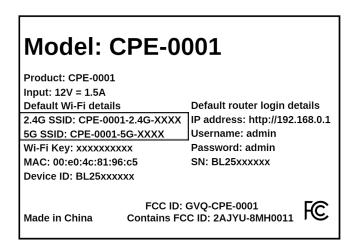
Chapter 3

Accessing the Web User Interface: Log In and Set Up: Setup Wizard

3.1. Login

After turning on the CPE-0001 connect to it via Wi-Fi by following these steps:

- 1. Locate the default SSID (network name) and the default Wi-Fi key (password) on the sticker located on the bottom of the router.
- 2. On your mobile device, access the Wi-Fi settings menu. Select the SSID (network name) and enter the default Wi-Fi key (password) from Step 1.
 - a. Either 2.4G SSID or 5G SSID is fine to connect to.



After connecting to Wi-Fi, access the Web User Interface by following this step:

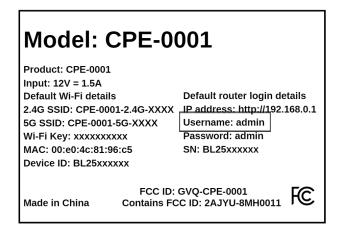
1. On your mobile device, navigate to an internet search browser, and input the IP address of **192.168.0.1**, then click enter.

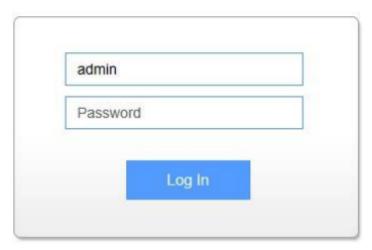




After navigating to the Web User Interface, log in by following this step:

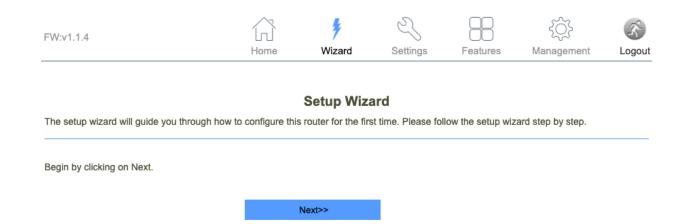
 On your mobile device, login to the Web User Interface's Home Page using the default user name of admin and the default password which will be a series of letters and numbers. Both of these can be found on the sticker located on the bottom of the router.





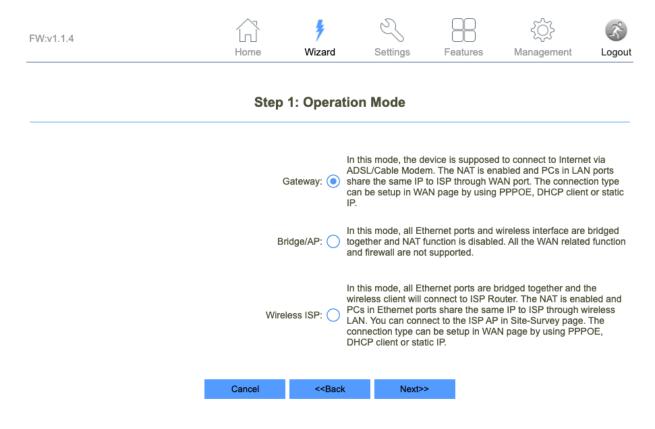
3.2 Setup Wizard

After logging into the CPE-0001, the **Setup Wizard** will appear. The **Setup Wizard** will guide users along the CPE-0001 configuration steps, it is imperative they follow the guide step by step.





Step 1: Operation Mode



The **Operation Mode** page is used to toggle the CPE-0001 between different operational modes; Gateway, Bridge/AP mode, and Wireless ISP.

To ensure your device works on your pre-selected data plan, you must start by selecting **Gateway**, you can always go back and change this selection at a later time if you wish.



Step 2: WAN Interface Setup



The WAN Interface Setup page is used to set the WAN Access Type.

You do not need to set up the WAN Interface at this moment, you can always go back and set it up at a later time.

Skip this step and click Next.



Step 3: LAN Interface Setup

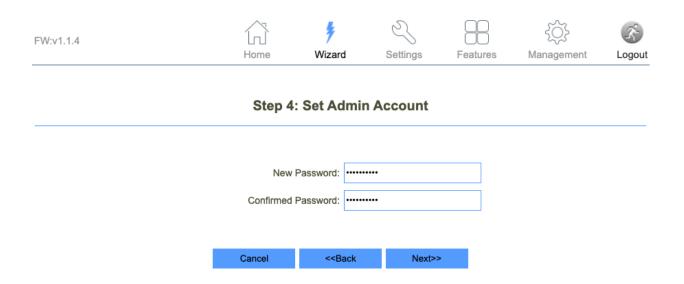
FW:v1.1.4	Home	% Wizard	Settings	Features	{◯} Management	Logout
	Step 3:	: LAN Interl	face Setup			
	IP Address: 192.168.0.1 Subnet Mask: 255.255.255.0					
	Cancel	< <back< td=""><td>Next>></td><td></td><td></td><td></td></back<>	Next>>			

The **LAN Interface Setup** page is used to configure the IP Address and Subnet Mask if you are connecting an external router to the CPE-0001 via LAN.

You do not need to set up the LAN Interface at this moment, you can always go back and set it up at a later time.

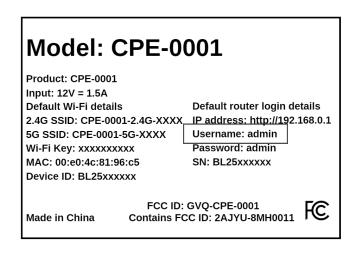


Step 4: Set Admin Account



The **Set Admin Account** page is used to set the new user interface (router log-in) password.

The pre-set user and password can be found on the sticker located on the bottom of the router.



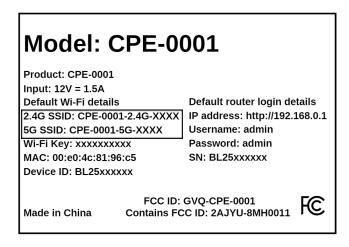


Step 5: Setup Wireless

FW:v1.1.4		*		3	88	₹ <u>`</u>	3
	Home	Wizar	d	Settings	Features	Management	Logout
	Step	5: Setu	ıp Wir	eless			
		2.40	SHz				
	Enabl	e Wireless:	~				
		SSID:	CPE-000	1-2.4G-a841			
		Password:	•••••				
		50					
	Fach	5G					
	Enabi	e Wireless:					
		SSID:	CPE-000	1-5G-a841			
		Password:	•••••				
	•			m			
	Cancel	< <b< td=""><td>ack</td><td>Finish ></td><td>·></td><td></td><td></td></b<>	ack	Finish >	·>		

The **Setup Wireless** page is used to set the SSID and password for both the 2.4GHz and 5GHz Wi-Fi networks.

It is also used to enable or disable either of the Wi-Fi networks.





Step 6: Automatic Reboot

Change setting successfully!

Do not turn off or reboot the Device during this time.

Please wait 0 seconds

The CPE-0001 will reboot once you have clicked the finished button on Step 6 to apply the changes you have made.

Remember to connect back to the router's broadcasted Wi-Fi network to connect to it again.

Remember, you may have changed what that looks like in the previous step.



Chapter 3

Accessing the Web User Interface: Understanding the Home Page

3.3. Home Page/Main Section

After completing the Setup Wizard, the Home Page of the CPE-0001 will appear.





The **Home Page** is where users can check the connection status between the CPE-0001 and the Internet, and adjust settings such as Wi-Fi options, parental controls, and more.



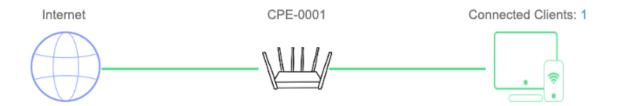
3.3.1 Banner

FW:v1.1.4

Home Wizard Settings Features Management Logout

At the top of the **Home Page**, a banner consisting of icons is presented. Each of these icons represents a sub-section, we will explore each sub section in this guide. We have already explored the Wizard sub-section earlier in this chapter. To the left of the icons, the current firmware version (FW) of the CPE-0001 is displayed.

3.3.2 Network Map



The **Network Map** is located in the middle of the **Home Page**. The line between the Internet Globe, the CPE-0001, and the Internet devices on the map indicate the connection status between them.

A solid green line indicates a successful connection, whereas a red line with an x in the idle indicates that there is no connection.

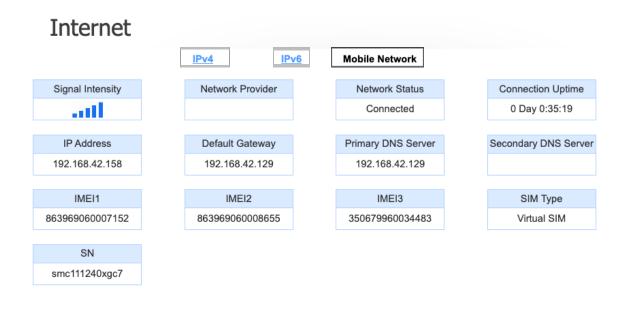
If there is a red line with an x in the idle between the Internet Globe and the CPE-0001, there is no 4G LTE connection present. If there is a red line with an x in the idle between the Internet Globe and the CPE-0001 it is an indication that there is no Wi-Fi connection between the CPE-0001 and Internet devices either over Wi-Fi or via LAN.



The Internet Globe image, the CPE-0001 image, and the Desktop Image are all clickable and reveal menus.

3.3.3 Internet







The Internet section is divided into three distinct sections: IPv4, IPv6, and Mobile Network.

3.3.3.1 IPv4 or Internet Protocol Version 4

	IPv4	<u>IPv6</u>	Mobile Network	
MAC Address	Connection Type		Network Status	Connection Uptime
48:c8:62:08:a8:42			Disconnected	
IP Address	Default Gateway		Primary DNS Server	Secondary DNS Server
Not Available	Not Available		Not Available	Not Available

Item	Description
MAC Address	The MAC Address or the Media Access Control address is a unique serial number in the network circuitry of every Ethernet and Wi-Fi device.
Connection Type	Dynamic Host Configuration Protocol Version
Network Status	The connection status between the CPE-0001 and the internet when using the WAN port.
Connection Uptime	The period of time the CPE-0001 has been connected to the internet.
IP Address	An IP address, or Internet Protocol address, is a series of numbers that identifies any device on a network.
Default Gateway	The IP address of another router your CPE-0001 sends traffic too.
Primary DNS Server	The first touchpoint for a browser asking where to find a site.
Secondary DNS Server	The second touchpoint for a browser asking where to find a site in the case that the Primary DNS Server is unavailable.



