

JATONTEC LTE-A JT6300M CAT7 Outdoor CPE User Manual V1.0

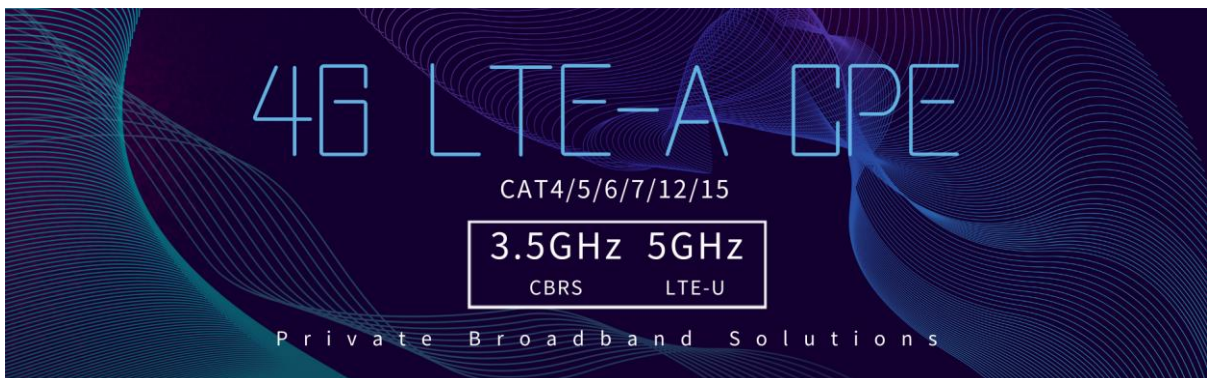


Table of Contents

1. OVERVIEW.....	5
■ OPERATOR DEVICE SPECIFICATION.....	5
■ RADIO INTERFACE SPECIFICATION.....	5
■ WI-FI INTERFACE.....	6
2. GETTING STARTED.....	6
■ PACKING LIST AND CPE UNIT.....	6
■ INSTALLING AND POWER ON.....	7
■ INSTALLING OUTDOOR UNIT (ODU).....	8
■ HEADER CONNECTION.....	8
■ LED DISPLAY.....	9
3. MANAGING CPE DEVICE.....	10
■ WEB LOGIN.....	10
4. SYSTEM INFORMATION.....	11
■ SYSTEM STATUS.....	11
■ NETWORK.....	12
■ STATISTICS INFO.....	13
5. LTE CONFIGURATION.....	14
■ INTERFACE INFO.....	14
■ RADIO SETTINGS.....	15
■ PDN.....	16
■ SIM CARD.....	17
■ PLMN SELECTION.....	18
■ CELL SELECTION.....	19
■ PIN MANAGEMENT.....	20
■ COMMAND.....	21
6. NETWORK CONFIGURATION.....	22
■ OPERATION MODE SETTING.....	22
■ LAN NETWORKING.....	23
■ VPN SETTING UNDER ROUTER MODE.....	24
■ VPN SETTING UNDER L2 BRIDGE MODE.....	26
■ PACKETS CLASSIFIER.....	28
■ IPV6 SETTING.....	29
■ DDNS SETTING UNDER ROUTER MODE.....	30
■ CLIENT LIST.....	30
7. WI-FI CONFIGURATION.....	31
■ NETWORK SETTINGS.....	31

■	WPS SETTING.....	31
■	WI-FI STATUS.....	32
8.	SERVICE CONFIGURATION	33
■	PORT FORWARDING.....	33
■	PACKET FILTERING	33
■	UPNP	34
■	DMZ SETTING.....	34
■	SECURITY SETTING.....	35
9.	VOIP CONFIGURATION	35
■	NUMBER ANALYSIS	38
■	CALL.....	39
■	DSP	40
■	ENHANCED SERVICES.....	41
■	LINE FEATURES.....	42
■	PORT	43
■	MODULE MANAGEMENT.....	43
10.	SYSTEM MAINTENANCE.....	45
■	GENERAL SETTING	45
■	GENERAL SETTING	46
■	TR069.....	47
■	NTP SETTING	48
■	AUTO UPDATE.....	49
■	MAINTENANCE.....	50
■	IPERF	51
■	PING	52
11.	FAQ AND TROUBLESHOOTING.....	53

PLEASE READ THESE SAFETY PRECAUTIONS!

RF Energy Health Hazard



The radio equipment described in this guide uses radio frequency transmitters. Although the power level is low, the concentrated energy from a directional antenna may pose a health hazard. Do not allow human body to keep close contact with the device for long period of time while the transmitter is operating.

Protection from Rain and Lightning



The device needs to operate in an indoor environment where no rain or water leakage can be exposed to the device. Before connecting this instrument to the power line, make sure that the voltage of the power source matches the requirements of the instrument. The unit must be standards.

Disposal and Recycling Information



Pursuant to the WEEE EU Directive electronic and electrical waste must not be disposed of with unsorted waste. Please contact your local recycling authority for disposal of this product.

Reduction of Hazardous Substances



This CPE is compliant with the EU Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation (Regulation No 1907/2006/EC of the European Parliament and of the Council) and the EU Restriction of Hazardous Substances (RoHS) Directive (Directive 2002/95/EC of the European Parliament and of the Council).

FCC Notice, USA

This CPE unit can comply with Part 15B of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This device is specifically designed to be used under Part 90Z, Subpart E of the FCC Rules and Regulations. Any unauthorized modification or changes to this device may void the operator's authority to operate this device.

Furthermore, this device is intended to be used only when installed in accordance with the instructions outlined in this manual. Failure to comply with these instructions may also void the operator's authority to operate this device and/or the manufacturer's warranty.

EC Conformance Declaration

Marking by the above symbol indicates compliance with the Essential Requirements of the RED Directive of the European Union (2014/53/EU). This equipment can meet the following conformance standards:

- EN 60950-1 (IEC 60950-1) - Product Safety
- EN 301 489-1, EN 301 489-17, EN 300 328 - EMC requirements for radio equipment

This device is intended for use in all European Community countries.

1. Overview

The JATONTEC JT6300M CPE is a highly advanced LTE outdoor multi-service product solution specifically designed to meet integrated data, voice and Wi-Fi access needs for residential, business and enterprise users. The product consists of an outdoor data CPE unit (ODU) and an indoor multiservice gateway unit (HGW) that supports advanced networking, VoIP gateway and WLAN AP functionalities. It enables wide service coverage and provides high data throughput and networking features to customers who needs easy broadband access, low cost VoIP service and Wi-Fi connectivity.



■ Operator Device Specification

Model	Description & User Interface
IDU	<ul style="list-style-type: none"> • 1 RJ45 10/100/1000M ETH (PoE), 2 RJ45 10/100/1000M ETH, 1 RJ11/FXS Line • SYS, NET, SIG(Tri color) , 2.4G Wi-Fi, 5G Wi-Fi, LAN1-2, LINE • 48V/0.5A DC • Dimensions: 135 mm (L) × 105 mm (W) × 30mm (D) • Weight: < 300g
ODU	<ul style="list-style-type: none"> • 1 RJ45 10/100/1000M ETH (PoE) • PWR, SYS, SIM, LINK, ACT, and LTE (1-5) LEDs • 48V/0.5A PoE • Dimensions: 250 mm (L) × 250 mm (W) × 75 mm (D) • Weight: < 2 Kg

■ Radio Interface Specification

Frequency Bands	Band 42/43/48 , Band 3/7/20
Radio Access	3GPP E-UTRA Release 11
Operation Mode	TDD, 4RX, 2TXD, or TDD, 2RX, 2TXD,

Output Power	23dBm
Throughput	Category 7
SIM Support	SIM card slot (2FF)

■ Wi-Fi Interface

Radio Access	802.11a/b/g/n/ac (2.4GHz 300 Mbps, 5GHz 867Mbps)
Output Power	15 ± 1dBm
Antenna	3dBi built-in antenna
Security	64/128-bit WEP, WPA/WPA2

2. Getting Started

■ Packing list and CPE Unit

Upon receiving the product, please unpack the product package carefully. Each product is shipped with the following items:

Table 2-1 Packing List

Outdoor CPE Products	Quantity
ODU unit	1
IDU unit	1
Mounting brackets	1
48V DC Power adapter	1
Ethernet Cable	1

If you find any of the items is missing, please contact our local distributor immediately.

CPE Unit :

Unpacking the Equipment Table 2-1 lists all the standard parts that are supplied in your LTE CPE Unit Installation Package. Please take the time to unpack the package and check its contents against this list.



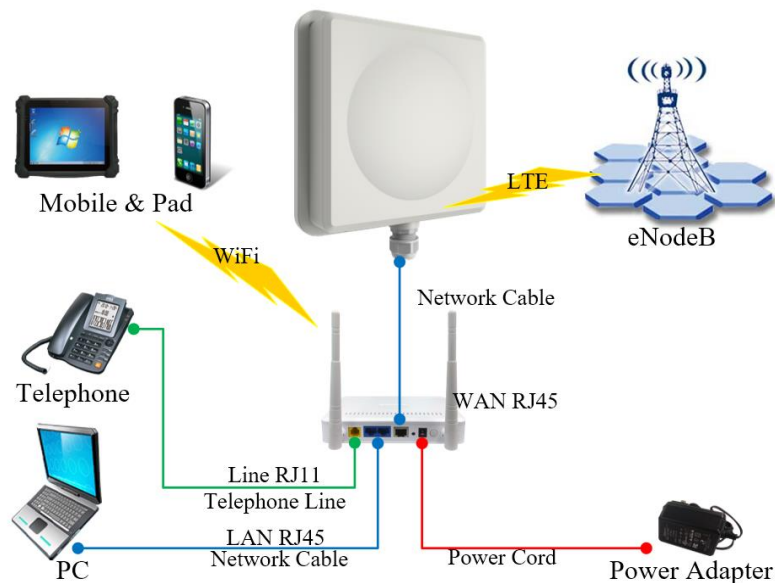
■ Installing and power on

For outdoor CPE product, it is suggested that the CPE device be installed in a shaded area to avoid direct sun light exposure and prolong the device life.

To power on the device, the CPE must use a 48V DC power supply adapter. The power adapters can operate in 90-250V AC range and therefore can be used in different country. An Ethernet cable is required to connect the WAN port of IDU with the POE(LAN) port of ODU. By the way, the ODU don't support the hot-plugging. Once the device is powered up, the user should wait for about 2 minutes before the device becomes operational. For CPE with the SYS LED indicator, a solid light indicates the system has completed the startup procedure.

