

**JATONTECH JT8500D JT8500H
LTE-A Pro CAT15 Outdoor CPE
Administrator User Manual V1.0**



PLEASE READ THESE SAFETY PRECAUTIONS!

This device complies with part 96 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 96 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.

RF Exposure Information (MPE)

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.

This equipment should be installed and operated with minimum distance 32 cm between the radiator & your body.

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1. Overview

JATONTECH 8500D/H(JT8500D/H) is highly advanced TDD LTE-A Pro CAT15 outdoor data unit specially designed to meet the most challenging demands of today's high speed wireless backhaul and fixed wireless access deployments by the CBRS 4G service operators. The unit can support multiple TDD band operations. Multiple operator network support can also be provisioned on the unit to allow the deployment across entire country with different operators.

■ User Interface Specification

Model	Description & User Interface
JT8500D	<ul style="list-style-type: none">- Panel antenna:<ul style="list-style-type: none">- JT8500D 14dBi- JT8500H 17dBi- 1 RJ45 10/100/1000M LAN Port
JT8500H	<ul style="list-style-type: none">- PWR, SYS, SIM, LINK, ACT, and LTE (1-5) LEDs- 48V/0.5A PoE supply, ODU Power <15 Watts- Dimensions: 250 mm (L) x 250 mm (W) x 75 mm (D)- Weight: <2.5 Kg

2. Getting Started

1) Packing list

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
PoE adapter	1
Power cord	1
Mounting brackets	1
PC Ethernet Cable	1

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

2) 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.



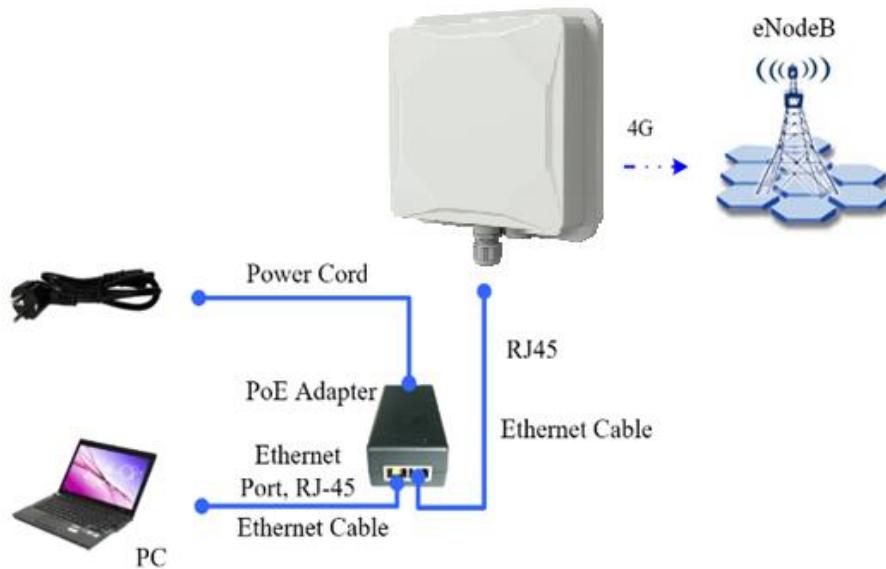
3) Installing the Equipment

■ Device Logic connection

For outdoor CPE product, it is suggested that the CPE device be installed in a shaded area to avoid direct sun light exposure which may cause over heat in certain extreme weather condition.

To power on the device, the outdoor CPE must use a 48V PoE integrated DC power supply adapter. The power adapters can operate in 100-240V AC range and therefore can be used in different country. Once the device is powered up, the user should wait for about 1 minutes before the device becomes operational. When the RF1 LED becomes blinking green, it indicates the system has completed the startup procedure.

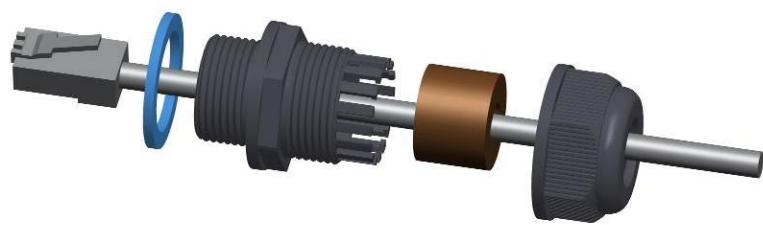
To connect PC, LAN switch or other type of IP device to the CPE product, the user should use SFTP CAT5E Ethernet cable and connect to the appropriate LAN port. Once connected, the ETH LED indicator should come on.