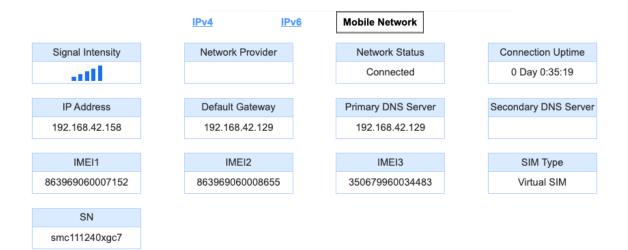
3.2.2.2 IPv6 or Internet Protocol Version 6

	IPv4	IPv6	Mobile Network	
MAC Address	Connection T	ype	Network Status	Connection Uptime
48:c8:62:08:a8:42	DHCPv6		Disconnected	
IP Address	Default Gatev	vay	Primary DNS Server	Secondary DNS Server
Not Available	Not Availab	е	Not Available	Not Available

Item	Description
MAC Address	The MAC Address or the Media Access Control address is a unique serial number in the network circuitry of every Ethernet and Wi-Fi device.
Connection Type	Dynamic Host Configuration Protocol Version
Network Status	The connection status between the CPE-0001 and the internet when using the WAN port.
Connection Uptime	The period of time the CPE-0001 has been consistently connected to the internet.
IP Address	An IP address, or Internet Protocol address, is a series of numbers that identifies any device on a network.
Default Gateway	The IP address of another router your CPE-0001 sends traffic too.
Primary DNS Server	The first touchpoint for a browser asking where to find a site.
Secondary DNS Server	The second touchpoint for a browser asking where to find a site in the case that the Primary DNS Server is unavailable.



3.2.2.3 Mobile Network



Item	Description
Signal Intensity	The cellular signal strength of the CPE-0001.
Network Provider	The local cellular network your CPE-0001 connects to.
Network Status	The connection status between the CPE-0001 and the internet when using vSIM.
Connection Uptime	The period of time the CPE-0001 has been connected to the internet.
IP Address	An IP address, or Internet Protocol address, is a series of numbers that identifies any device on a network.
Default Gateway	The IP address of another router your CPE-0001 sends traffic too.
Primary DNS Server	The first touchpoint for a browser asking where to find a site.
Secondary DNS Server	The second touchpoint for a browser asking where to find a site in the case that the Primary DNS Server is unavailable.



IMEI (1,2,3)	IMEI or International Mobile Equipment Identity is a unique number for identifying a device on a mobile network.
SIM Type	Whether the CPE-0001 is connecting to the internet via Virtual Sim or Physical Sim.
SN	The CPE-0001's Serial Number.

3.3.4 CPE-0001

FW:v1.1.4



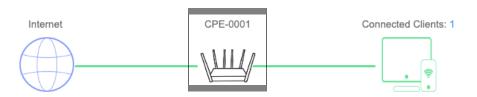












CPE-0001

IPv4 Network			
MAC Address:	48:c8:62:08:a8:41		
Router IP Address:	192.168.0.1		
Subnet Mask:	255.255.255.0		

IPv6 Network				
Link-Local Address:	fe80::4ac8:62ff:fe08:a841			
Router IPv6 Address:	Not Available			

System			
Uptime:	3 Days 0:59:51		
Build Time:	Mon Sep 26 09:41:47 CST 2022		

	CPU
CPU Usage:	18.00%
Memory (Free/Total):	51776/106080

Wi-Fi 2.4GHz			
Status:	Up		
Wi-Fi Name (SSID):	CPE-0001-2.4G-a841		
Encryption:	WPA2-WPA3-Mixed		
BSSID:	48:c8:62:d8:a8:41		
Channel Number:	7		

Wi-Fi 5GHz			
Status: Up			
Wi-Fi Name (SSID):	CPE-0001-5G-a841		
Encryption:	WPA2-WPA3-Mixed		
BSSID:	48:c8:62:58:a8:41		
Channel Number:	161		



Clicking the CPE-0001 image provides a combined overview of the same internet sections that were found under the Global Internet Image.

Item	Description
MAC Address	The cellular signal strength of the CPE-0001.
Router IP Address	The CPE-0001's IP address.
Subnet Mask	A number that resembles an IP address. It reveals how many bits in the IP address are used for the network by masking the network portion of the IP address
Link-Local Address	A network address that is valid only for communications within the subnetwork that the host is connected to.
Router IPv6 Address	A numeric label that is used to identify and locate a network interface of a computer or a network node participating in a computer network using IPv6.
CPU Usage	The percentage of total CPU capacity being used at any given time.
Memory (Free/Total)	The amount of memory used.
Status	An indication of whether or not the 2.4GHz and 5GHz Wi-Fi networks are emitting.
WiFi Name (SSID)	The network name.
Encryption	The encryption type currently being used to secure your wireless network with an authentication protocol.
BSSID	Basic Service Set Identifier.
Channel Number	The Wi-Fi channel your CPE-0001 is emitting Wi-Fi through.



3.2.1 Connected Clients



Connected Clients

Hostname	IP Address	MAC Address
Home-Office-Computer	192.168.0.101	38:f9:3e:1e:0b:32f

There is a clickable number and logo above the Connected Client's image which represents the number of devices connected at any given point in time.

Item	Description			
Hostname Name(s) of the connected personal devices to the CPE-0001 emitted Wi-Fi network.				
IP Address	An IP address, or Internet Protocol address, is a series of numbers that identifies any device on a network.			



MAC Address	The MAC Address or the Media Access Control address is a unique serial number in the network circuitry of every Ethernet and Wi-Fi		
WAC Address	device.		



Chapter 3

Accessing the Web User Interface: Settings

3.4. Settings

After selecting the wrench tool icon on the banner atop the GUI, the **Settings** of the CPE-0001 will appear.



The **Settings** is where users can toggle the CPE-0001 between Virtual and Physical Sim, rename the default SSID (network name), change the default Wi-Fi password, set the Wi-Fi security mode, scan for access points, enable or disable WPS functions, and set the Wi-Fi band as either 2.4GHz or 5.0GHz, amongst other features. It is divided into five distinct sections which all have their own subsections.

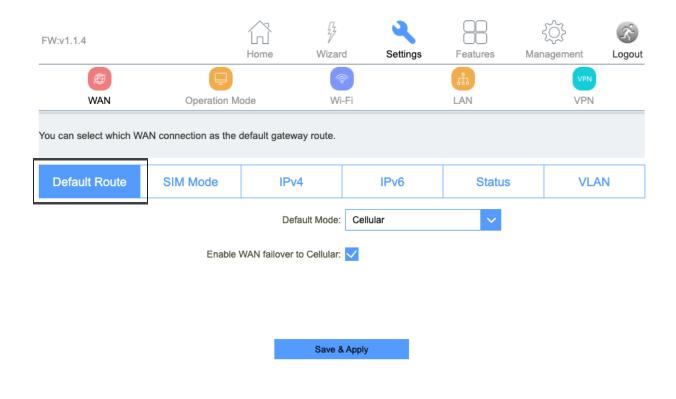
3.4.1 WAN

The **WAN** page is used to configure the parameters for the internet network that connects to the WAN port of the CPE-0001. The page is divided into six distinct sections, those being Default Route, SIM Mode, IPv4, IPv6, Status, and VLAN.





3.4.1.1 Default Route

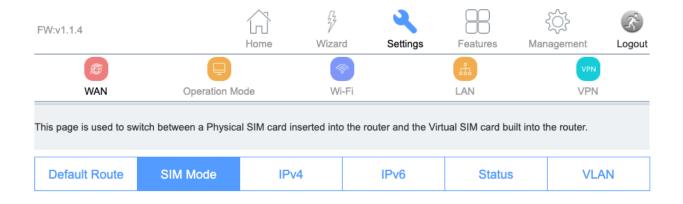


The **Default Route** page enables the user to select which WAN connection (WAN1 or Cellular) provides the source of the internet to the CPE-0001.

Selecting "enable WAN failover to Cellular", allows the CPE-0001 to automatically continue providing internet through Virtual Sim, if the router that you connected to it via the WAN port has failed.



3.4.1 SIM Mode



The **SIM Mode** page is used a toggle between a Physical SIM inserted in the router for internet and a Virtual built into the router for internet.

Virtual SIM



Make sure that Virtual SIM is selected so that your CPE-0001 will work on your data plan.



When using a Physical SIM card, toggle to Physical SIM and a menu will appear. Once you have inputted your desired changes click "Save & Apply".

The CPE-0001 will reboot with your saved changes after 30 seconds. Be sure to connect to the CPE-0001's Wi-Fi network once the reboot is complete.

Physical SIM

FW:v1.1.4			7	્ય		\exists	£	35
		Home	Wizard	d Setting	gs Featu	ires Ma	anagement	Logout
					The state of the s		VPN	
WAN	Operation M	ode	Wi-	·Fi	LAN		VPN	
This page is used to sw	itch between a Physica	al SIM card	I inserted into	the router and t	the Virtual SIM	card built into	the router.	
Default Route	SIM Mode	II	Pv4	IPv6		Status	VLA	N
			SIM Mode:	Physical SIM		~		
			User Name:					
			Password:					
			APN:	internet				
			PIN:					
			Auth Method:	AUTO		~		
			Manual APN:					
			Save & A	Apply				



Item	Description
SIM Mode	Physical Sim or Virtual SIM
User Name	The username associated with your physical sim data plan.
Password	The password associated with your physical sim data plan.
APN	The APN provided by your internet service provider.
PIN	The PIN provider by your internet service provider.
Auth Method PAP	Password Authentication Protocol
Auth Method CHAP	Challenge-Handshake Authentication Protocol

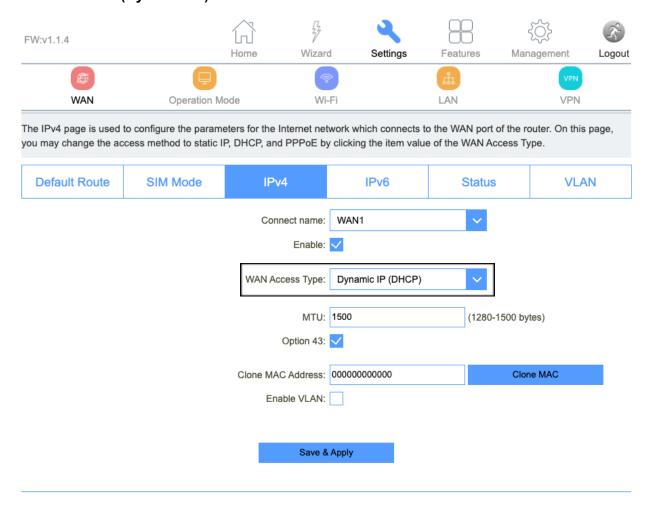
3.4.1.1 IPv4

The **IPv4** page is used to toggle between three WAN Access Types (modes) that can be used; DHCP, Static IP, and PPPoE. A fourth mode is available and takes the form of a VLAN tag and can be used if necessary.





3.4.1.1.1 DHCP (Dynamic IP)



Selecting the Dynamic IP (DHCP) WAN Access Type will enable the router to automatically obtain IP addresses, subnet masks, and gateway addresses.