To connect PC, LAN switch or other type of IP device to the CPE product, the user should use standard CAT6 Ethernet cable and connect to the appropriate LAN port. Once connected, the CPE(IDU) LAN LED indicator should be on.

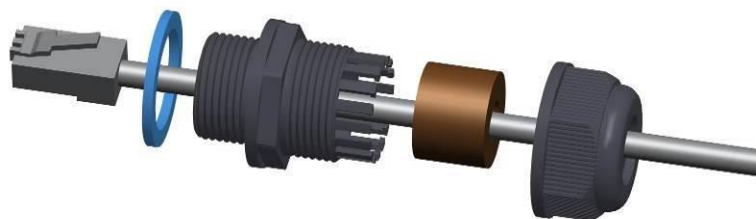
To use the phone service(Optional), operator can simply plug the phone line to the CPE RJ11 port in the back. If the line is not registered or configured, a fast-busy tone will be provided and the corresponding LINE LED light will be off.



■ Installing Outdoor Unit (ODU)



■ Header Connection



■ LED Display

Type	LED	Function	Description
IDU	SYS	Power indicator	Green color – Device is powered on.
	NET	WAN port status	Blinking green – The data is in transmission.
	SIG	RF signal indicator	Red: RSRP < -118dBm Green: -118dBm <= RSRP < -105dBm Blue: -105dBm <= RSRP
	2.4G & 5G	Wi-Fi indicator	Light is on –2.4G & 5G Wi-Fi is on.
	LAN1&LAN2	LAN port status	Solid green – LAN port is up. Blinking green – LAN data activity in progress.
	Line (Optional)	POTS line status	OFF – Line is not registered or provisioned. Green Color – The line is ready and registered Green Blinking – Voice Call in progress

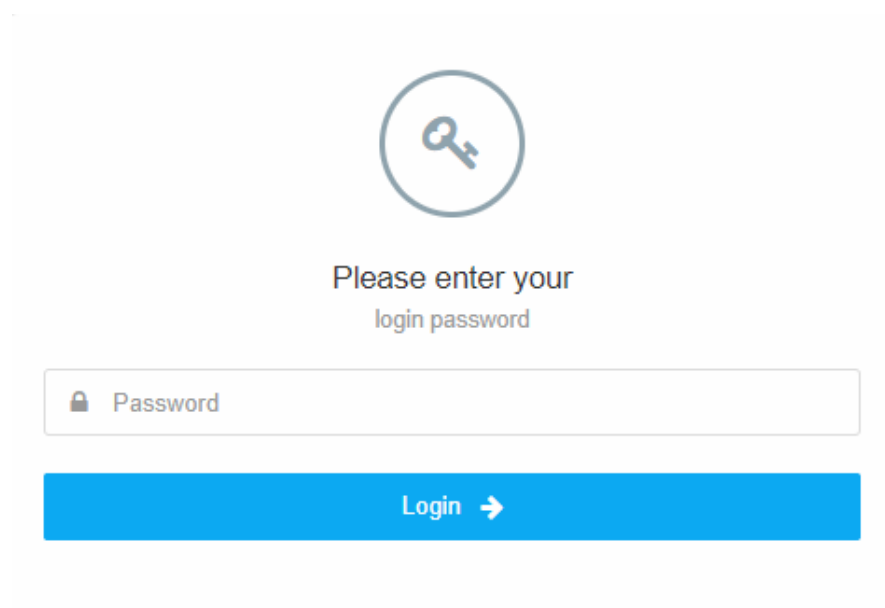
Type	LED	Function	Description
ODU	PWR	Power indicator	Solid green – Device is power on.
	SYS	System run indicator	Solid green – Device is in normal operation.
	SIM	SIM card indicator	Light is on – SIM card state is ready, Blinking Green – SIM card is error.
	LINK	LAN port status	Solid Green – LAN port is up.
	ACT	LAN port status	Blinking Green – LAN data transmission.
	RF (5LEDs)	RF Signal Strength	5 level signal strengths indication by 5 green LEDs. 1st Green LED: -115dBm < RSRP 2nd Green LED: -115dBm <= RSRP < -105dBm 3rd Green LED: -105dBm <= RSRP < -95dBm 4th Green LED: -95dBm <= RSRP < -85dBm 5th Green LED: -85 <= RSRP

3. Managing CPE Device

The JT6300M offers rich management features which facilitate the task of service provider. It supports local management access, Telnet, WEB, and centralized remote OTA configuration, upgrades management and device monitoring via standard TR-069 ACS systems. The following describes the basic procedures for configuring the device for LTE operation.

■ WEB Login

It is a preferred to setup the CPE using a Web browser from a local PC connected to device LAN port. The operator should ensure that the connected PC has acquired IP address via DHCP from the device. After IP connectivity is established between the PC and CPE device, the operator may launch a Web browser and specify <http://172.16.1.1> in the address bar. A window will pop up requesting password. Input the user login password and then click the “**Log in**” button. After successful log on, the default home page of the WEB GUI interface will appear. Note the default password is “[admin123](#)”.



4. System Information

■ System Status

The menu shows the general system info of the CPE device. It includes system, general, WAN, LAN, Wi-Fi information.

The screenshot displays the 'System Status' page of a CPE device. The interface includes a sidebar with navigation options and a main content area with three sections: Device Info, WAN Configuration, and LAN Info.

System Information (Sidebar)

- System Status
- Network
- Statistic Info
- LTE Configuration >
- Network Configuration >
- Wi-Fi Configuration >
- Service Configuration >
- VoIP Configuration >
- System Maintenance >

Device Info

Manufacturer	
CPU Usage	0%
Memory Usage	67%
Software Version	V2.0.0B715
Hardware Version	V1.0
S/N	K6200MFE9810
System Current Time	2018-07-31 18:52:23
System Up Time	24 mins, 35 secs
Operation Mode	Router (NAT)

WAN Configuration

Connected Type	LTE PDN
IP Address	
Subnet Mask	
Default Gateway	
DNS Server	202.96.128.86 202.96.134.33

LAN Info

LAN IP Address	192.168.0.1
Subnet Mask	255.255.255.0
MAC Address	6C:AD:EF:FE:98:10
DHCP Server Status	Enable
DHCP IP Address Pool	192.168.0.2 - 192.168.0.100
DNS Proxy Status	Enable

■ Network

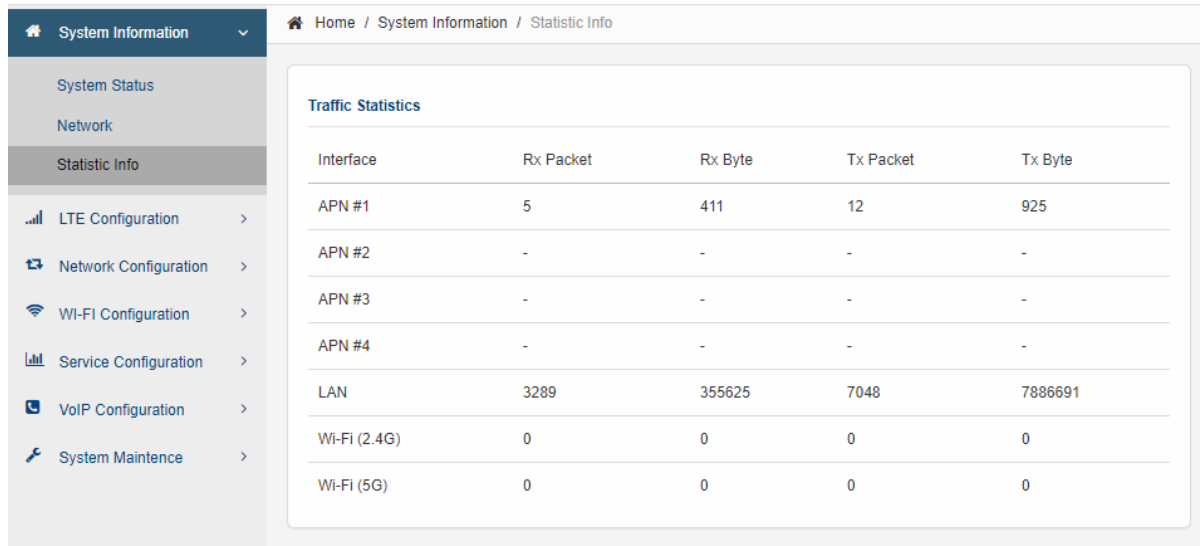
The menu shows the general network status that includes PDN interface info.

The screenshot displays a web-based network configuration interface. On the left is a sidebar menu with the following items: System Information (selected), System Status, Network, and Statistic Info. Below these are several configuration categories with expandable arrows: LTE Configuration, Network Configuration, WI-FI Configuration, Service Configuration, VoIP Configuration, and System Maintenance. The main content area shows the breadcrumb 'Home / System Information / Multiple PDN Info' and lists four PDN entries. PDN 1 is fully configured with an IP address, subnet mask, default gateway, and DNS servers. PDN 2, 3, and 4 are partially configured, showing only their APN names and subnet masks.

PDN ID	APN Name	IP Address	Subnet Mask	Default Gateway	DNS Server
PDN 1		10.11.102.195	255.255.255.255	10.11.102.195	202.96.128.86 202.96.134.33
PDN 2	APN2		255.255.255.255		
PDN 3	APN3		255.255.255.255		
PDN 4	APN4		255.255.255.255		

■ Statistics Info

The menu shows the CPE device traffic statistics and memory usage information.



The screenshot displays a web interface with a sidebar menu on the left and a main content area on the right. The sidebar menu includes 'System Information' (expanded), 'System Status', 'Network', 'Statistic Info', 'LTE Configuration', 'Network Configuration', 'Wi-Fi Configuration', 'Service Configuration', 'VoIP Configuration', and 'System Maintenance'. The main content area shows the breadcrumb 'Home / System Information / Statistic Info' and a table titled 'Traffic Statistics'.

Interface	Rx Packet	Rx Byte	Tx Packet	Tx Byte
APN #1	5	411	12	925
APN #2	-	-	-	-
APN #3	-	-	-	-
APN #4	-	-	-	-
LAN	3289	355625	7048	7886691
Wi-Fi (2.4G)	0	0	0	0
Wi-Fi (5G)	0	0	0	0

5. LTE Configuration

■ Interface Info

The LTE interface info GUI gives detailed LTE information about the radio connection, the UL/DL Bandwidth, UL/DL Frequency, the receiving signal strength of the device by the LTE Info WEB GUI.