■ **Installing Mounting brackets**



■ **Header Connection**



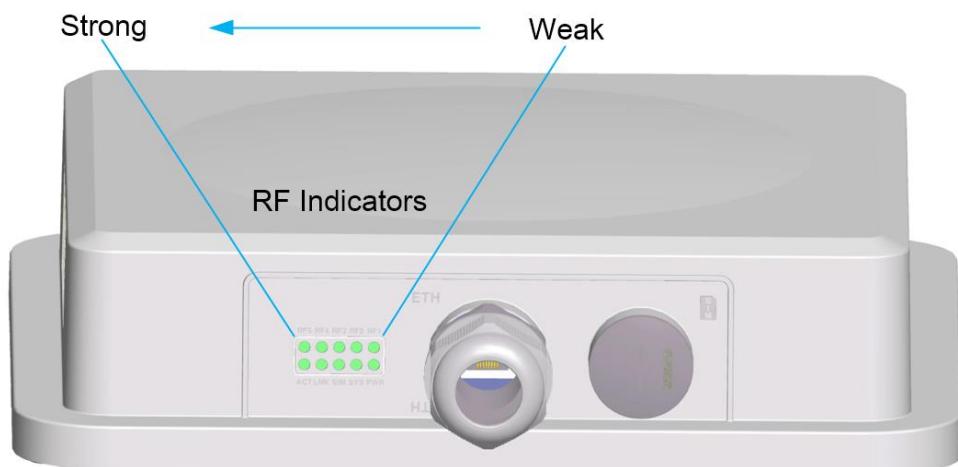
2 LED Display

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

■ RF Signal Adjustment

After the CPE outdoor unit has installed, the direction of antenna's azimuth and pitch angle needs to adjust for the best signal strength. In near line of sight condition, the CPE will have the best signal when the antenna is directly pointing the base station.

User can adjust the holder to change the direction and angle of the antenna while observing the RF LED on the outdoor unit which indicates the signal strength.

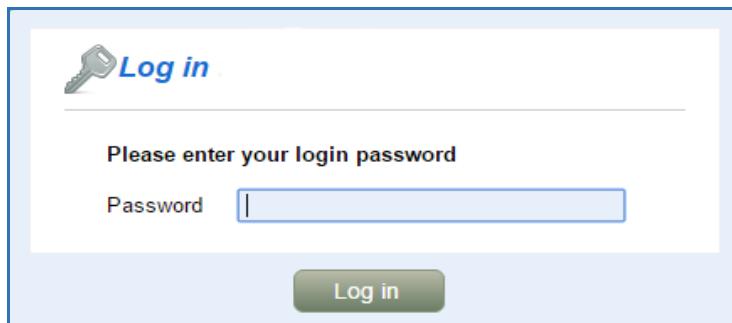


3 Managing CPE Device

JT8500D/H is a user-friendly LTE CPE, and very easy to configure and setup. Subscribers can just connect the device to their computer or home switch/router and the device is ready to provide Internet Services.

■ WEB Login

It is a preferred to setup the CPE using a Web browser from a local PC connected to device LAN port. The user should ensure that the connected PC have acquired IP address via DHCP from the device. After IP connectivity is established between the PC and CPE device, the user may launch a Web browser and specify <http://10.1.1.1> in the address bar. A window will pop up requesting password. Input the user or administrator login password and then click the “Log in” button. After successful log on, the default home page will appear. Note the default user & administrator passwords are “user123” and “admin123” respectively.



4 LTE Configuration

■ Overview

Once the user is logged in, the following window device status window will be prompted for viewing. It contains both the system information, networking and device information configured for the device.

LTE
Network
Security
Applications
Management
Maintenance
Status

[Logout](#)
Reboot

Overview
NDS
PLMN Settings
Cell Selection
PDN Settings
SIM Card
Advanced
Command Shell

•
admin

LTE Information

System Information

Manufacturer	
Model Name	
Chip Model	GDM7243A
Serial Number	
IMEI	
IMSI	
Supported Band	48
Firmware Version	0.3.3.9

Radio Information

RSRP	-102.9 / -104 / -105.3 / -103.1 dBm
	-139.2 / -126.6 / -130.5 / -136.8 dBm
RSSI	-77.2 / -78.3 / -79.6 / -77.5 dBm
	-103.1 / -99.2 / -100.8 / -103.2 dBm
RSRQ	-5.9 / -6 / -6.1 / -6 dB
	-16.6 / -7.8 / -10.1 / -13.8 dB
SINR	24 dB
CINR	24.2 dB
CQI	0
Rank Indication	2
Transmit Mode	TM2
Band ID	48
UL/DL Bandwidth	20000 / 20000 KHz
UL/DL Earfcn	55340 / 55340
UL/DL MCS	QAM16(14) / QAM16(5)
RRC State	active
EMM State	registered home
C-RNTI	0
PCI	222
eNB ID	3911
Cell ID	42
ECI	00F472A
Total TxPower	-8.6 dBm
UL/DL Throughput	2.07 kbps / 680 bps
UL/DL Max Throughput	3.97 kbps / 680 bps