Selecting Dynamic IP (DHCP) WAN Access Type also enables you to set the MTU to allow smaller or larger data packages to flow into the CPE-0001. You should not have to adjust this metric.



For large locations such as an office building or campus with a large grouping of computers or other devices all located in the same place, VLAN can be enabled.

Item	Description		
МТИ	Minimum Transmission Unit (to be kept as default).		
VLAN ID	Identifies the VLAN to which a data frame belongs.		



3.4.1.1.2 Static IP

FW:v1.1.4			4	88	₹ <u>`</u>	K.
		Home Wizar	d Settings	Features	Management	Logout
		a a		th.	VPN	
WAN	Operation Mo	de Wi	i-Fi	LAN	VPN	
	to configure the parame					is page,
Default Route	SIM Mode	IPv4	IPv6	Status	VL	AN
		Connect name:	WAN1	~		
		Enable:	✓			
		WAN Access Type:	Static IP	~		
		IP Address:	192.168.50.183			
		Subnet Mask:	255.255.255.0			
		Default Gateway:	192.168.50.1			
		MTU:	1500	(1400-	1500 bytes)	
		DNS 1:	192.168.50.1			
		DNS 2:				
		Clone MAC Address:	00000000000		Clone MAC	
		Enable VLAN:				
		Save 8	& Apply			

Selecting the Static IP Access Type will enable the router to support Static IP as a WAN connection type.



ltem	Description	
IP Address	The cellular signal strength of the CPE-0001.	
Subnet Mask	A number that resembles an IP address. It reveals how many bits in the IP address are used for the network by masking the network portion of the IP address	
Default Gateway	The IP address of another router your CPE-0001 sends traffic too.	
DNS 1	Domain Name System 1	
DNS 2	Domain Name System 2	
МТИ	Minimum Transmission Unit (to be kept as default).	
VLAN ID	Identifies the VLAN to which a data frame belongs.	



3.4.1.1.2 PPPoE

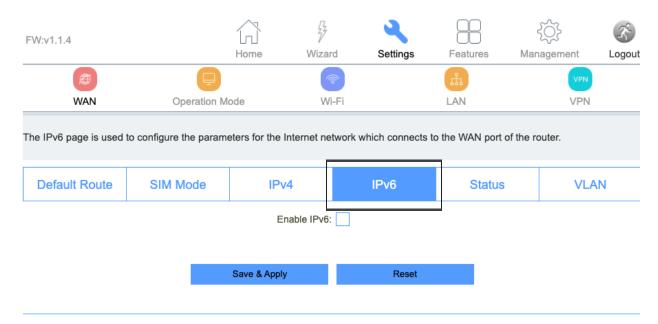
FW:v1.1.4		Home Wizar	d Settings	Features Mar	nagement Logout
					VPN
WAN	Operation M	ode Wi		th.	VPN
The IPv4 page is used you may change the ac	to configure the parame	eters for the Internet ne	twork which connects to	o the WAN port of the r	outer. On this page,
Default Route	SIM Mode	IPv4	IPv6	Status	VLAN
		Connect name:	WAN1	~	
		Enable:	✓		
		WAN Access Type:	PPPoE	~	
		User Name:			
		Password:			
		Service Name:			
		MTU:	1492	(1360-1492 by	/tes)
		Connection Type:	Continuous	~	
		Clone MAC Address:	00000000000	Clor	ne MAC
		Enable VLAN:			
		Save 8	k Apply		

Selecting the PPPoE Access Type will enable the router to support PPPoE as a WAN connection type.



Item	Description
VLAN ID	Identifies the VLAN to which a data frame belongs.
Service Name	CPE-0001
мти	Minimum Transmission Unit (to be kept as default).
Connection Type: Continuous	Continuous
Connection Type: Connect on Demand	Connect on Demand
Connection Type: Manual	Manual

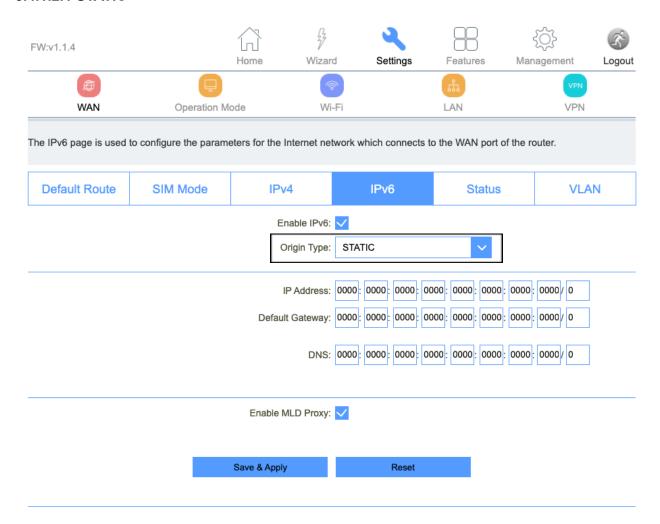
3.4.1.2 IPv6





By enabling IPv6, a collapsable menu will appear, enabling the user to toggle between three distinct origin types, STATIC, AUTO, and 6RD.

3.4.1.2.1 STATIC



Item	Description	
IP Address	The cellular signal strength of the CPE-0001.	



Default Gateway	The IP address of another router your CPE-0001 sends traffic too.
DNS 1	Domain Name System
MLD Proxy	Multicast Listener Discovery

3.4.1.2.2 AUTO

FW:v1.1.4		Home Wiza	rd Settings	Features	Management	Logout
WAN	Operation M		ő-Fi	LAN	VPN VPN	
The IPv6 page is used	·					
Default Route	SIM Mode	IPv4	IPv6	Status	VLA	.N
		Enable IPv6 Origin Type Address Mode DUID PD Enable	: AUTO : Stateful Address : 0003000148c86208a8	V 342		
		Enable MLD Proxy	: 🗸			
		Save & Apply	Reset			

ltem	Description
Stateful Address	DHCP will supply an IPv6 address.



Stateless Address	DHCPv6 server does not provide IP addresses at all.
DUID	The DUID identified a DHCPv6 device.
PD	Prefix Delegation
MLD Proxy	Multicast Listener Discovery

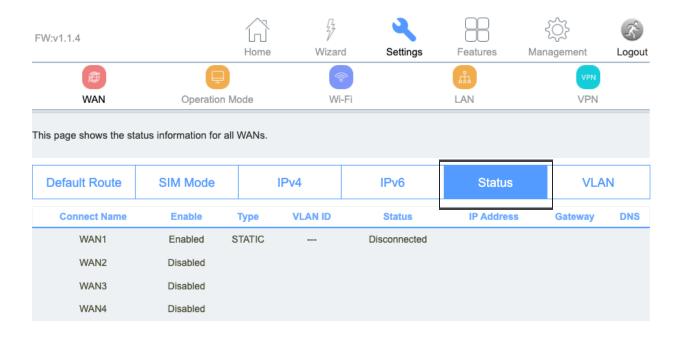
3.4.1.2.1 6RD

FW:v1.1.4			77	4			(Ç)	K.
		Home	Wizard	Settings	Features	Man	agement	Logout
			িক		Th.		VPN	
WAN	Operation M	ode	Wi-	Fi .	LAN		VPN	
The IPv6 page is used	to configure the param	eters for the I	nternet net	work which connects	to the WAN por	of the ro	outer.	
Default Route	SIM Mode	IPv	4	IPv6	Statu	5	VLA	N
		Er	nable IPv6:	✓				
		С	rigin Type:	6RD	~			
			l I	0000 : 0000 : 0000 : 0		0000	0000/0	
		WAN IPv	4 Address:	Get from DHCP	/ 0			
	6RD Bor	der Relay IPv	4 Address:	0.0.0.0				
			DNS:	0000 : 0000 : 0000 : 0	0000 : 0000 : 000	0: 0000	0000/0	
		Enable N	/ILD Proxy:	~				
		Save & Apply	,	Reset				



Item	Description
6RD IPv6 Prefix	WAN IPv6 prefix delegation.
WAN IPv4 Address	WAN IPv4 Address.
6RD Border Relay IPv4 Address	Border Relay IPv4 Address
DNS	Domain Name System
MLD Proxy	Multicast Listener Discovery

3.4.1.3 Status



The **Status** page will display the status of each WAN connection; WAN1, WAN2, WAN3, WAN4.



3.4.1.4 VLAN

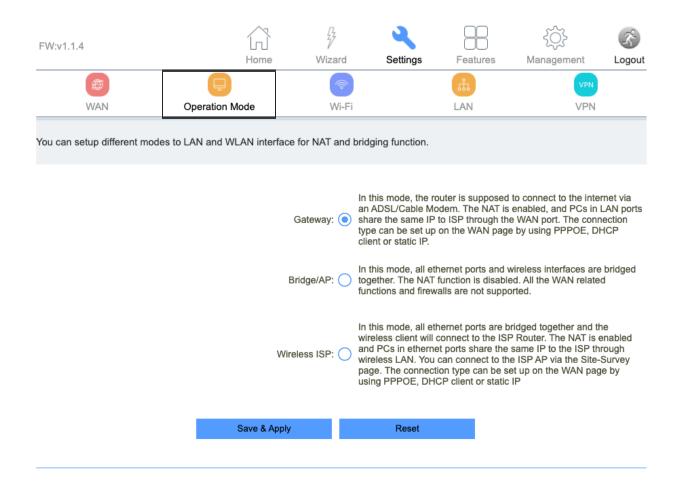
FW:v1.1.4			7	•	٦ .		₹ <u>`</u>	K-
		Home	Wizar	d Se	ettings	Features	Management	Logout
	(P)		(A			Å	VPN	
WAN	Operation M	ode	Wi	-Fi		LAN	VPN	
The VLAN page contain	ns the entries below wi	thin the tab	le which are	used to conf	igure VLAN	N settings.		
Default Route	SIM Mode	IF	Pv4	IPv	_′ 6	Status	VLA	N
		VLAN	N ID(1-4095):	1				
		VLAN	Priorith(0-7):	VLAN Prio	rity 0	~		
		□ LAN1	□ LAN2	☐ LAN3	□ LAN4			
			Save 8	Apply				
Current VLAN Table								
VLAN ID	VLAN Priority		Tagge	d Ports		Untagged Por	ts S	elect
			Delete S	Selected				

The **VLAN** page is used to configure the VLAN settings.



3.4.2.2 Operation Mode

The **Operation Mode** page is used to toggle the CPE-0001 between the different operational modes; Gateway, Bridge Mode, and Wireless ISP.



The CPE-0001 must remain on Gateway mode to work with your data plan.



3.4.3 Wi-Fi



The Wi-Fi section is used to configure the CPE-0001's Wi-Fi settings.