System Information >
Home / LTE Configuration / Interface Info

LTE Configuration

Interface Info

Radio Settings

APN

SIM Card

PLMN Selection

eNB Settings

PIN Management

Command

Network Configuration >

Wi-Fi Configuration >

Service Configuration >

VoIP Configuration >

System Maintenance >

Connect Info

Connection State	CONNECTED	Connected Time	1 min 22 secs
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Radio Info

UL EARFCN	43250	DL EARFCN	43250
UL Frequency	3566000 KHz @ 20000 KHz	DL Frequency	3566000 KHz @ 20000 KHz
UL MCS	22	DL MCS	27
RSRP0	-105.83 dBm	RSRP1	-106.25 dBm
SINR0	17.6 dB	SINR1	17.08 dB
CINR0	17.53 dB	CINR1	17 dB
Transfer Mode	3	TX Power	-26.48 dBm
PCI	222	eNodeB ID	59
Cell ID	154	Registered PLMN	EPC230 46088
RSRQ	-6.92 dB	CQI	14
Band ID	42	C-RNTI	380
RRC State	active	EMM State	registered
Rank Indicator	0 (RANK1)	ECI	0003B9A
UL Throughput	0.0 kbps	DL Throughput	0.0 kbps

2nd Cell Info

Index	EARFCN	PCI	RSRP(dBm)	RSRQ(dB)	CINR(dB)	Active
1	43000	111	-108.30	-7.60	18.00	✔

Module Info

Chip Model	SQN3220CA	Band Support	42, 43
Duplexing Scheme	TDD	SIM Card State	Ready
Firmware Version	4.2.1.0-0 [M]	IMSI	460880000000013
IMEI	862343030311352	MSISDN	-

■ Radio Settings

The LTE radio can be enabled or disabled via 4G Radio setting. The radio can also be reset via Reconnect. Frequency scanning step and channel settings can all be configured as follow. By default, 500KHz frequency scanning step is assumed.

System Information > Home / LTE Configuration / Radio Settings

LTE Configuration

- Interface Info
- Radio Settings**
- APN
- SIM Card
- PLMN Selection
- eNB Settings
- PIN Management
- Command

Radio

Radio Enable Status ON

Frequency Scanning Step

Band Settings

Scan Mode

Network Configuration >

Wi-Fi Configuration >

Service Configuration >

VoIP Configuration >

System Maintenance >

■ PDN

This menu is used to configure the operator APN profile. You can configure single or multiple APNs for the operator network. The below shows an example of two APN configuration.

System Information > Home / LTE Configuration / APN

LTE Configuration

- Interface Info
- Radio Settings
- APN**
- SIM Card
- PLMN Selection
- eNB Settings
- PIN Management
- Command

Network Configuration >

- Wi-Fi Configuration >
- Service Configuration >
- VoIP Configuration >
- System Maintenance >

APN Selection

APN Number: # 1

APN Settings

Enable: ON

APN Name:

Authentication Type: NONE

Network Type: IPv4

MTU: 1400

Default Gateway: ON

APN Type: TR069 + VoIP

APN List

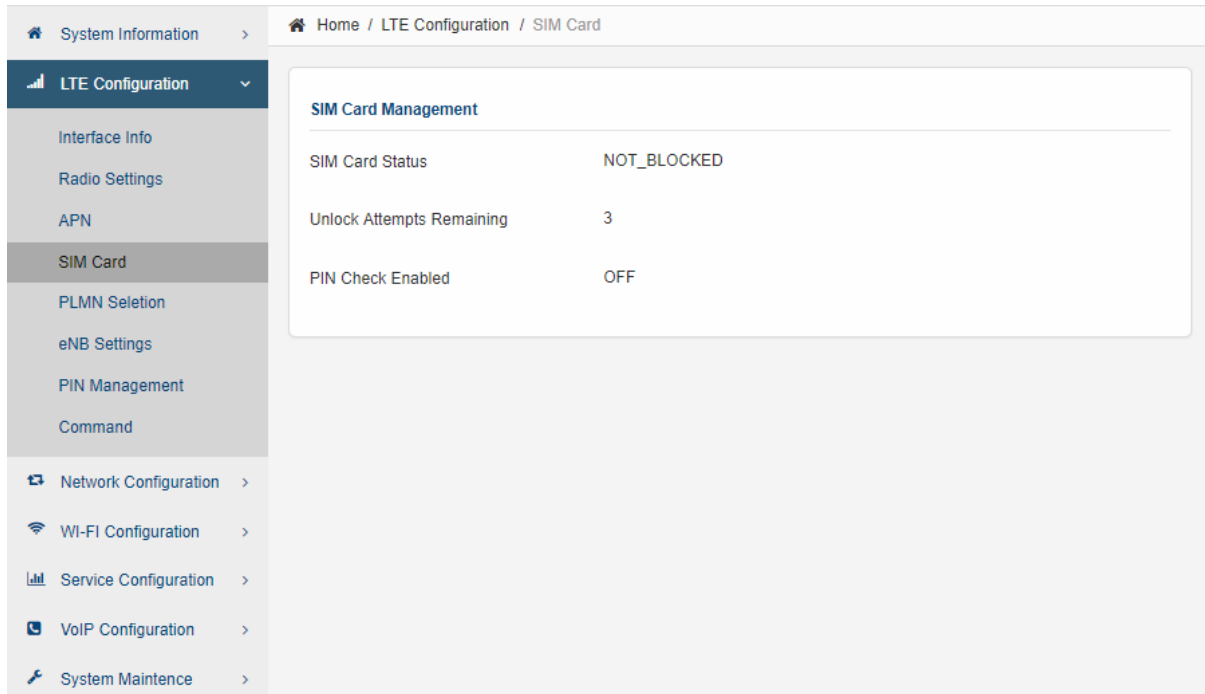
APN Name	Enable	Network Type	MTU	Default Gateway	APN Type	LAN Port
-	Enable	IPv4	1400	Enable	TR069 + VoIP	--
APN2	Disable	IPv4	1400	--	--	--
APN3	Disable	IPv4	1400	--	--	--
APN4	Disable	IPv4	1400	--	--	--

Save & Commit

The user can view the APN status info in the System Information - Network menu.

■ SIM Card

The SIM card menu is used to view the SIM card status and perform card restriction for SIM card.



The screenshot shows a web-based configuration interface. The breadcrumb navigation at the top reads "Home / LTE Configuration / SIM Card". The left sidebar contains a menu with the following items: "System Information", "LTE Configuration" (expanded), "Interface Info", "Radio Settings", "APN", "SIM Card" (selected), "PLMN Selection", "eNB Settings", "PIN Management", "Command", "Network Configuration", "Wi-Fi Configuration", "Service Configuration", "VoIP Configuration", and "System Maintenance". The main content area displays "SIM Card Management" with the following status information:

SIM Card Management	
SIM Card Status	NOT_BLOCKED
Unlock Attempts Remaining	3
PIN Check Enabled	OFF

■ PLMN Selection

The user can add and configure the PLMN list to restrict the CPE to attach. The CPE will attach to network according to the PLMN priority assigned.

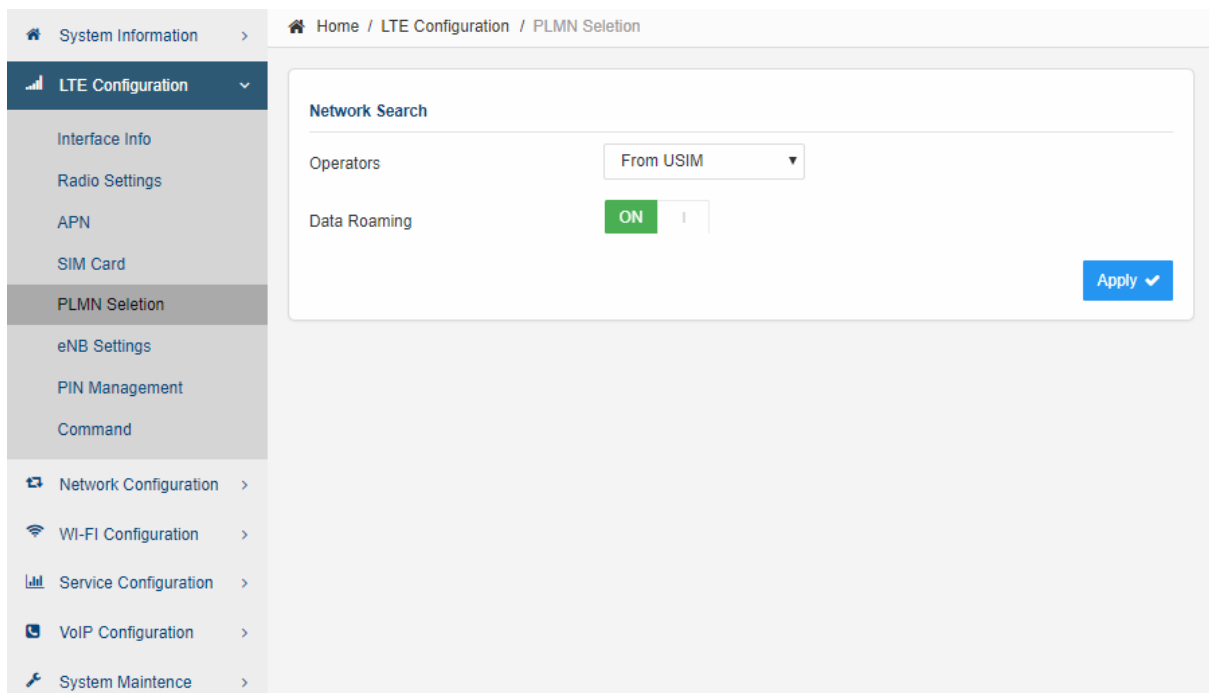
The image displays two screenshots of the PLMN Selection configuration page. The top screenshot shows the 'Auto' selection mode, where the 'Operators' dropdown is set to 'Auto' and the 'Data Roaming' toggle is off. The bottom screenshot shows the 'Manual' selection mode, where the 'Operators' dropdown is set to 'Manual', there is a 'Scan' button, and the 'Data Roaming' toggle is turned 'ON'. Both screenshots feature a left-hand navigation menu with 'LTE Configuration' expanded to 'PLMN Selection'.