Connection

Media State	ATTACHED
Connection Time	23 sec
SIM Card State	Ready
Network Description	internet.mnc088.mcc460.gprs
PDN type	IPv4
Registered PLMN	46088
IPv4 Address	10.14.100.205
IPv4 DNS	8.8.8.8
IPv6 Address	
IPv6 DNS	

Activity

Sent	305 bytes / 5 packets
Received	0 bytes / 0 packets

Help

System Information:
This section shows the basic device 4G Radio hardware and firmware information.

Radio Information:
This section provides 4G LTE air interface related information.

Connection:
This section shows the status of radio and connection for 4G LTE.

Activity:
Shows received and sent packet/byte statistics on WAN interface.

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■ ND&S Configuration

The LTE radio can be enabled or disabled via 4G Radio setting. The radio can also be reset via Reconnect.

Note: After configure any parameters of the device, you must click the “Save & Apply” button to save the configuration. Otherwise the configuration will not take effect.

■ 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.

■ 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 “preferred Listing”, user add the desired cell ID to the list and the CPE will attach to the appropriate cell after a full scan.

■ PDN Setting

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.

You can view the APN status info in the Status menu.

■ SIM Card

The SIM card 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.

■ Advanced

In this menu, you can configure advanced options for the CPE operation.

Fast scan will allow you to quickly connect to good cell when they are first found instead of search the best cell. The ZUC encryption support is only required when your core network (EPC) force to use the ZUC encryption for access authentication. The operation mode allows you to select the UE capability for receiving and transmitting.

In addition, the PSM timer and location service UE settings can also be configured for advanced users. Default settings should be used for normal operation.

Advanced Settings

Fast Scan Settings

Fast Scan Enable

QAM64 Settings

Uplink QAM64 Enable

ZUC Support

128-EEA3/EIA3 Enable

Operation Mode

Uplink CDD Enable

UE Max TX Enable

PSM Timer

Mode

T3324	20	2 seconds
T3412	1	10 hours

Help

ZUC Support:
Optional setting to support ZUC 128-EEA3/EIA3 encryption.

PSM Timer:
Power Save Management Timer.

T3324:
Once expired, the UE goes power saving mode and will not listen to paging but remain registered in the network. The default setting is 2 seconds.

T3412:
Once expired, the UE will perform Tracking Area Update. The default setting is 10 hours.

Buttons: Save & Apply, Cancel

■ Command Shell

The Command Shell is used to run LTE command via the WEB GUI interface. You can type the command and click the APPLY button to execute.

5 Network Configuration

■ Internet

This section allows user to configure the CPE operation mode, device name, MTU and etc. The CPE default Operation Mode is Router, and the LAN PC connected to device LAN port will obtain IP address via DHCP server of the device. The default MTU Size is 1500, user can modify the MTU Size if necessary.

Note when setting the connection mode as L2 Bridge or L3 Bridge, there will be a warning window pops up. Remember the management IP address 192.168.0.1 and click the “ok” button.

When the user wants to manage the home page again, the PC should be configured a static IP address as 10.1.1.X manual in order to visit the CPE managing page <http://10.1.1.1>.

■ LAN Setting

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.

Link MaxBitRate & Duplex

LAN Reset

Duplex

Max Bit Rate

Device IP

Local IP Address	192.	168.	0.	1
Subnet Mask	255.	255.	255.	0
Local DNS				

Network Address Server Settings (DHCP)

DHCP Server	<input checked="" type="checkbox"/> Enable
DNS Proxy	<input checked="" type="checkbox"/> Enable
Min IP Address	192.168.0.100
Max IP Address	192.168.0.254
Client Lease Time	86400 seconds
WINS Server	0.0.0.0

DHCP Static Leases Map

Index	IP Address	MAC Address
1	192.168.0.1	00:0C:29:00:00:01
2	192.168.0.2	00:0C:29:00:00:02
3	192.168.0.3	00:0C:29:00:00:03
4	192.168.0.4	00:0C:29:00:00:04
5	192.168.0.5	00:0C:29:00:00:05

Deny IP Address

Index	IP Address	Delete
-------	------------	--------

Router Settings

Index	Destination IP	Route Subnet Mask	Gateway	Delete
-------	----------------	-------------------	---------	--------

■ 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.