3.4.3.1 Basic

FW:v1.1.4		Home	Wizard	Settings	Features	{\hat{O}} Management	Logout
WAN	Operation M		Wi-F		LAN	VPN	
This page is used to con encryption settings as w				which may connect to	the router. He	re you may change	the wireless
Basic	Security	AC	CL	Site Survey	WPS	Wi-Fi S	chedule
			N interface:	2.4GHz	~		
	Disable	Wireless LAI	N Interface: or Region:	UNITED STATES	~		
			Band:	2.4 GHz (B+G+N)	~		
			Mode:	AP	~		
			SSID:	Multiple AP CPE-0001-2.4G-a841			
		Cha	nnel Width:	20MHz	~		
		Contro	l Sideband:	Upper	~		
		Chann	nel Number:	7	~		
		Broad	dcast SSID:	On	~		
			WMM:	On	~		
			Data Rate:	Auto	~		
			ted Clients:	Show Active Clien	nts		
	Enable U	niversal Repe	eater Mode:				
		Save & Ap	ply	Reset			



The **Basic** page is used to toggle between and set up both the 2.4GHz and 5.0GHz Wi-Fi interfaces (bands).

Wi-Fi as a feature can also be shut off on this page by selecting the 'Disable Wireless LAN Interface' box.

The CPE-0001's SSID (network name) and guest SSID can both be edited on this page. Edits include the ability to rename the SSID and toggle its broadcasting status (whether or not it comes up as an option when users are viewing available Wi-Fi networks to connect to on their mobile devices). In addition, users can view Associated Clients which provides a list of all devices connected to the CPE-0001's Wi-Fi network at that exact moment.

For more technically savvy users, the Wi-Fi channel width, sideband, and number can all be toggled from within the Wi-Fi page as well.



ltem	Description
Disable Wireless LAN Interface	You may choose to enable or disable the wireless function.
Wireless Band	Default is "Mixed 802.11b/g/n". It is strongly recommended that you set the Band to "802.11b/g/n", that way all 802.11b, 802.11g, and 802.11n wireless stations can connect to the CPE-0001.
Multiple AP	You can set the guest SSID from this button.
Network Type	You can configure the WLAN network type with this parameter.
SSID	Set a Wi-Fi name (SSID) for your wireless network. If you switch to Client Mode, this field becomes the SSID of the AP you want to connect with.
Channel Width	Select a proper channel bandwidth to enhance wireless performance. When there are 11b/g and 11n wireless clients, please select the 802.11n mode of 20/40MHz frequency band.
Control Sideband	Control channels are only applicable if your gateway is operating at 40 MHz bandwidth and the 802.11n mode is configured as Automatic.
Channel Number	For optimal wireless performance, you may select the least interferential channel. It is advisable that you select an unused channel or "Auto" to let the CPE-0001 detect and select the best possible channel for your wireless network to operate on from the drop-down list.
Broadcast SSID	You may choose a visible or invisible SSID broadcast. When it is enabled, the CPE-0001's SSID will be broadcast in the wireless network so that it can be scanned by wireless clients and they can join the wireless network with this SSID.

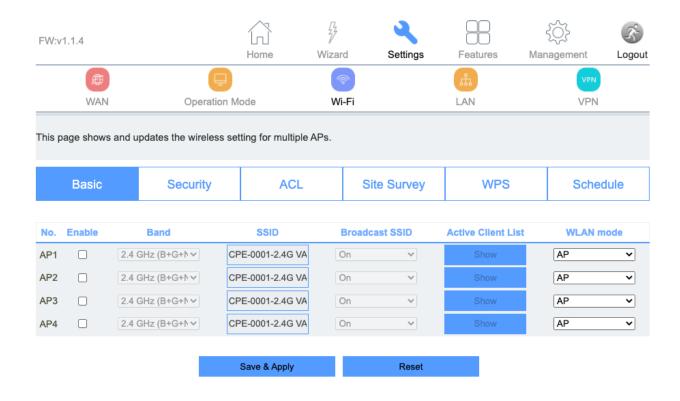


WMM	WMM provides basic Quality of service (QoS) features to IEEE 802.11 networks. WMM prioritizes traffic according to four Access Categories: voice, video, best effort, and background.
Associated Clients	This option shows you all the clients who are connected to a SSID.
Enable Universal Repeater Mode	Repeater mode.

Selecting **Show Active Clients** leads to the Active Wireless Client Table which displays a list of the current devices that are connected to the CPE-0001 at any given point in time.



Selecting **Multiple AP** leads to a view of the wireless settings for multiple APs.





FW:v1.1.4			•		{(<u> </u>	K.
		Home Wizar	d Settings	Features	Manag	gement	Logout
(5)				i		VPN	
WAN	Operation Mo	de Wi	-Fi	LAN		VPN	
This page allows you t the router's wireless no	o setup wireless security. etwork.	Turning on WEP or W	/PA by using Encryptio	n Keys could p	revent unau	uthorized acco	ess to
Basic	Security	ACL	Site Survey	WPS	3	Wi-Fi Sche	edule
		Select SSID:	Root AP - CPE-0001	-2.4G- V			
		Encryption:	WPA2-WPA3-MIXED	~			
		Authentication Mode:	O Enterprise (RADIUS	S) Personal	(Pre-Shared	l Key)	
		WPA2 Cipher Suite:	TKIP AES				
	Manager	ment Frame Protection:	onone capable	required			
	P	re-Shared Key Format:	Passphrase	~			
		Pre-Shared Key:	•••••				
		Save & Apply	Reset				

3.4.3.2 Security

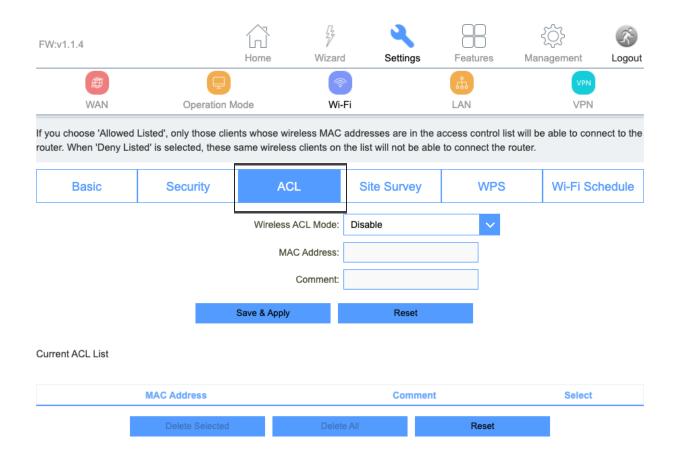
The **Security** page is used to set the Wi-Fi encryption type.

ltem	Description
Encryption	Select the security mode from the Encryption drop down list. There are 4 options in the Security Mode drop down list: Disable WEP WPA2



	WPA-Mixed
Enterprise (RADIUS)	Remote Authentication Dial In User Service
TKIP	Temporal Key Integrity Protocol
AES	Advanced Encryption Standard

3.4.3.3 ACL



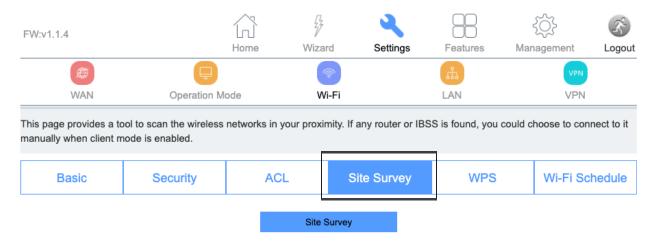
The **ACL** page enables user's to specify which wireless device MAC addresses are permitted to connect to the CPE-0001's Wi-Fi network and which are not permitted.



Keep this mode disabled if you want to keep your Wi-Fi free for any device in your home to connect too without limitation.

Item	Description
Wireless ACL Mode	If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect to the Access Point.
MAC Address	The MAC address of the client.

3.4.3.4 Site Survey



SSID	BSSID	Channel Number	Туре	Encrypt	Signal
TDPQ	40:b0:76:c0:bf:f0	7(B+G+N+AC)	AP	WPA2-PSK	55
WTPD	3a:1a:52:28:46:1a	7 (G+N)	AP	WPA2-PSK	42
SRVC	40:e3:d6:5e:13:24	11 (B+G+N)	AP	WPA2-PSK	33
chargingstations	40:e3:d6:5e:13:25	11 (B+G+N)	AP	WPA2-PSK	33
DIRECT-2E-HP ENVY 6000 series	86:2a:fd:95:f4:2e	6 (G+N)	AP	WPA2-PSK	30
WWA	f0:9f:c2:3d:99:24	1 (B+G+N)	AP	WPA2-PSK	29

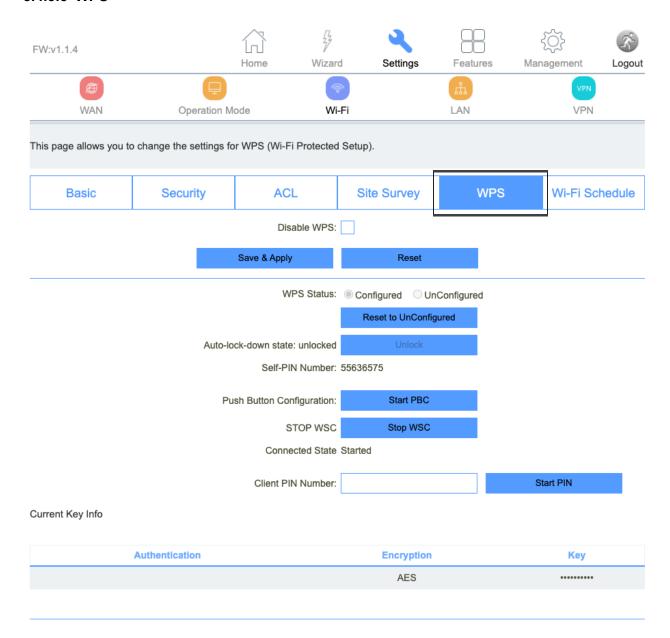


The **Site Survey** page enables user's to scan all the Wi-Fi networks available to them in the immediate vicinity of the CPE-0001.

When the CPE-0001 is set in client mode, it can act as a repeater and connect to those specific Wi-Fi networks, rendering the plan unusable.



3.4.3.5 WPS

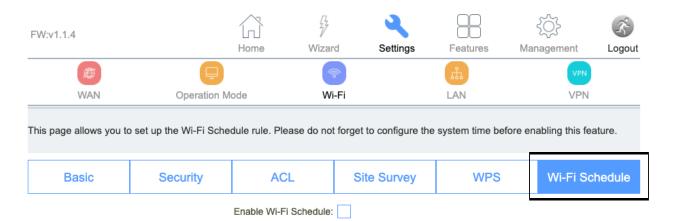


The **WPS** page enables the user to change the settings for Wi-Fi Protected Setup. Specifically enabling the user to enable or disable WPS, and permit certain devices to connect to the CPE-0001 via WPS.



Item	Description
WPS	This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to an Access Point in a minute without any hassle.
Disable WPS	Enable or disable WPS function.

3.4.3.6 Wi-Fi Schedule







3.4.5 LAN

The **LAN** section enables the user to configure the parameters for the local area network.