Top Screenshot (Auto Selection):

- Page Title: Home / LTE Configuration / PLMN Selection
- Section: Network Search
- Operators: Auto (dropdown menu open showing options: Auto, From USIM, Manual, Manual Priority)
- Data Roaming: Off
- Apply button: Present

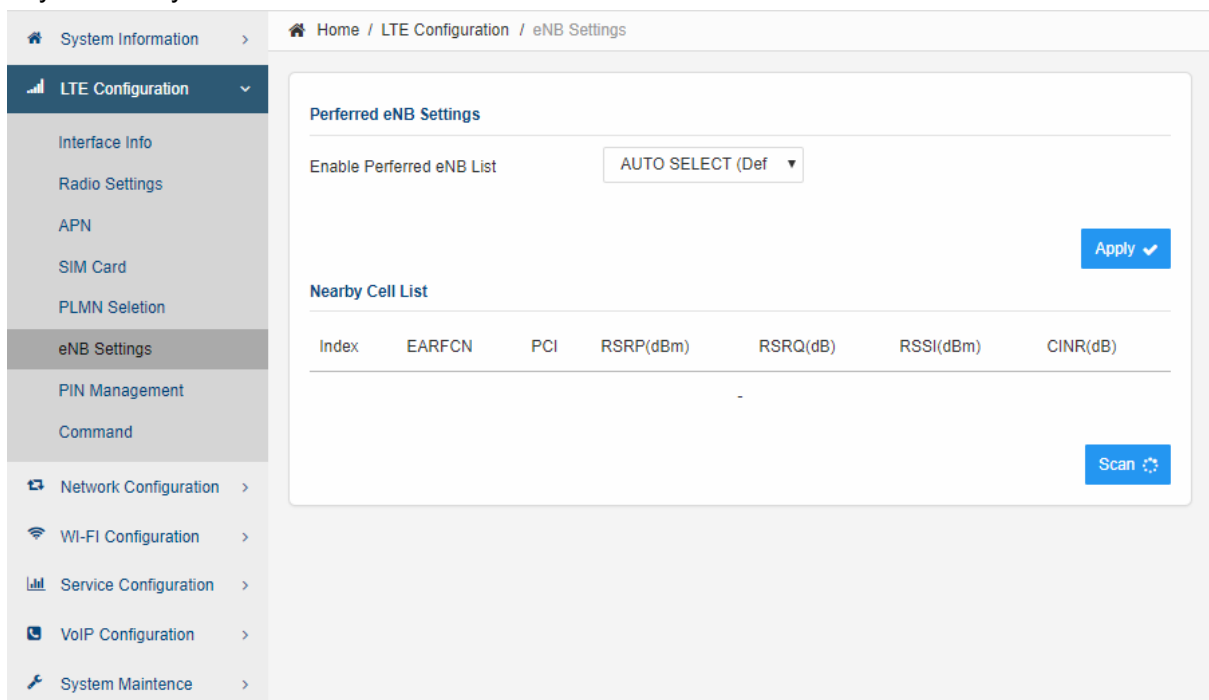
Bottom Screenshot (Manual Selection):

- Page Title: Home / LTE Configuration / PLMN Selection
- Section: Network Search
- Operators: Manual (dropdown menu)
- Scan button: Present
- MCC: [Empty text input field]
- MNC: [Empty text input field]
- Data Roaming: ON (toggle)
- Apply button: Present



■ Cell Selection

The cell selection menu is used to configure how CPE will select the best cell. User can configure the “Auto Select” mode to select cell based 3GPP standard. When configured with “Auto Select & Lock”, user add the desired cell ID to the list and the CPE will attach to the appropriate cell after a full scan. If configured with “Manual Select”, the CPE will not connect to any cell if they are in the list.



■ PIN Management

The PIN Management menu is used to view the SIM card status and perform PIN code management for SIM card. You disable or enable the SIM card PIN check on the CPE to bind the SIM card inserted.

The screenshot shows a web interface for PIN Management. The breadcrumb path is "Home / LTE Configuration / PIN Management". The left sidebar contains a menu with "LTE Configuration" expanded, showing options like "Interface Info", "Radio Settings", "APN", "SIM Card", "PLMN Selection", "eNB Settings", "PIN Management" (selected), and "Command". Below this are other configuration categories: "Network Configuration", "Wi-Fi Configuration", "Service Configuration", "VoIP Configuration", and "System Maintenance".

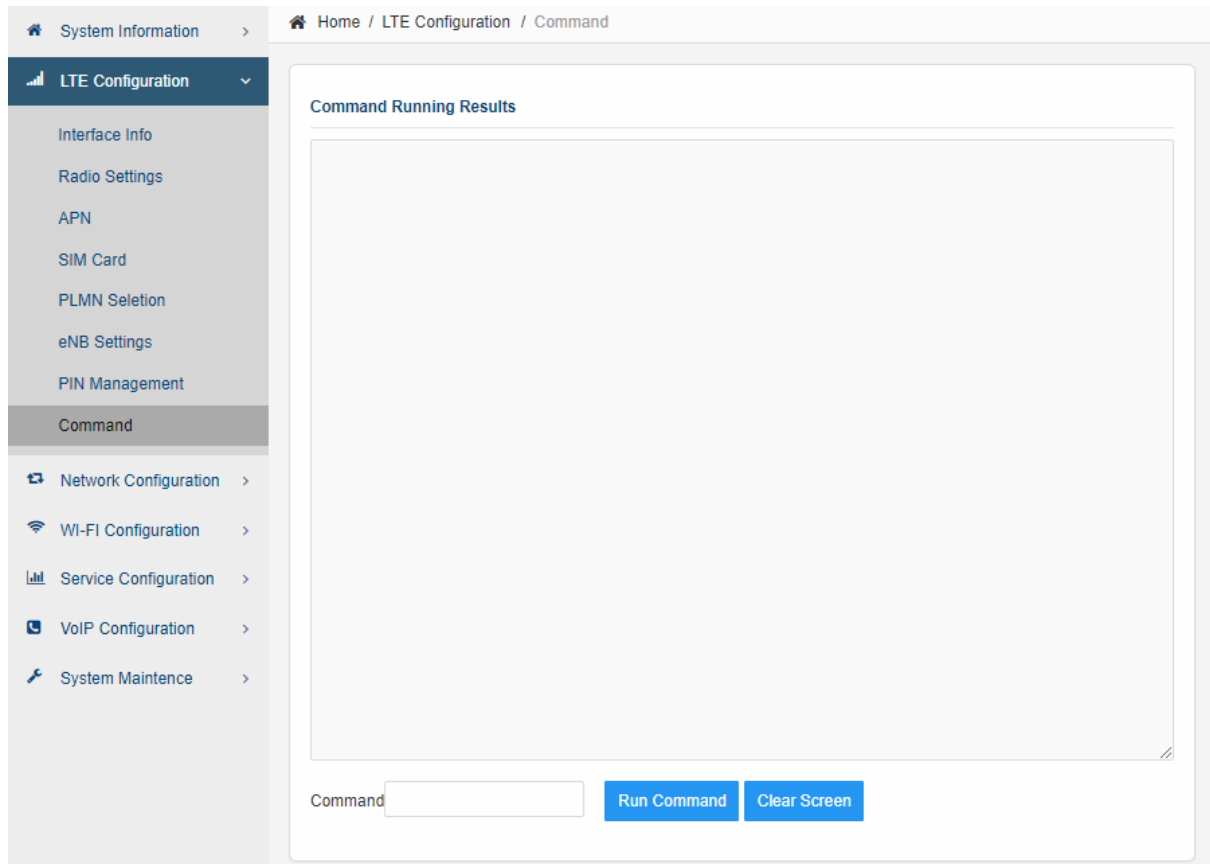
The main content area is titled "SIM Card Management" and contains the following fields:

- Mode:** A dropdown menu set to "Standard Mode".
- SIM Card State:** Displays "PIN disabled".
- PIN Management:** A dropdown menu set to "Enable PIN".
- PIN:** An empty text input field.
- Remaining Attempts:** Displays "3".

An "Apply" button with a checkmark is located at the bottom right of the configuration area.

■ Command

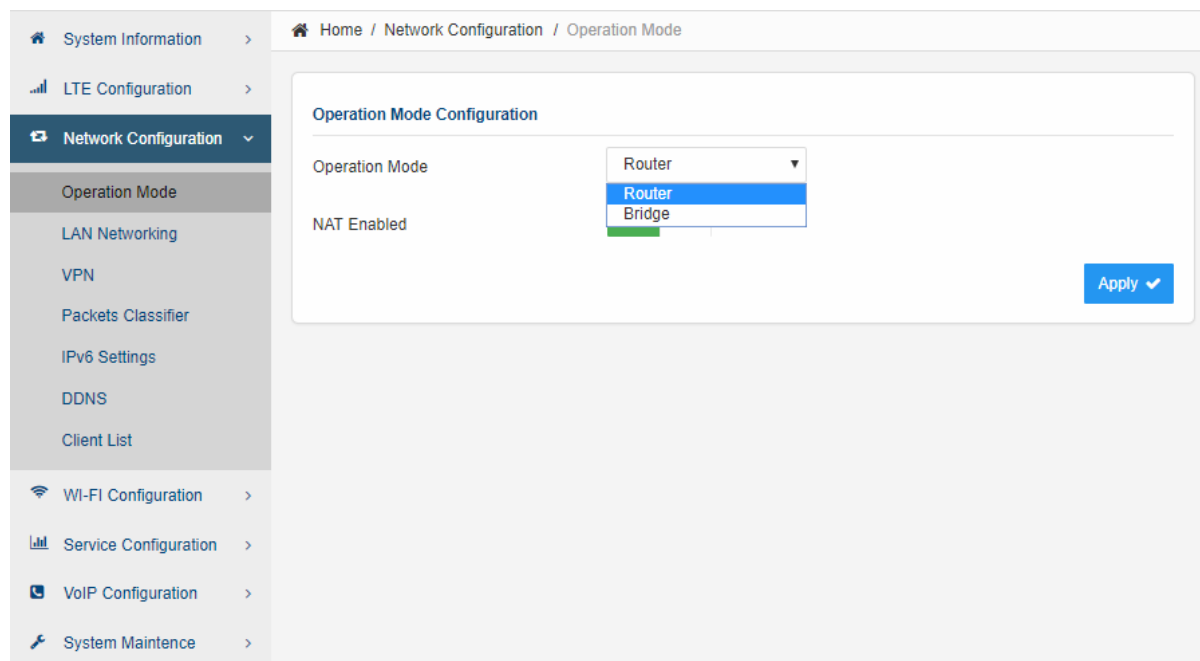
The Command menu is used to run LTE command via the WEB GUI interface. The user can type the command and click the “Run Command” button to execute.