FW:v1.1.4 Home Wizard Settings Features Management	agement Logout
WAN Operation Mode Wi-Fi LAN	VPN VPN
This page is used to configure the parameters for the local area network which connects to the LAN port of the LTE CF change the settings for IP addresses, subnet mask, DHCP, and more.	PE. Here you may
IPv4 IPv6 TUNNEL 6	o over 4
IP Address: 192.168.0.1	
Subnet Mask: 255.255.255.0	
Default Gateway: 0.0.0.0	
Work Mode: Server	
DHCP Client Range: 192.168.0.100 - 192.168.0.200	Show Client
Lease Time: 1440 (1 ~ 10080 minute	ies)
DNS: 0.0.0.0	
Static DHCP: Set Static DHCP	
Domain Name: router.local	
802.1d Spanning Tree: Off	
Save & Apply Reset	



The **IPv4** page enables the user to change the settings for several LAN-related parameters with focus on settings around the DHCP function.

FW:v1.1.4		Home Wizard	d Settings	Featu	res	€Ô} Management	Logout
WAN	Operation Mo	de Wi-	-Fi	LAN		VPN VPN	
This page is used to config change the settings for IP				the LAN p	ort of the L	TE CPE. Here yo	u may
IPv4		IP\	/6		TUNN	EL 6 over 4	
		IP Address:	192.168.0.1				
		Subnet Mask:	255.255.255.0				
		Default Gateway:	0.0.0.0				
		Work Mode:	Server		~		
		DHCP Client Range:	192.168.0.100	- 192.168.0.	200	Show Client	
		Lease Time:	1440		(1 ~ 10080	minutes)	
		DNS:	0.0.0.0				
		Static DHCP:	Set Static DH	ICP			
		Domain Name:	router.local				
		802.1d Spanning Tree:	Off		~		
					_		
		Save & Apply	Reset				



Item	Description
LAN IP Address	The default is 192.168.0.1. You can change it according to your needs.
Subnet Mask	The router's LAN subnet mask.
Work Mode	If this is selected, the router serves as the DHCP server and automatically assigns IP addresses to all computers in the LAN.
DHCP Client Range	Enter the start and end IP address of all the available successive IPs.
Lease Time	Select the time for using one assigned IP from the drop down list. After the lease time, the AP automatically assigns new IP addresses to all connected computers.
Static DHCP	This page allows you to reserve IP addresses, and assign the same IP address to the network device with the specified MAC address any time it requests an IP address. This is almost the same as when a device has a static IP address except that the device must still request an IP address from the DHCP server.
Domain Name	Set the domain name of the server.
802.1d Spanning Tree	Enable or disable spanning tree function.



3.4.5.2 Static DHCP

Entering the **Static DHCP** page by clicking the "Set Static DHCP" button enables users to reserve a specific IP address for a device by granting them access to bind the MAC address of the said device to an IP address that is specified by the user on this page.

Click the "Set Static DHCP" button also reveals the RADVD page.

FW:v1.1.4		77	٩		3 {	<u></u>	K.
	Home	Wizard	Setting	s Featu	res Mana	gement	Logout
		িক		th.		VPN	
WAN C	peration Mode	Wi-F	i	LAN		VPN	
This page allows you reserve IP actime it requests an IP address. This an IP address from the DHCP serv	is almost the same as						-
IPv4	IPv6		RAI	OVD	TUNN	NEL 6 over	4
	Enable S	tatic DHCP:					
		IP Address:					
	MA	AC Address:					
		Comment:					
	Save & Apply		Rese	t			
Static DHCP List							
IP Address	MAC	Address		Comm	nent	Selec	t
Delete	e Selected	Delete	All	Re	eset		



3.4.5.3 IPv6

The **IPv6** page enables the user to permit the CPE-0001 to serve as the DHCP server and automatically assigns IPv6 addresses to all connected mobile devices on the LAN.

FW:v1.1.4	Ln Hon	ne Wizar	Settings	Factorina	₹ <u>`</u>	3
ATTEC				Features		Logout
(#)	Operation Made	NA F		LAN	VPN	
WAN	Operation Mode	Wi	-†1	LAN	VPN	
This page is used to config	ure DHCPv6 and RADVI	D.				
				_		
IPv4		IP	/6	•	TUNNEL 6 over 4	
		10.4.1.	f. 00 0000 0000		000 0000 0004/04	
		IP Address:	1680 : 0000 : 0000 :	0000 : 0000 : 0	000 : 0000 : 0001 / 64	
	DHCF	v6 Server Enable:	✓			
		Address Mode:	Stateless Address	~		
		RADVD Enable:	✓			
		Prefix:	Prefix Delegation	<u> </u>		
		AdvValidLifetime:	3600			
	Adv	PreferredLifetime:	3600			
		Save &	Apply			

ltem	Description
IP Address	Router's LAN IPv6 address.
RADVD	Router Advertisement Dameon



Stateful Address	DHCP will supply an IPv6 address.				
Stateless Address	DHCPv6 server does not provide IP addresses at all.				
6RD IPv6 Prefix	WAN IPv6 prefix delegation.				



3.4.5.4 RADVD

Configuring Router Adv	vertisement	_			_	
IPv4		IPv6	RA	NDVD	TUNN	IEL 6 over 4
		Enable	✓			
		radvdinterfacename	br0			
		MaxRtrAdvInterval	15			
		MinRtrAdvInterval	10			
		MinDelayBetweenRAs	10			
		AdvManagedFlag				
		AdvOtherConfigFlag	✓			
		AdvLinkMTU	0			
		AdvReachableTime	0			
		AdvRetransTimer	0			
		AdvCurHopLimit	0			
		AdvDefaultLifetime	45			
		AdvDefaultPreference	high		~	
		AdvSourceLLAddress				
		UnicastOnly				
		Prefix1				
		Enabled				
		Prefix2	!			
		Enabled				
	Save & Apply	de	ault	res	set	



The **RADVD** page enables the user to set up all the settings around IPv6 RADVD, including the specified time delays between packets, maximum and minimum retry intervals, and advertisement settings.

Item	Description
radvdinterfacename	Interface name.
MaxRtrAdvInterval	Max retry advertisement interval.
MinRtrAdvInterval	Min retry advertisement interval.
MinDelayBetweenRAs	Min delay between router advertisement.
AdvManagedFlag	Advertisement managed flag.
AdvOtherConfigFlag	Advertisement other config flag.
AdvLinkMTU	Advertisement link MTU.
AdvReachableTime	Advertisement reachable time.
AdvRetransTimer	Advertisement retrains timer.
AdvCurHopLimit	Advertisement current hop limit.
AdvDefaultLifetime	Advertisement default lifetime.
AdvDefaultPreference	"High", "medium" or "low" for the advertisement default preference.
AdvSourceLLAddress	Advertisement source link local address.
UnicastOnly	Unicast only.
Prefix1 Enabled	Enable or disable prefix.
Prefix	Enter the prefix and prefix length.
AdvOnLinkFlag	Advertisement on link flag.
AdvAutonomousFlag	Advertisement autonomous flag.



AdvValidLifetime Advertisement valid lifetime.			
AdvPreferredLifetime Advertisement preferred life time.			
AdvRouterAddr	Advertisement router address.		
If6to4	Enter the interface 6to4.		

3.4.5.5 TUNNEL 6 over 4



The **TUNNEL 6 over 4** page enables users to either enable or disable tunnel 6 over 4.

Item	Description			
Enable	Enable or disable tunnel 6 over 4.			



3.4.6 VPN

The **VPN** section enables the user to configure the settings for PPTP, L2TPv2, and L2TPv3 and view the Status of each.

FW:v1.1.4		7	9		₹ <u>`</u>	杀
	Home	Wizard	Settings	Features	Management	Logout
(29)	=	*		ii.	VPN	
WAN	Operation Mode	Wi-Fi		LAN	VPN	
This page is used to configu	ure the parameters for the In	ternet network which co	onnects to th	ne PPTP server.		
PPTP	L2TPv2	L2TPv3		GRE	Status	
		Enable:				
		Save & Apply				



3.4.6.1 PPTP

FW:v1.1.4		77	Q attic)	₹ <u>`</u>	K.
FPE	Home	Wizard	Settir		es	Management	Logout
WAN	Operation Mode	Wi-F	i	LAN		VPN	
This page is used to configur	re the parameters for the In	ternet network v	which connect	s to the PPTP ser	ver.		
	1						
PPTP	L2TPv2	L2TP	v3	GRE		Status	
		Enable:	/		'		
		Server:					
		Username:					
		Password:					
		MTU: 1	492	(1360-149	2 bytes)	
		MPPE:					
		MPPC:					
		Save & A	pply				

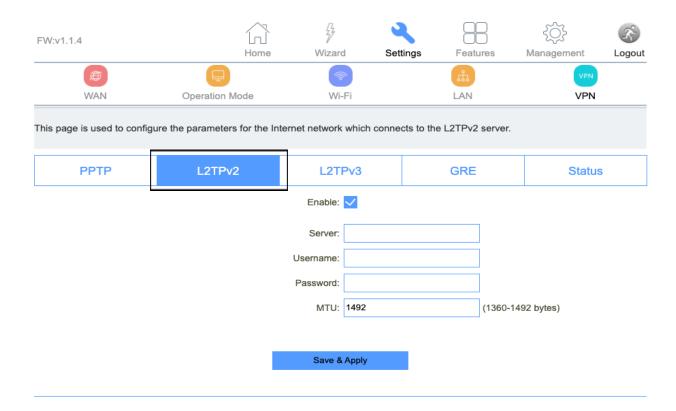
The **PPTP** page enables user's to configure the parameters for the internet network which connects to the PPTP server.

Item Description					
Server	The name of PPTP Server.				
Username	The user name provided by the cellular carrier.				



Password	The password provided by the cellular carrier.
мти	You can keep the maximum transmission unit (MTU) as default.

3.4.6.2 L2TPv2



The **L2TPv2** page is used to configure the parameters for the internet network which connects to the L2TPv2 server.

Item	Description			
Server	The name of L2TP Server.			
Username	The user name provided by the cellular carrier.			



Password	The password provided by the cellular carrier.
мти	You can keep the maximum transmission unit (MTU) as default.

3.4.6.3 L2TPv3

FW:v1.1.4		77	4	8	3	₹ <u>`</u>	K	
	Home	Wizar	d Settin	ngs Feat	ures	Management	Logout	
	=	(A)		h		VPN		
WAN	Operation Mode	Wi	Fi	LAN		VPN		
This page is used to configu	ure the parameters for the Ir	nternet network	which connect	ts to the L2TPv3	server.			
PPTP	L2TPv2	L2T	Pv3	GRE		Status		
	-	Enable:	✓	•				
	Local	Host Address:	0.0.0.0		(0.0.0.0 is	(0.0.0.0 is autoconfig)		
	Remote	Host Address:						
	Tunnel Address:			(172.10				
	Remote Tunnel Address:			(172.10.13.1/24)				
		Tunnel Id:	(1 ~ 4294			967295)		
	Ren	note Tunnel Id:	(1 ~ 4294967295)			967295)		
		Session Id:			(1 ~ 4294	967295)		
	Remote session Id:			(1 ~		(1 ~ 4294967295)		
MTU:			1488 (136			88 bytes)		
		NAT:						
		Save 8	Apply					



The **L2TPv3** page is used to configure the parameters for the internet network which connects to the L2TPv3 server.

Item	Description
Local Host Address	The address of the LAN side device of the local, eg:192.168.0.2.
Remote Host Address	The address of the LAN side device of the remote host, eg:192.168.8.2.
Local Udp Port	Lan side device udp port.
Remote Udp Port	Remote device udp port.
Tunnel Address	Wan interface ip address.
Remote Tunnel Address	Remote device wan interface ip address.
Tunnel Id	Local device tunnel id.
Remote Tunnel Id	Remote device tunnel id.
Session Id	Local device session id.
Remote session ld	Remote device session id.
мти	You can keep the maximum transmission unit (MTU) as default.



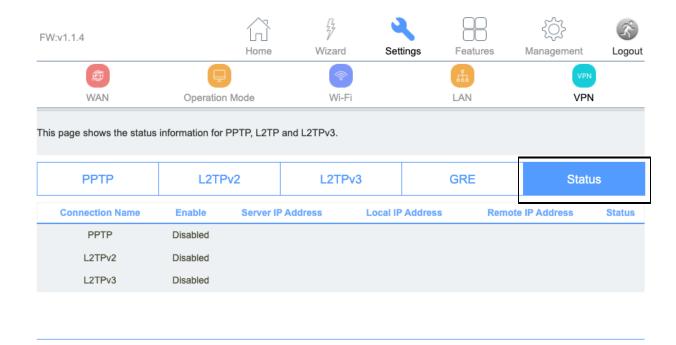
3.4.6.5 GRE

The **GRE** page is used to configure the parameters for the internet network which connects to the Generic Routing Encapsulation tunneling protocol.

FW:v1.1.4		7	4	86	3	₹ <u>`</u>	R.
	Home	Wizard	Settings	Featu	res Ma	nagement	Logout
(5)		(%	₹ I			VPN	
WAN	Operation Mode	Wi-	Fi	LAN		VPN	
This page is used to confi	gure the parameters for the	Internet network	which connects to	o the GRE.			
PPTP	L2TPv2	L2T	Pv3	GRE		Status	
		Enable:					
	Loca	al Host Address:			(0.0.0.0 is aut	oconfig)	
	Remot	te Host Address:			(10.10.10.10)		
		Tunnel Address:			(172.10.12.1)		
	Remote	Tunnel Address:			(172.10.13.1)		
		NAT:					
	Save &	Apply	Rese	et			
GRE Table							
Local Host	Remote Host Tur	nnel R	emote Tunnel	NAT S	Status	Status	Select
	Delete Selected	Delet	e All	Re	eset		



3.4.6.4 Status



The **Status** page presents an overview of the status information for PPTP, L2TPv2, and L2TPv3.



Chapter 3

Accessing the Web User Interface: Features

3.5. Features

The **Features** section enables the user to configure QoS, Firewalls, Port Forwarding, URL filtering, Routes, and Dynamic DNS.

FW:v1.1.4















3.5.1 QoS

FW:v1.1.4			7	3			K.	
		Home	Wizard	Settings	Features	Management	Logout	
Qos	\bigcirc	\rightarrow					DDNS	
QoS	Firewall	Port Forward	ling	URL Filter	R	oute Dy	namic DNS	
Entries in this table improve your online gaming experience by ensuring that your game traffic is prioritized over other network traffic, such as FTP or Web.								
		Enable QoS:	✓					
Automatic Uplink Speed:			✓					
Automatic Downlink Speed:			✓					
		Name:						
	QoS Type:				~			
		protocol:	Both		~			
	1	Local IP Address:			-			
		Local Port:			-			
	R	emot IP Address:			-			
		Remote Port:			-			
Mode:			Guarantee	d minimum	~			
	Uplink B	andwidth (Kbps):						
	Downlink B	andwidth (Kbps):						
		Priority:			(0-7,7 is high	nest priority)		
		Remark DSCP:			(0-63)			
		Comment:						
		Save & Apply		Reset				
Current QoS Rules	Table							
Name IP Version Protocol	Local IP Address Local Port Remote IP Address	Remote Port Local IPv6 ad	dr MAC Address	Phyport DSCP Mode Uplink	Bandwidth Downlink B	iandwidth Priority Weight Ren	nark DSCP Select	
	Delete Selected		Delete All		Reset			



The Quality of Service (QoS) page enables user's to limit the upload and download speeds that a specific mobile device is receiving.

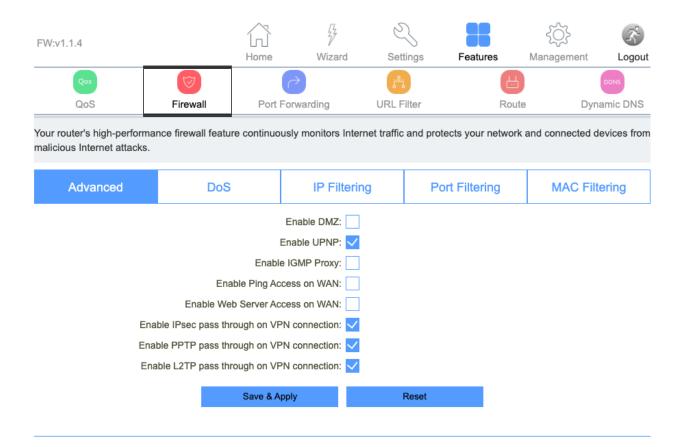
Quality of Service is an excellent and underutilized tool that allows you to train your CPE-0001 to divide up your available bandwidth between applications. With good QoS rules, you can ensure that your streaming video doesn't stutter because a big file is downloading at the same time, or that your work laptop isn't sluggish when you're trying to meet that last-minute deadline while your kids are playing games online.

Item	Description			
Automatic Uplink Speed	Automatic uplink speed.			
Manual Uplink Speed (Kbps)	Set the download speed of your internet access.			
Automatic Downlink Speed	Automatic downlink speed.			
Manual Downlink Speed (Kbps)	Set the upload speed of your internet access.			
Name	QoS rule name.			



3.5.2 Firewall

The Firewall page enables user's to set up a plethora of firewall-related features and functions.



3.5.2.1 Advanced

The **Advanced** page contains a series of checkboxes allowing user to toggle on or off specific fire-wall related functions, access, and VPN pass throughs.



FW:v1.1.4			77	6	\$		₹ <u>0</u> }	3
		Home	Wizard	Set	tings Feat u	ires	Management	Logout
Qos	\bigcirc		ightharpoons					DDNS
QoS	Firewall	Port F	orwarding	URL F	ilter	Route	Dyn	amic DNS
Your router's high-performance firewall feature continuously monitors Internet traffic and protects your network and connected device malicious Internet attacks.						evices from		
Advanced	DoS		IP Filteri	ing	Port Filter	ring	MAC Filt	ering
	1		Enable DMZ:]				
		E	nable UPNP: 🗸	l				
		Enable	IGMP Proxy:]				
	Enable	e Ping Acc	ess on WAN:]				
	Enable Web	Server Acc	ess on WAN:]				
Enable IPsec pass through on VPN connection: <								
Enable PPTP pass through on VPN connection: <								
Enable L2TP pass through on VPN connection								
		Save & Ap	pply		Reset			

Item	Description
Enable DMZ	DMZ function.
Enable UPnP	UPnP function.
Enable IGMP Proxy	IGMP Proxy function.
Enable Telnet Access on WAN	Telnet by wan access.
Enable Ping Access on WAN	Ping Access on WAN function.
Enable Web Server Access on WAN	Enable Web Server Access on WAN function.
Enable IPSec pass through on VPN connection	IPSEC to pass through IPSEC communication data.
Enable PPTP pass through on VPN connection	PPTP to pass through PPTP communication data.



Enable L2TP pass through on VPN connection

Enable or disable L2TP to pass through L2TP communication data.

3.5.2.2 Dos

The **Denial-of-Service (DoS)** page enables users to protect their CPE-0001 from DoS attack's by setting certain parameters relating to network security.

FW:v1.1.4				2	3		€€}}	B.
		Home	Wizard	d Set	tings Feat	ures	Management	Logout
Qos	(<u> </u>				DDNS
QoS	Firewall	Port	Forwarding	URLF	ilter	Route	Dyr	namic DNS
A denial-of-service (DoS) service.	attack is characteri	zed by an	explicit attempt	t by hackers t	o prevent legitima	ate users o	f a service from	using that
Advanced	DoS		IP Filt	ering	Port Filte	ering	MAC Fil	tering
	Er	able DoS F	Prevention					
	Whole	System F	lood: SYN	0		Packets/	Second	
	Who	le System I	Flood: FIN	0		Packets/	Second	
	Whole	System F	lood: UDP	0		Packets/	Second	
	Whole	System Flo	ood: ICMP	0		Packets/	Second	
	Per-S	Source IP F	lood: SYN	0		Packets/	Second	
	Per-	Source IP I	Flood: FIN	0		Packets/	Second	
	Per-S	ource IP F	lood: UDP	0		Packets/	Second	
	Per-Se	ource IP Flo	ood: ICMP	0		Packets/	Second	
		TCP/UDP	PortScan:	Low Sensiti	vity	-		
		ICI	MP Smurf:					
			IP Land:					
			IP Spoof:					
			TearDrop:					
			gOfDeath:					
			CP Scan:					
		-	WithData:					
			DP Bomb:					
		UDP Ech	oChargen:					

Clear ALL

Select ALL



3.5.2.3 IP Filtering

The **IP Filtering** page enables users to control what IP traffic will be allowed into and out of the CPE-0001's network.