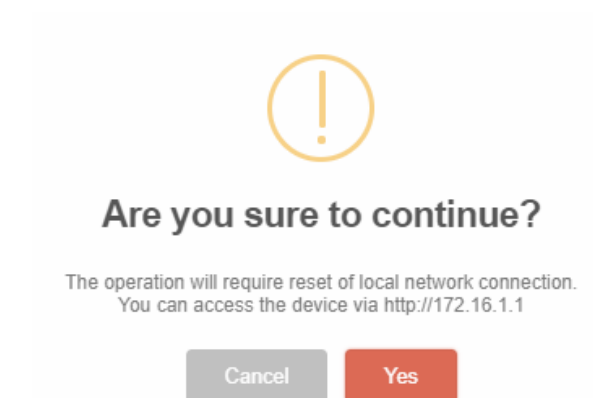
6. Network Configuration

■ Operation Mode Setting

The default device Operation Mode is Router, and the PC connected to device LAN port will obtain IP address via DHCP client.



The device operation mode could be changed from Router to Bridge if necessary as show by the following diagram:



In Bridge mode, the PC which connected the LAN port of the CPE will obtain the IP directly from the network. However, the device WEB GUI may still be accessed via port 8080 from remote side if remote management is enabled. For local LAN access, the user or operator can configure LAN PC with a static IP address as 172.16.1.x and login the WEB GUI via <http://172.16.1.1>.

■ LAN Networking

The LAN setting allows user to specify the device LAN IP, DHCP server setting, Local DNS and etc. When Router mode is selected, the DHCP server should be enabled by default.

User is advised to leave the default setting unchanged for quick configuration and smooth device operation.

System Information > Home / Network Configuration / LAN Networking

LTE Configuration >

Network Configuration

- Operation Mode
- LAN Networking**
- VPN
- Packets Classifier
- IPv6 Settings
- DDNS
- Client List

Wi-Fi Configuration >

Service Configuration >

VoIP Configuration >

System Maintenance >

LAN Setup

IP Address

Subnet Mask

MAC Address 6C:AD:EF:FE:98:10

DHCP Server Configuration

DHCP Server

Start IP Address

End IP Address

Lease Time

DNS Server Address Mode

DNS Proxy

Statically Assigned

#	IP Address	MAC Address
	<input type="text" value="XXX.XXX.XXX.XXX"/>	<input type="text"/>
	<input type="text" value="XXX.XXX.XXX.XXX"/>	<input type="text"/>
	<input type="text" value="XXX.XXX.XXX.XXX"/>	<input type="text"/>

Setup Options

802.1d Spanning Tree OFF

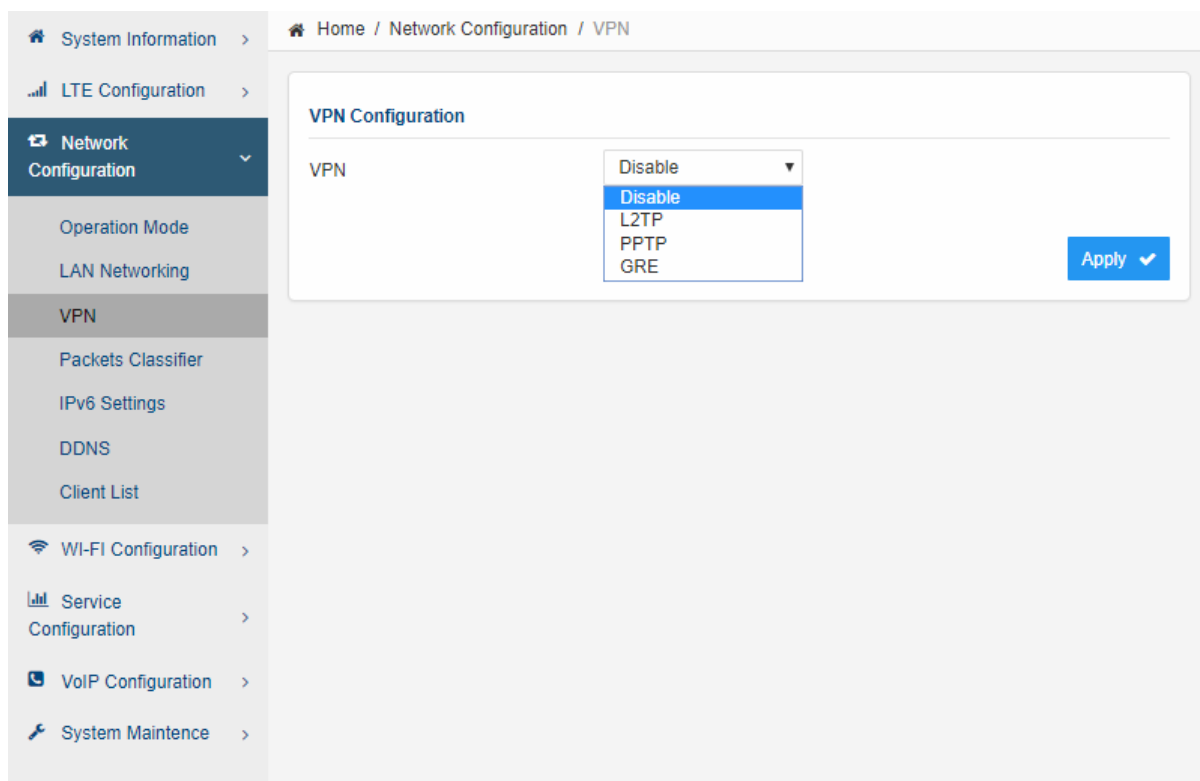
LLTD OFF

IGMP Proxy OFF

Router Advertisement OFF

■ VPN Setting Under Router Mode

This section allows user to configure VPN service for selected connection mode. In router mode, PPTP, L2TP and GRE can be selected. In L2 Bridge mode, only L2 GRE can be configured. The router mode VPN configuration is shown below.



The screenshot shows a web interface for configuring VPN settings. The breadcrumb navigation at the top reads "Home / Network Configuration / VPN". The left sidebar contains a menu with the following items: System Information, LTE Configuration, Network Configuration (selected), Operation Mode, LAN Networking, VPN (selected), Packets Classifier, IPv6 Settings, DDNS, Client List, WI-FI Configuration, Service Configuration, VoIP Configuration, and System Maintenance. The main content area is titled "VPN Configuration" and features a dropdown menu for the "VPN" setting. The dropdown is open, showing the following options: Disable (selected), L2TP, PPTP, and GRE. An "Apply" button with a checkmark is located to the right of the dropdown.

The L2TP configuration under router mode is shown below.

The screenshot shows the L2TP configuration page in a router's web interface. The breadcrumb navigation at the top reads "Home / Network Configuration / VPN". The left sidebar contains a menu with "Network Configuration" selected, and sub-items including "Operation Mode", "LAN Networking", "VPN", "Packets Classifier", "IPv6 Settings", "DDNS", "Client List", "Wi-Fi Configuration", "Service Configuration", "VoIP Configuration", and "System Maintenance". The main content area is titled "VPN Configuration" and includes the following settings:

- VPN: L2TP (dropdown)
- Enable Unmanaged L2TPv3 Tunnels: Disable (dropdown)
- L2TP Mode section:
 - Server Address: xxx.xxx.xxx.xxx (text input)
 - Username: (text input)
 - Password: (text input)
 - Host Name: KZT (text input)
 - MTU Size: 1360 (text input) with a range of (800 - 1360)

At the bottom right of the configuration area, there are two buttons: "Apply" and "Reconnect".

The PPTP configuration under router mode is shown as follows.

The screenshot shows the PPTP configuration page in a router's web interface. The breadcrumb navigation at the top reads "Home / Network Configuration / VPN". The left sidebar is identical to the L2TP configuration page, with "Network Configuration" selected. The main content area is titled "VPN Configuration" and includes the following settings:

- VPN: PPTP (dropdown)
- PPTP Mode section:
 - Server Address: xxx.xxx.xxx.xxx (text input)
 - Username: (text input)
 - Password: (text input)

At the bottom right of the configuration area, there are two buttons: "Apply" and "Reconnect".

The L2 GRE configuration under router mode is shown below.

Home / Network Configuration / VPN

VPN Configuration

VPN: GRE

Tunnel Layer: Layer 3

GRE Tunnel

<input type="checkbox"/>	No.	Tunnel Destination IP Address	GRE I/F IP	GRE R/F IP	Private Address	Key	Checksum
<div style="display: flex; justify-content: space-between;">Add +Delete Selected x</div>							

Apply ✓

■ VPN Setting Under L2 Bridge Mode

Under the L2 Bridge connection mode, L2 GRE or L2TP can be configured as follows.

Home / Network Configuration / VPN

VPN Configuration

VPN: L2TP

Enable Unmanaged L2TPv3 Tunnels: Enable

L2TP Mode

Encapsulation: IP

Interface Status: DOWN

	Local Endpoint	Peer Endpoint
Tunnel ID	<input type="text"/>	<input type="text"/>
Session ID	<input type="text"/>	<input type="text"/>
Tunnel IP Address	0.0.0.0	0.0.0.0
Internet IP Address	0.0.0.0	0.0.0.0
Cookie (Hex digits)	None	None
Offset	<input type="text"/>	<input type="text"/>
Layer2 Specific Header	Default	--
VLAN Configuration	Passthroug	--

Apply Reconnect

Home / Network Configuration / VPN

VPN Configuration

VPN: GRE

Tunnel Layer: Layer 2

GRE Tunnel

<input type="checkbox"/>	No.	Tunnel Destination IP Address	Key	Checksum
<input type="button" value="Add +"/> <input type="button" value="Delete Selected x"/>				

Apply

■ Packets Classifier

This configuration menu allows user to tag DSCP or TOS value for CPE local data (Management) and LAN port data (Data).

The image displays two screenshots of the 'Packets Classifier' configuration page in a web interface. The left sidebar contains a navigation menu with categories like System Information, LTE Configuration, Network Configuration, and Wi-Fi Configuration. The 'Packets Classifier' option is highlighted in the Network Configuration section.

The top screenshot shows the 'QoS Configuration' section with a 'DSCP/TOS Select' dropdown menu. The menu is open, showing options: 'Disable', 'DSCP', and 'TOS'. An 'Apply' button is visible to the right.

The bottom screenshot shows the same 'QoS Configuration' section with the 'DSCP/TOS Select' dropdown set to 'DSCP'. Below this, there are four rows of configuration options, each with a 'Tagged' dropdown and a numerical input field:

Configuration Item	Dropdown	Input Field
DSCP/TOS Select	DSCP	
Device Data DSCP	Tagged	0
SIP	Tagged	0
RTP	Tagged	0-63
Data Traffic DSCP	Tagged	0

An 'Apply' button is located at the bottom right of the configuration area in both screenshots.