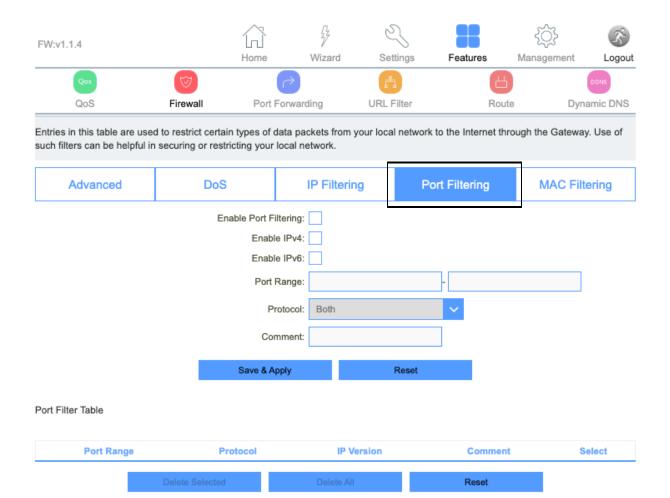
FW:v1.1.4		Home	Wizard	Settings	Features	{\(\bigcep\)} Management	Logout
Qos	⊘	₽		Å	<u>H</u>		DDNS
QoS	Firewall	Port Forward	ding	URL Filter	Route	Dyna	amic DNS
Entries in this table are used such filters can be helpful in				ur local netw	ork to the Internet thro	ugh the Gateway	. Use of
Advanced	DoS		IP Filtering		Port Filtering	MAC Filte	ering
	Ena	able IP Filtering:					
		Enable IPv4:					
		Enable IPv6:					
	Loca	al IPv4 Address:					
	Loca	al IPv6 Address:					
		Protocol:	Both		~		
		Comment:					
		Save & Apply		Reset			
IP Filter Table							
Local IP	Address		Protocol		Comment	Sel	ect
	Delete Selected		Delete All		Reset		



Item	Description
Enable IP Filtering	IP Filtering function.
Enable IPv4	IPv4 Filtering feature.
Enable IPv6	IPv6 Filtering feature.
Local IPv4 Address	LAN side source IPv4 address.
Local IPv6 Address	LAN side source IPv6 address.
Protocol	"TCP", "UDP" or" Both".

3.5.2.4 Port Filtering

The **Port Filtering** page enables users to allow or block certain network packers from following into and out of the CPE-0001's network based on their port number.





Item	Description
Enable Port Filtering	Enable or disable IP Filtering function.
Enable IPv4	Enable or disable IPv4 Filtering feature.
Enable IPv6	Enable or disable IPv6 Filtering feature.
Port Range	Set the port range for port filtering.
Protocol	Select "TCP", "UDP" or" Both".
Comment	Comment for the rule.

3.45.2.5 MAC Filtering

The **Mac Filtering** page enables users to allow or block certain mobile devices from connecting to the CPE-0001's Wi-Fi network based on their MAC address.

FW:v1.1.4			4	6	3		₹Ģ}-	F
		Home	Wizard	d Set	tings	Features	Management	Logout
Qos	\bigcirc		7	-		(H		DDNS
QoS	Firewall	Port F	orwarding	URL F	ilter	Rout	e Dyna	amic DNS
Entries in this table are used to restrict certain types of data packets from your local network to the Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.								
Advanced	DoS		IP Filt	ering	P	ort Filtering	MAC Filte	ering
		Mod	de: 💿 Blacki	ist O W	/hitelist			
	N	AAC Addre	ss:			Connect client Lis	sts	
		Comme	ent:					
		Save & Ap	oply		Reset			
MAC Filter Table								
M	AC Address			С	omment		Select	
	Delete Selected		Delet	e All		Reset		



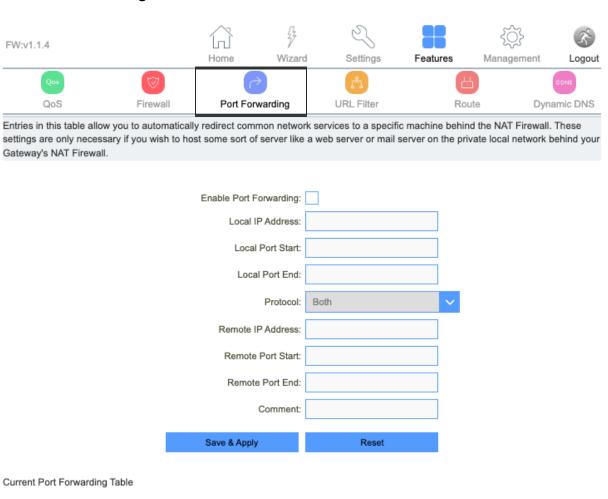
Item	Description
Blacklist	Block certain website URs from being accessed.
Whitelist	Allow certain website URLs from being accessed.
MAC Address	The MAC Address or the Media Access Control address is a unique serial number in the network circuitry of every Ethernet and Wi-Fi device.

3.5.3 Port Forwarding

Local IP Address

Local Port Range

Protocol



Remote IP Address

Remote Port Range

Status

Comment Select



The **Port Forwarding** page enables users to enable or disable port forwarding and set the port IP addresses that will be used to engage in allowing incoming traffic from outside the network to be sent to a local connected mobile device based on the requested port.

Item	Description
Enable Port Forwarding	Port Forwarding function.
Local IP Address	LAN IP address.
Local Port Start	LAN side start port.
Local Port End	LAN side end port.
Protocol	"TCP", "UDP" or "Both".
Remote IP Address	WAN IP address.
Remote Port Start	External start port.
Remote Port End	External end port.
Comment	Port number.



3.5.4 URL Filter

FW:v1.1.4			7	5		- {	٥̈́	B.
		Home	Wizard	Setting	s Feat	ures Mana	gement	Logout
Qos			ightharpoons			4		DDNS
QoS	Firewall	Port	Forwarding	URL Filte	r	Route	Dyna	mic DNS
URL filtering is used to deny LAN user from accessing the Internet; block those URLs which contain keywords listed below. Please note: URL filtering cannot filter the HTTPS encrypted domain name. Enable URL Filtering:								
	Den	y URL add	fress(black list): (
	Allo	w URL add	lress(white list):	0				
			URL Address:					
		Save &	Apply	Res	set			
URL Filter Table								
	URL	Address				Sele	ct	
	Delete Selected		Delete	All	R	teset		

The **URL Filter** page is used to deny LAN users from accessing the internet. Users can block certain URLs that contain specific keywords.

Item	Description
Enable URL Filtering	Enable or disable URL Filtering function.
Deny URL address (black list)	Blocking access to the URL list.
Allow URL address (white list)	Allowing access to the URL list.



URL Address	Block or allow access URL.

3.5.5 Route

The **Static Route** page enables user's to enable or disable the Static route and input the items around it.

FW:v1.1.4			7	2		£	B.
		Home	Wizard	Settings	Features	Management	Logout
Qos	$ \bigcirc $	ightharpoonup		F	<u> </u>		DDNS
QoS	Firewall	Port Forward	ding UF	RL Filter	Route	Dyr	namic DNS
	e Internet, your LTE Rouis process, allowing traffi				mine where traffic	should be sent	. Static
		S	Static Route				
	Ena	ble Static Route:					
		IP Address:					
		Subnet Mask:					
		Gateway:					
		Metric:					
		Interface:	LAN		~		
	Save & Apply		Reset	5	Show Route Table		
Static Route Table							
Destinatio	n IP Address	Netmask	Gateway	Metric	Interface	Status	Select
	Delete Selected		Delete All		Reset		



ltem	Description				
Enable Static Route	Enable or disable Static route.				
IP Address	An IP address, or Internet Protocol address, is a series of numbers that identifies any device on a network.				
Subnet Mask	A number that resembles an IP address. It reveals how many bits in the IP address are used for the network by masking the network portion of the IP address				
Gateway	The IP address of another router your CPE-0001 sends traffic too.				
Metric	The routing metric.				

3.5.6 Dynamic DNS

The **Dynamic Domain Name Services (Dynamic DNS)** page allows a dynamic public IP address to be associated with a static host name in any of the many domains and allows access to a specific host from various locations on the internet. DDNS requires that an account be set up with one of the supported DDNS service providers.

FW:v1.1.4		Home	Wizard	Settings	Features	Management	Logout
Qos	\bigcirc	7)	r i	- Calaires		DDNS
QoS	Firewall	Port Forw	arding	URL Filter	Ro	ute Dy	namic DNS
Dynamic DNS is a service address.	ce that provides you	with a valid, und		ernet domain name (a URL) to go w	vith your ever char	nging IP-
		Service Provide		3	~		
		Domain Nam	e: host.dynd	ns.org			
		User Name/Ema	iil:				
		Password/Ke	y:				
		Save & Apply		Reset			



ltem	Description
Server Provider	Select server from the drop-down list DynDNS TZO
Domain Name	The host name.
User Name/Email	The user name.
Password/Key	The password.

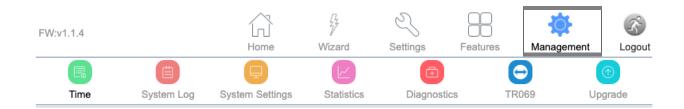


Chapter 3

Accessing the Web User Interface: Management

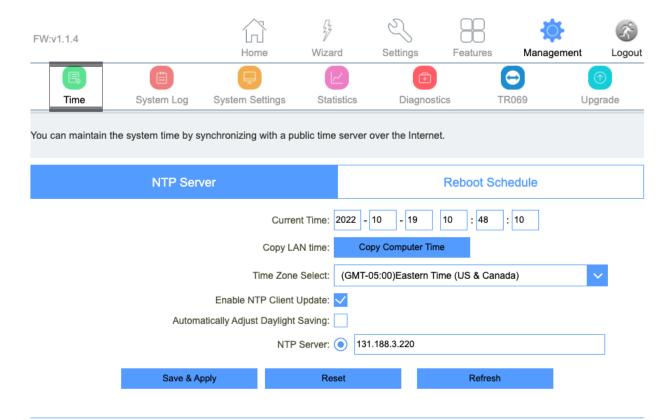
3.6. Management

The **Management** section enables the user to perform key system updates such as setting the CPE-0001's IP address log-in username and password, enabling or disabling TR069, and upgrading the CPE-0001's firmware.



3.6.1 Time

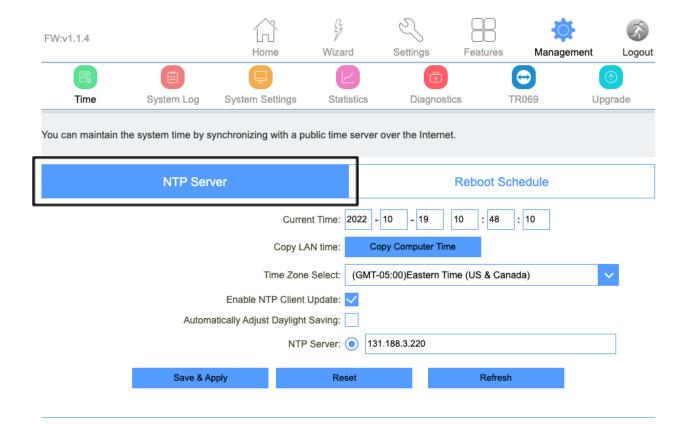
The **Time** sub-section contains several pages related to time-related settings.





3.6.1.1 NTP Server

The **NTP Server** page enables user's to set the current time and time zone onto their CPE-0001, in addition to setting NTP server.

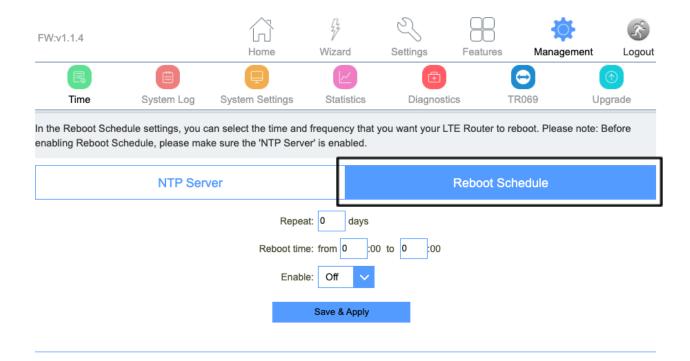


Item	Description
Current Time	Select the time zone in your area.
Copy LAN time	Copy time from computer.
Time Zone Select	Select the time zone from the drop box.
Enable NTP client update	NTP client update.



Automatically Adjust Daylight Saving	Daylight savings function.
NTP Server	Select the well known NTP Server.
Manual IP Setting	Enter the server manually.

3.6.1.2 Reboot Schedule



The **Reboot Schedule** page enables user's to allow their CPE-0001 to reboot automatically at a specified time.



3.6.1 System Log

FW:v1.1.4		Home	Wizard	Settings	Features	Management Logou
Time	System Log	System Settings	Statistics	Diagnostics	TR069	Upgrade
This page can be u	sed to set the remo	te Log server and sho	w the system Lo	og.		
			able Log:			
		Enable Rer Log Server IP				
			Apply Changes	•		
		Refresh		Clear		

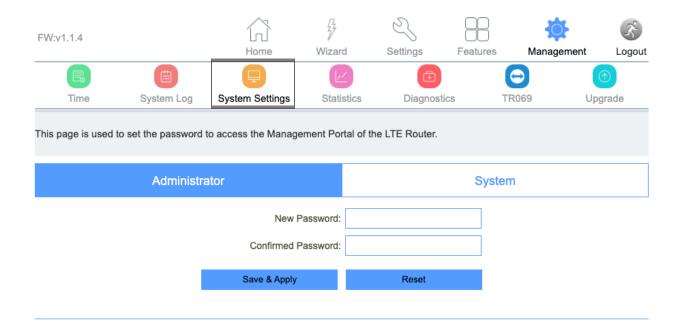
Item	Description
Enable Log	Log function.
System All	Print all log information.



Wireless	Print wireless log information.
DoS	Print DoS log information.
Enable Remote Log	"Logging to Syslog Server".
Log Server IP Address	Enter the Syslog server IP address.

3.6.2 System Settings

The **System Settings** subsection contains several pages related to basic administration settings.





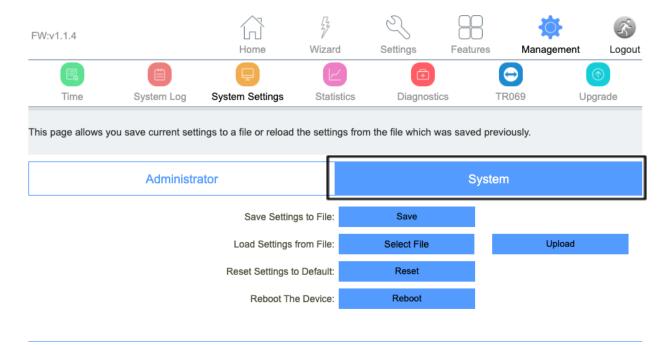
3.6.2.1 Administrator

The **Administrator** page allows users to set the CPE-0001's IP address log-in username and password.

ı	FW:v1.1.4	Home	Wizard	Settings	Features	Management	Logout
						(-)	\bigcirc
	Time System L	og System Settir	ngs Statis	tics Diagr	nostics	TR069 (Jpgrade
Т	This page is used to set the pass	word to access the Ma	anagement Port	al of the LTE Rout	er.		
	Admi	nistrator			Syste	em	
_		ı	New Password:				
		Confirm	med Password:				
		Save & A	Apply	Reset			



3.6.2.2 System



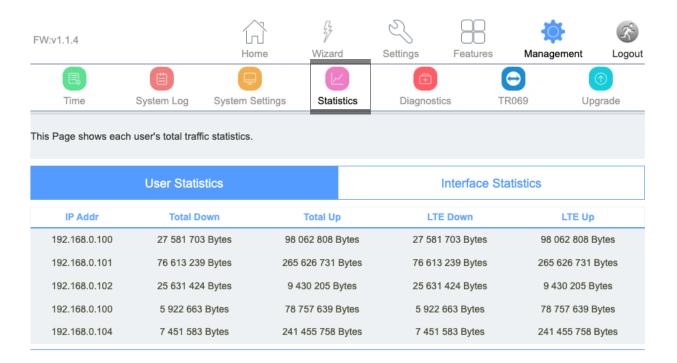
Item	Description
Save settings to file	Save the settings to the local PC.
Load settings from File	Load the settings from the local PC.
Reset Settings to Default	Restore the device to factory default.
Reboot the device	Press the button to reboot the device.

The **System** page allows user's to back up, restore, and erase the CPE-0001's current settings. Once you provision your router to your liking, it is recommended to back up the settings so that they are saved as a file on your computer. In the future, you can then restore the CPE-0001's settings from this file.

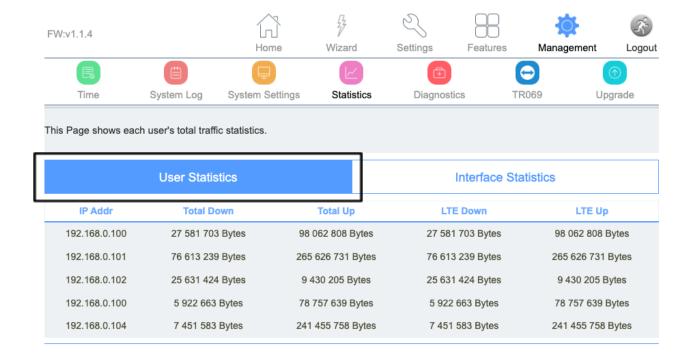


3.6.3 Statistics

The **Statistics** subsection contains several pages related to basic administration settings.

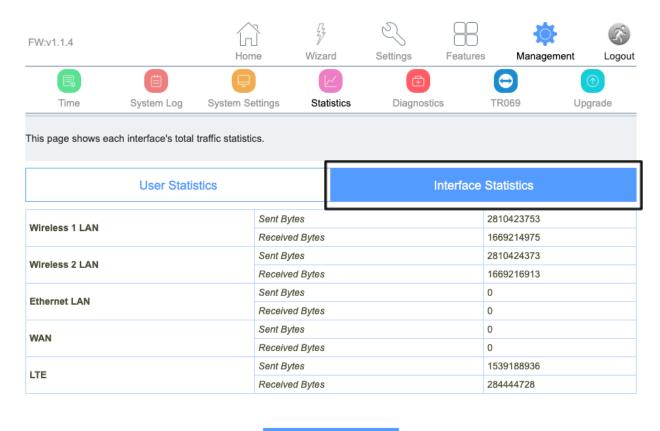


3.6.3.1 User Statistics





3.6.3.2 Interface Statistics



Refresh



3.6.4 Diagnostics

The **Diagnostics** page provides various diagnostics surrounding ping and traceroute for IP connection.

FW:v1.1.4			Home	Wizard	Settings	Featu	res M	fanagement	Logou
			Plone	Wizaid	Settings		(a)		①
Time	_	m Log	System Settings	Statistic	_		TR069	•	pgrade
This page gives yo	ou various d	diagnostic	s about ping for IP o	connection.		_			
		Ping				Tra	ceroute		
	г								
Host Name or IP A	\ddress:							RUN	
									//



3.6.4.1 Ping

FW:v1.1.4		Home	Wizard	Settings	Features	Management	Logou
					· oataroo		(h)
	System Log	System Settings	Statistics	Diagnostic	s T	R069	Upgrade
This page gives you vari	ous diagnostics	about ping for IP con	nection.				
	Ping				Tracero	ute	
Host Name or IP Addres	S:					RU	N



3.6.4.1 Traceroute

FW:v1.1.4			7	3			K.
		Home	Wizard	Settings	Features	Management	Logout
				\bigcirc			\bigcirc
Time	System Log	System Settings	Statistics	Diagnostic	s TF	R069 U	pgrade
This page gives yo	ou various diagnostio	cs about traceroute for	IP connection.				
	Ping				Tracerou	ute	
Host Name or IP A	ddress:					RUN	



3.6.5 TR069

FW:v1.1.4		1d	75	63		3		3
		Home	Wizard	Settings	Featu		gement	Logout
		\Box		Œ				\odot
Time	System Log	System Settings	Statistic	s Diagno	ostics	TR069	Upg	grade
This page is used	to configure the TR-0	069.						
		TR069:	Disabled	Enabled				
ACS:			http://acs.iqon	line.com				
User Name:			tr69-iqonline					
		Password:	•••••					
	Pe	riodic Inform Enable:	Disabled	Enabled				
	Pe	riodic Inform Interval:	86400					
		Interface:	DEFAULT		~			
	C	Connection Request						
		Authentication:	Disabled	Enabled				
		User Name:	admin					
		Password:	••••					
Path:			/					
		Port:	30009					
		Save & Apply		Reset				
	Cer	rtificat Management						
		CA Certificat:	Sel	lect File		Upload		
		View CA Certificat:		View				

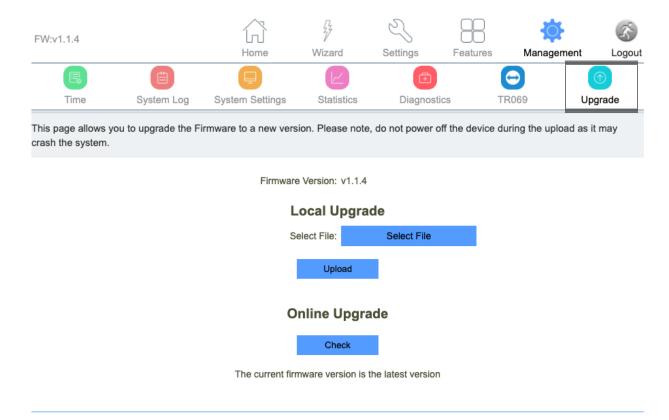
The **TR069** page is used to configure the TR069 functionalities in addition to setting the ACS's parameters.



Item	Description				
TR069	Technical Report 069				
ACS	ACS server domain or IP Address.				
User Name	Username for connection to ACS.				
Password	Password for connection to ACS.				
Periodic Inform Enable	Periodic inform.				
Periodic Inform Interval	Periodic inform interval.				
Connection Request User Name	User Name used form ACS connection to TR069.				
Connection Request Password	Password used form ACS connection to TR069.				
Path	Connection request path.				
Port	Connection port.				



3.6.5 Upgrade



From time to time, new versions may be released of the CPE-0001's Firmware. Firmware updates contain improvements and fix existing problems.

The **Local Upgrade** page enables users to upgrade the CPE-0001's software.

The **Online Upgrade** section of the page enables users to upgrade the mobile module firmware to a new version.

Do not power off the device during the upload as it may crash the system.