Home / Network Configuration / Packets Classifier

QoS Configuration

DSCP/TOS Select	TOS	
Device Data TOS	Tagged	0
SIP	Tagged	0
RTP	Tagged	0,2,4,8,16
Data Traffic TOS	Tagged	0

Apply ✓

■ IPv6 Setting

In this page, user configure the IPv6 operation setting for the CPE device.

Home / Network Configuration / IPv6 Settings

IPv6 Connection Type

IPv6 Operation Mode	IPv4/IPv6 Dual-St: Disable IPv4/IPv6 Dual-Stack
DHCPv6 Address Settings	
DHCPv6 Autoconfiguration Mode	Stateless
DNS Server Address Mode	Autoconfiguration
DNS Server	<input type="text"/>
	<input type="text"/>

Apply ✓

■ DDNS Setting Under Router Mode

This configuration menu allows user to configure use of different DDNS service for router mode operation.

The screenshot shows the 'Dynamic DNS Settings' page. The breadcrumb path is 'Home / Network Configuration / DDNS'. The left sidebar contains various configuration options, with 'Network Configuration' expanded to show 'DDNS' selected. The main content area has a 'Dynamic DNS Provider' dropdown menu currently set to 'Disable'. The dropdown list includes 'Disable', 'dyndns.org', 'freedns.afraid.org', 'www.zoneedit.com', 'www.no-ip.com', and 'Custom'. Below the dropdown is a 'Dynamic DNS Status' field. At the bottom right, there are 'Force Update' and 'Apply' buttons.

■ Client List

This shows all the LAN clients that are connected to the CPE device.

The screenshot shows the 'Client List' page. The breadcrumb path is 'Home / Network Configuration / Client List'. The left sidebar is the same as in the previous screenshot, with 'Client List' selected. The main content area is titled 'DHCP Clients' and contains a table with the following columns: '#', 'Host Name', 'MAC Address', 'IP Address', and 'Expires in'. The table is currently empty, with 'N/A' centered in the body.

#	Host Name	MAC Address	IP Address	Expires in
N/A				

7. Wi-Fi Configuration

■ Network Settings

In the Wi-Fi configuration, the operator can modify the default SSID and select the desired Security Policy to protect device Wi-Fi access. For easy configuration, the operator can use one of the following three recommended common security policies for setup.

The screenshot displays the 'Network Settings' page for Wi-Fi configuration. The left sidebar contains a navigation menu with the following items: System Information, LTE Configuration, Network Configuration, Wi-Fi Configuration (selected), WPS Settings, Wi-Fi Status, Service Configuration, VoIP Configuration, and System Maintenance. The main content area is titled '2.4G Wi-Fi Setup' and '5G Wi-Fi Setup'. The '2.4G Wi-Fi Setup' section includes the following fields:

- Enable 2.4G Wi-Fi Network: ON
- Network Name(SSID): MyWiFi-FE9810
- Hidden:
- Password: *****
- Visible passwords:
- Security Mode: WPA-PSK/WPA2
- Network Mode: 802.11b/g/n Mixe
- Country Code: CN (China)
- Frequency (Channel): AutoSelect
- Channel Bandwidth: 20 MHz
- TX Power: 100%

An 'Apply' button is located at the bottom right of the configuration area.

■ WPS setting

The WPS setting allows user to enable or disable Wi-Fi WPS service.

Home / WI-FI Configuration / WPS Settings

WPS Setting

WPS Enable Status

[Apply ✓](#)

■ Wi-Fi Status

The menu shows the Wi-Fi info of the CPE device.

Home / System Information / Wi-Fi Status

2.4G Wi-Fi Info 5G Wi-Fi Info

Wi-Fi Configurations

SSID MyWiFi-FE9810 (ON)
 Wi-Fi Mode 802.11b/g/n Mixed Mode
 Channel AutoSelect (Channel 6)

Station List

#	MAC Address	IP Address

8. Service Configuration

■ Port Forwarding

This menu allows user to configure the port forwarding rules for the CPE in router mode.

The screenshot shows the 'Port Forwarding' configuration page. The breadcrumb trail is 'Home / Service Configuration / Port Forwarding'. The left sidebar contains navigation options: System Information, LTE Configuration, Network Configuration, WI-FI Configuration, Service Configuration (selected), Port Forwarding (selected), Packet Filtering, UPnP, DMZ Setting, Security Setting, VoIP Configuration, and System Maintenance. The main content area is titled 'Port Forwarding Settings'. It features a toggle switch for 'Port Forwarding' which is currently set to 'OFF'. Below this is a table with columns: No., WAN Port Range, Protocol, LAN IP Address, LAN Port Range, and Comment. The table is currently empty. There are 'Add +' and 'Delete Selected ✖' buttons above the table. An 'Apply ✓' button is located at the bottom right of the settings area.

■ Packet Filtering

This allows user to create packet filter to control the client access.

The screenshot shows the 'Packet Filtering' configuration page. The breadcrumb trail is 'Home / Service Configuration / Packet Filtering'. The left sidebar is identical to the previous screenshot, with 'Packet Filtering' selected under 'Service Configuration'. The main content area is titled 'Basic Settings'. It features a toggle switch for 'Packet Filtering' which is currently set to 'OFF'. Below this is a 'Default Policy' dropdown menu set to 'Dropped'. Underneath is a section titled 'Current filters in system' with a table. The table has columns: Index, Source MAC address, Dest IP Address, Source IP Address, Protocol, Dest Port Range, Source Port Range, Day, Time, Action, and Comment. The table is currently empty. There are 'Add +' and 'Delete Selected ✖' buttons above the table. An 'Apply ✓' button is located at the bottom right of the settings area.

■ UPnP

This menu allows user to configure the UPnP application for on-demand “DMZ” support. The current forwarding rules created can be viewed and cleared if required.

The screenshot shows the UPnP Configuration page. The left sidebar contains a menu with items: System Information, LTE Configuration, Network Configuration, WI-FI Configuration, Service Configuration (selected), Port Forwarding, Packet Filtering, UPnP, DMZ Setting, Security Setting, VoIP Configuration, and System Maintenance. The main content area has a breadcrumb trail: Home / Service Configuration / UPnP. The title is "UPnP Configuration". There are three settings: "UPnP Enable" is a toggle switch set to "OFF"; "Advertisement Interval (30~1800s)" is a text input field with the value "60"; and "Port" is a text input field with the value "5000". Below these is a section titled "UPnP Portmap Table" with a table header: Internal IP Address, Internal Port, External IP Address, External Port, Protocol, and Description. The table body is empty, showing "--". At the bottom right are two buttons: "Apply" and "Restart".

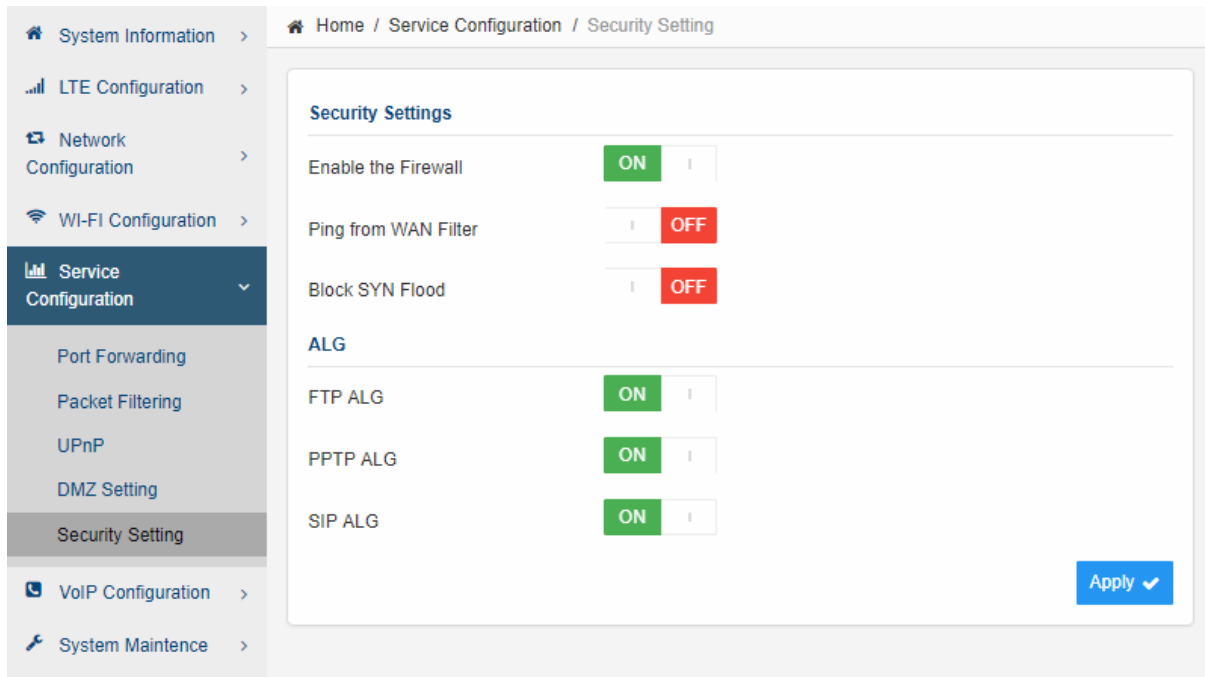
■ DMZ Setting

This menu allows user to configure the DMZ setting for CPE in router mode. Web server, Telnet/SSH and Ping Service port can be exempted from DMZ mapping if required. By enabling DMZ option will make the specified local LAN host (DMZ IP) exposed to Internet.

The screenshot shows the DMZ Setting page. The left sidebar is the same as in the previous screenshot, with "DMZ Setting" selected. The main content area has a breadcrumb trail: Home / Service Configuration / DMZ Setting. The title is "DMZ Setting". There are three settings: "DMZ Setting" is a dropdown menu set to "Enable"; "DMZ IP Address" is an empty text input field; and "Exclude Web Server Port" is an unchecked checkbox. At the bottom right is an "Apply" button.

■ Security Setting

This allows to configure security protection and ALG options.



The screenshot shows a web interface for configuring security settings. The left sidebar contains a navigation menu with the following items: System Information, LTE Configuration, Network Configuration, WI-FI Configuration, Service Configuration (highlighted), Port Forwarding, Packet Filtering, UPnP, DMZ Setting, Security Setting (highlighted), VoIP Configuration, and System Maintenance. The main content area is titled 'Security Settings' and contains the following options:

Setting	Value
Enable the Firewall	ON
Ping from WAN Filter	OFF
Block SYN Flood	OFF
ALG	
FTP ALG	ON
PPTP ALG	ON
SIP ALG	ON

An 'Apply' button with a checkmark is located at the bottom right of the configuration area.

9. VoIP Configuration

In this configuration page, the operator requires to enter the SIP operator name, account and password information if he desires to configure the VoIP networking. The register status check box must be enabled to allow device SIP registration.

The SIP register and proxy server configuration should be performed by the network operator via administration management interface. The SIP account status is displayed for operator information. When the SIP line is registered and ready, the Line LED in the front panel will be light up. If the device VoIP function is not working properly, the operator is advised to contact the network operator for assistance.

Home / VoIP Configuration / SIP User Account

User Configurations

Port Status	<input type="text" value="Unregistered"/>
Receive Port	<input type="text" value="5060"/>
User Name	<input type="text"/>
Account	<input type="text"/>
Password	<input type="text"/>

[Apply ✓](#)

System Information >

LTE Configuration >

Network Configuration >

WI-FI Configuration >

Service Configuration >

VoIP Configuration ▾

- SIP User Account
- SIP Configuration
- Number Analysis
- Call Configuration
- DSP Configuration
- Enhanced Services
- Line Features
- Port Configuration
- Module Management

System Maintenance >

Home / VoIP Configuration / SIP Configuration

Register Configurations

Register Status OFF

Registrar Address

Registrar Receiving Port

Registrar Period (s)

Local Hostname

Use Registrar as Hostname ON

Use Registrar as Proxy ON

Keep-Alive status ON

Keep-Alive Period (s)

[Remove Binding](#) [Apply](#)

SIP Protocol Parameter Configurations

Hook Flash

Max Forwards

Max Auth

Supported 100rel

User Agent Product Lable MAC Address Version

Use Tel URL OFF

[Apply](#)

■ Number Analysis

The device is collects dial numbers from external phone or fax. Dialed digits are analyzed before being sent out to another element in a VoIP network. Dial numbers can be modified according to specific needs. Rules can be setup to modified a dial number, if it meets certain condition.

Home / VoIP Configuration / Number Analysis

Call Route Configuration

<input type="checkbox"/>	Index	Prefix	Source	MinLen	MaxLen	Type	Route Addr	ChgInd
Add + Delete x								
Apply ✓								

Number Change Configuration

<input type="checkbox"/>	Index	Type	Position	Length	Number
Add + Delete x					
Apply ✓					

■ Call

Call Configuration section defined a few behaviors when a call is outgoing or incoming.

The screenshot displays the 'Call Configuration' page in a web management interface. The left sidebar contains a navigation menu with the following items: System Information, LTE Configuration, Network Configuration, WI-FI Configuration, Service Configuration, VoIP Configuration (selected), SIP User Account, SIP Configuration, Number Analysis, Call Configuration (highlighted), DSP Configuration, Enhanced Services, Line Features, Port Configuration, Module Management, and System Maintenance. The main content area is titled 'Home / VoIP Configuration / Call Configuration' and is divided into three sections:

- Dial Plan(DigitMap) Configuration:** The 'Dial Plan' field contains the text: `*68|*XX.T|*XX.#|XX.T|XX.#|****`. The 'IP Dialing' toggle is set to 'OFF'.
- Call Parameter Configuration:** This section includes three dropdown menus: 'Port Select Mode in Group' (set to 'Early Release Firs'), 'SIP Call Hold Mode' (set to 'Set SDP C address'), and 'Send SIP Hook Flash' (set to 'yes').
- Call Timer Configuration:** This section includes four input fields for timer values: 'Ringback Timer' (120), 'Ring Timer' (125), 'Busy Timer' (40), and 'Offhook Warning Timer' (60).

An 'Apply' button with a checkmark is located at the bottom right of the configuration area.

■ DSP

Voice is sampled and coded into digital bit stream, before they are packetized into IP packets. The following sections discuss various codecs supported by the device.

Home / VoIP Configuration / DSP Configuration

DSP Configurations

DTMF Transfer Mode	audio-stream
Echo Cancellation	<input checked="" type="checkbox"/> ON
Silence Suppression	<input type="checkbox"/> OFF
DSP Gain	0
Support Codec	<input checked="" type="checkbox"/> PCMA <input checked="" type="checkbox"/> PCMU <input checked="" type="checkbox"/> G.721 <input type="checkbox"/> G.722 <input type="checkbox"/> G.723 <input checked="" type="checkbox"/> G.729
Preferred Codec	PCMA
Packetization Period	20
G723 Rate	<input checked="" type="radio"/> 6.3kbps encoding rate <input type="radio"/> 5.3kbps encoding rate
RFC2833 Payload	101
Call Id(FSK) Type	BellCore
RTP Start Port	10000
Drop 2833 Event Packet	<input type="checkbox"/> OFF
Region	Default

Fax Configurations

Fax Mode	T.38
Max Rate	14400bps
Port Offset	2
Send Nat T38	<input checked="" type="checkbox"/> ON

■ Enhanced Services

The device supports a rich set of supplementary services. Click on “Enhanced Services Configuration”, the following Supplementary Service Subscription are displayed in the right frame of browser window:

Many of the enhanced services need to be provisioned with the proper activation codes to work with the soft switch. The default service codes are displayed below. Service codes are configurable.

Supplementary Service Subscription

<input checked="" type="checkbox"/> Call Waiting	<input checked="" type="checkbox"/> Call Transfer	<input checked="" type="checkbox"/> Caller ID	<input checked="" type="checkbox"/> Call Forward All
<input checked="" type="checkbox"/> Call Forward Busy	<input checked="" type="checkbox"/> Call Forward No Answer	<input checked="" type="checkbox"/> Do Not Disturb	<input checked="" type="checkbox"/> Speed Dial
<input checked="" type="checkbox"/> Hot Line	<input type="checkbox"/> Block CID	<input checked="" type="checkbox"/> Blind Call Transfer	<input checked="" type="checkbox"/> Call Park
<input checked="" type="checkbox"/> Call Pick Up	<input checked="" type="checkbox"/> 3WC	<input checked="" type="checkbox"/> Data Call	<input type="checkbox"/> Voice Mail

Service Codes Configuration

Call Forward All Act	<input type="text" value="*72"/>
Call Forward All Deact	<input type="text" value="*73"/>
Call Forward Busy Act	<input type="text" value="*90"/>
Call Forward Busy DeAct	<input type="text" value="*91"/>
Call Forward No Answer Act	<input type="text" value="*92"/>
Call Forward No Answer Deact	<input type="text" value="*93"/>
Do Not Disturb Act	<input type="text" value="*78"/>
Do Not Disturb Deact	<input type="text" value="*79"/>
Speed Dial Act	<input type="text" value="*74"/>
Speed Dial Use	<input type="text"/>
Hot Line Act	<input type="text" value="*52"/>
Hot Line Deact	<input type="text" value="*53"/>
CW Act	<input type="text" value="*56"/>
CW Deact	<input type="text" value="*57"/>
CW Per Call Act	<input type="text" value="*71"/>
CW Per Call Deact	<input type="text" value="*70"/>
Block CID Act	<input type="text" value="*67"/>

■ Line Features

Line Settings specify user specific parameters for supplementary services. These settings will remain even their associated features are deactivated, so that users are not required to set them next time.

System Information > Home / VoIP Configuration / Line Features

LTE Configuration >

Network Configuration >

WI-FI Configuration >

Service Configuration >

VoIP Configuration ▾

- SIP User Account
- SIP Configuration
- Number Analysis
- Call Configuration
- DSP Configuration
- Enhanced Services
- Line Features**
- Port Configuration
- Module Management

System Maintenance >

Call Forward Settings

Cfwd All Dest	<input type="text"/>
Cfwd Busy Dest	<input type="text"/>
Cfwd No Ans Dest	<input type="text"/>
Cfwd No Ans Delay (s)	<input type="text" value="20"/>

Hot Line Settings

Hot Line Dest	<input type="text"/>
Hot Line Delay (s)	<input type="text" value="4"/>

Callout Right Configuration

Control Mode	<input type="text" value="No Restrict"/>
WhiteList	<input type="text"/>
BlackList	<input type="text"/>

■ Port

Port configuration defines physical and electrical layer parameters, such as port transmit power.

Home / VoIP Configuration / Port Configuration

Port Attribute [apply to ports]

Port Status: ok no-loop

Port Gain: -3.5db/-3.5db

Port Attribute [apply to device]

Encoding Mode: a law (Modification will not take effect until system reset)

Min Hook Time: 150ms

Max Hook Time: 500ms

Port Application Attribute

Port Application: Fax Polarity Reverse

Private Number

Private Number:

Apply

■ Module Management

The device need not be reset if changes are made at application level, e.g. Proxy IP address change. However, the media protocol can be restarted to effect changes.

Home / VoIP Configuration / Module Management

Restart SIP Protocol

Protocol Type: SIP

Protocol Status: Running

Protocol Restart

Reset VoIP Setting

Load VoIP Default Setting: **Load Default**

System Information >

LTE Configuration >

Network Configuration >

Wi-Fi Configuration >

Service Configuration >

VoIP Configuration ▾

- SIP User Account
- SIP Configuration
- Number Analysis
- Call Configuration
- DSP Configuration
- Enhanced Services
- Line Features
- Port Configuration
- Module Management**

System Maintenance >

10. System Maintenance

■ General Setting

The menu allows user to configure the device management control and language setting.

Home / System Maintenance / General Setting

Language Settings

Select Language: English

Apply ✓

Device Management Control

WEB Admin Management: Enable All

Specified Remote IP Address: []

Enable Debug Mode: OFF

Allow User SIP Account Configuration: ON

Allow User SIP Server Configuration: OFF

Allow HTTP Login from WAN: ON

Web Server Port: 80

HTTPs Enable: OFF

HTTPs Port for Remote Access: 443

Auto-Logout Timeout: ON

Time Setting: 20

Apply ✓

■ General Setting

The menu allows user to configure the WEB GUI login password.

The screenshot shows a web interface for configuring system settings. On the left is a navigation menu with categories like System Information, LTE Configuration, Network Configuration, Wi-Fi Configuration, Service Configuration, VoIP Configuration, System Maintenance, and Diagnosis. The 'System Maintenance' menu is expanded, showing 'General Setting', 'Account Setting', 'TR069', 'NTP Setting', 'Auto Update', 'Maintenance', and 'Diagnosis'. The 'Account Setting' option is selected. The main content area is titled 'Administrator Settings' and contains four input fields: 'User Account' (with the value 'admin'), 'Old Password', 'New Password', and 'Confirm Password'. An 'Apply' button with a checkmark is located at the bottom right of the settings area. The breadcrumb path at the top reads 'Home / System Maintenance / Account Setting'.

■ TR069

The menu allows user to configure the necessary setting for TR069 management of the CPE device.

The screenshot shows a web interface for configuring TR069 settings. The left sidebar contains a navigation menu with the following items: System Information, LTE Configuration, Network Configuration, Wi-Fi Configuration, Service Configuration, VoIP Configuration, System Maintenance (selected), General Setting, Account Setting, TR069 (highlighted), NTP Setting, Auto Update, Maintenance, and Diagnosis. The main content area is titled 'TR069 Configuration' and includes the following fields and controls:

- TR069 Enable: A toggle switch currently set to OFF.
- ACS URL: An empty text input field.
- ACS Username: An empty text input field.
- ACS Password: An empty text input field.
- Periodic Inform Enable: A toggle switch currently set to ON.
- Periodic Inform Interval: A text input field containing the value '90'.
- Periodic Inform Time: A text input field containing the value '2001-01-01T00:00:00'. Below this field is a link '(e.g. 2000-01-01T01:01:01)'.
- CPE Username: A text input field containing the value 'admin'.
- CPE Password: A text input field with masked characters (dots).

At the bottom right of the configuration section, there are two buttons: 'Apply' and 'Connect'. Below this is a section titled 'Load ACS Certificate' with the following fields:

- ACS Certificate Status: A text field containing 'N / A'.
- Size (Byte): A text field containing 'N / A'.
- Certificate Path: A file selection field with a 'Choose File' button and the text 'No file chosen'.

At the bottom right of the certificate section, there are two buttons: 'Load' and 'Remove'.

■ NTP Setting

The menu allows user to configure the NTP setting for the CPE device.

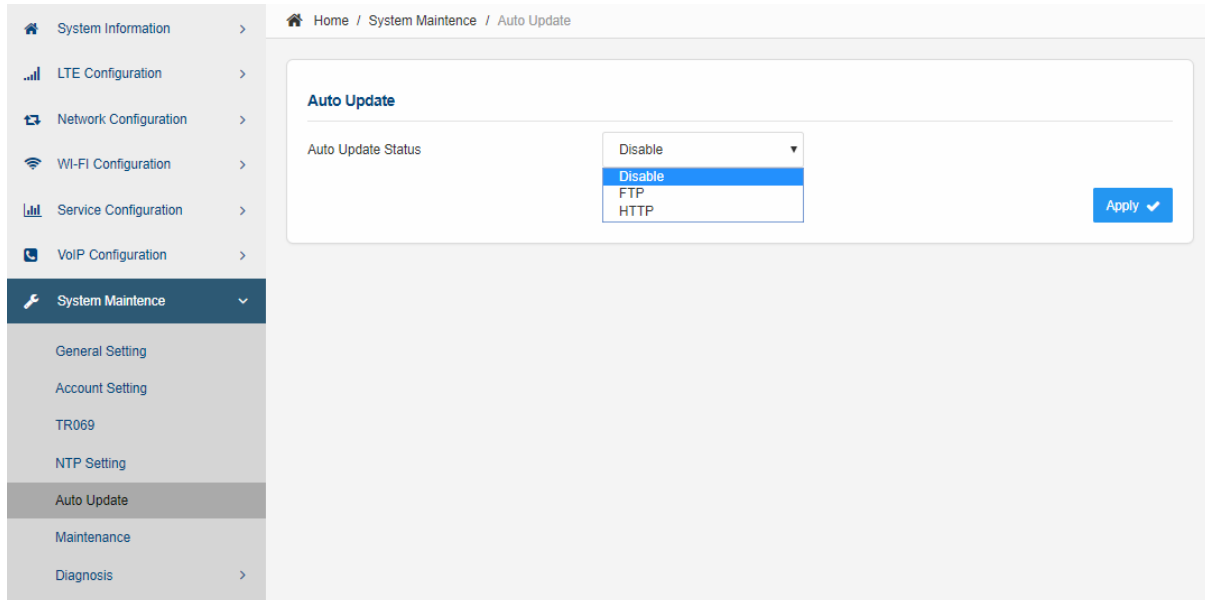
The screenshot shows a web interface for configuring NTP settings. On the left is a navigation menu with the following items: System Information, LTE Configuration, Network Configuration, Wi-Fi Configuration, Service Configuration, VoIP Configuration, System Maintenance (selected), General Setting, Account Setting, TR069, NTP Setting (highlighted), Auto Update, Maintenance, and Diagnosis. The main content area has a breadcrumb trail: Home / System Maintenance / NTP Setting. The NTP Setting form includes: NTP Client (ON), Current Time (Tue Jul 31 21:33:41) with a Sync with host button, Time Zone ((UTC+08:00) China Coast), NTP Server (time.nist.gov), and NTP synchronization(Hours) (12). An Apply button is located at the bottom right of the form.

NTP Client	<input checked="" type="checkbox"/>
Current Time	Tue Jul 31 21:33:41 Sync with host
Time Zone	(UTC+08:00) China Coast
NTP Server	time.nist.gov
NTP synchronization(Hours)	12

[Apply](#)

■ Auto Update

The user can select the Auto Update device's firmware. This menu can configure the remote upgrade using FTP or HTTP.



The screenshot shows a web interface for configuring the Auto Update feature. On the left is a navigation menu with the following items: System Information, LTE Configuration, Network Configuration, Wi-Fi Configuration, Service Configuration, VoIP Configuration, System Maintenance (selected), General Setting, Account Setting, TR069, NTP Setting, Auto Update (highlighted), Maintenance, and Diagnosis. The main content area has a breadcrumb trail: Home / System Maintenance / Auto Update. Below this is a form titled "Auto Update" containing an "Auto Update Status" label and a dropdown menu. The dropdown menu is open, showing three options: "Disable", "FTP", and "HTTP". The "Disable" option is currently selected. To the right of the dropdown is a blue "Apply" button with a checkmark icon.

■ Maintenance

This menu allows user to perform firmware upgrade via WEG GUI with option to reset to factory setting. It can also configure the remote upgrade using FTP, TFTP or HTTP.

The screenshot displays the 'Maintenance' section of the WEG GUI. The left sidebar contains a navigation menu with the following items: System Information, LTE Configuration, Network Configuration, Wi-Fi Configuration, Service Configuration, VoIP Configuration, System Maintenance (selected), General Setting, Account Setting, TR069, NTP Setting, Auto Update, Maintenance, and Diagnosis. The main content area is titled 'Home / System Maintenance / Maintenance' and contains several sections:

- Firmware Upgrade over HTTP:** Includes a 'Location' field with a 'Choose File' button and 'No file chosen' text, a 'Reset to Factory Defaults' checkbox, and an 'Upgrade' button.
- Firmware Rollback:** Shows 'Current Firmware Version' as V2.0.0B716 and 'Rollback Firmware Version' as V2.0.0B716, with a 'Rollback' button.
- Configuration File Management:** Includes a 'Location' field with a 'Choose File' button and 'No file chosen' text, an 'Import & Overwrite SIP Account' checkbox, and 'Apply', 'Import', and 'Export' buttons.
- Restart the Device:** Features a 'Restart the Device' label and a 'Restart' button.
- Load Factory Default:** Features a 'Load Factory Default' label and a 'Load Default' button.

■ Iperf

This menu allows user to configure iPerf testing using WEB GUI interface. Both TCP and UDP tests can be supported. Remote iPerf server is required to conduct the tests.

The screenshot shows a web interface for configuring iPerf. On the left is a navigation menu with categories: System Information, LTE Configuration, Network Configuration, Wi-Fi Configuration, Service Configuration, VoIP Configuration, System Maintenance (expanded), Diagnosis, Iperf, and Ping. The System Maintenance menu includes General Setting, Account Setting, TR069, NTP Setting, Auto Update, Maintenance, and Diagnosis. The Iperf menu is currently selected. The main content area is titled 'Iperf Settings' and contains the following fields: Client/Server (dropdown menu set to 'Client'), Server Address (text input), Port (text input set to '5001'), Measurement Time (sec.) (text input set to '20'), Protocol Type (dropdown menu set to 'TCP'), and Parallel Client Threads (text input set to '1'). Below the settings are 'Start' and 'Stop' buttons. A 'Result' section below contains a large empty text area and a 'Clear' button.

■ Ping

This menu allows user to perform PING tests using WEB GUI interface. Both IPv4 and IPv6 can be supported.

The screenshot shows a web interface for performing a PING test. On the left is a navigation menu with the following items: System Information, LTE Configuration, Network Configuration, Wi-Fi Configuration, Service Configuration, VoIP Configuration, System Maintenance (selected), General Setting, Account Setting, TR069, NTP Setting, Auto Update, Maintenance, Diagnosis, Iperf, and Ping. The main content area has a breadcrumb trail: Home / System Maintenance / Ping. The title is "PING Test". There are four input fields: "Ping" (empty), "Ping Count" (5), "Packet Size (byte)" (64), and "Ping Timeout (sec)" (10). A blue "Start" button with a right-pointing arrow is next to the "Ping" field. Below the input fields is a large, empty rectangular box for displaying test results.

11. FAQ and Troubleshooting

1) My PC cannot connect to the CPE.

- Re-plug the PC Ethernet cable and check if the PC LAN connection is up or showing activity.
- Check if the SYS LED is on. If it is not, check the power cord and make sure it is connected properly. Also verify that the AC power supply is available.
- If the PC LAN shows no activity and CPE SYS LED is off but the power cord and ETH cable are connected properly and there is AC supply, then it is likely the power adapter is damaged. Please contact distributor to obtain replacement part.

2) My PC cannot acquire IP from the CPE.

- First check if the Network card is up and working properly. Then check the PC Network card configuration and make sure the DHCP is enabled.
- To release and renew the correct IP address, please unplug the Ethernet cable from PC and wait for about 5 seconds, then connect it again.
- If the problem persists, please contact the operator or distributor for further diagnoses.

3) My CPE networking is not working properly.

- You may want to check if the LTE connection is up and running properly. You can do this by login the WEB GUI and check the Interface Info page.
- You may want to perform a factory reset and see if the problem is being corrected. You can do this by log into the WEB GUI using “admin123” password and perform restore the unit to default factory setting.
- If the problem cannot be corrected by factory reset, please contact the operator or distributor for further diagnoses.

4) I forget the login password and like to reset the unit to factory default.

- You may press and hold the RESET button in the back of the unit for 5 seconds. The unit will reset and reboot. Please wait until the unit finishes rebooting to regain access the device WEB GUI using default login credentials.
- After device reset, if the device cannot connect to the network, please contact the operator or distributor for further support. Additional device provision may be required.