VPN Setup

VPN Protocol

Protocol Type: None

None
PPTP
L2TP
GRE

Save & Apply Cancel

Help

Protocol Type:
In this page, you can configure the VPN services for PPTP, L2TP and GRE.

The PPTP configuration under router mode is shown below.

VPN Setup

VPN Protocol

Protocol Type: PPTP

Protocol Type:
In this page, you can configure data for PPTP VPN and L2TP VPN and GRE VPN.

PPTP

PPTP State: Disconnected

PPTP IP Address:

Gateway (PPTP Server):

User Name:

Password: Unmask

PPTP MTU: 1314

PPTP MRU: 1314

Connection Strategy: Keep Alive

Redial Period: 60 Second.

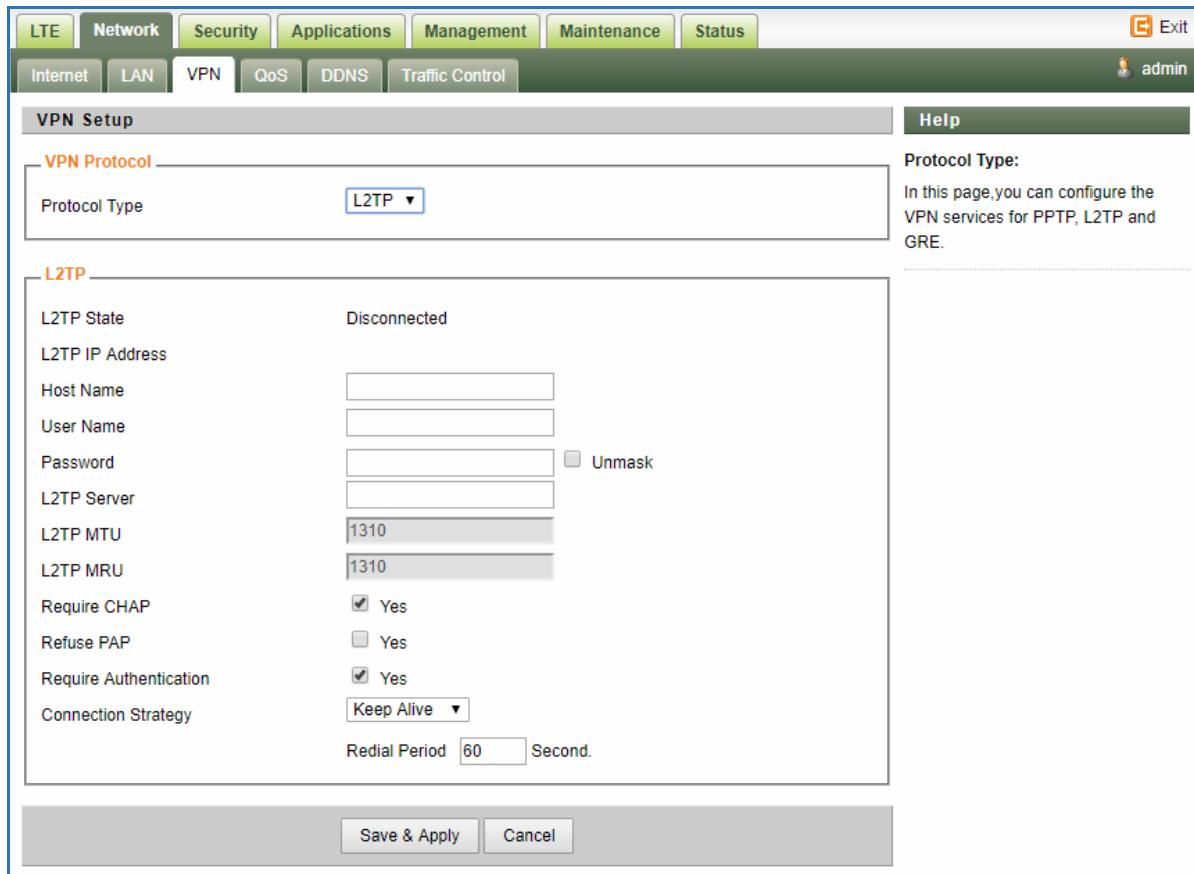
PPTP Encryption: Enable

Disable Packet Reordering: Enable

Additional PPTP Options:

Save & Apply Cancel

The L2TP configuration under router mode is shown as follows.

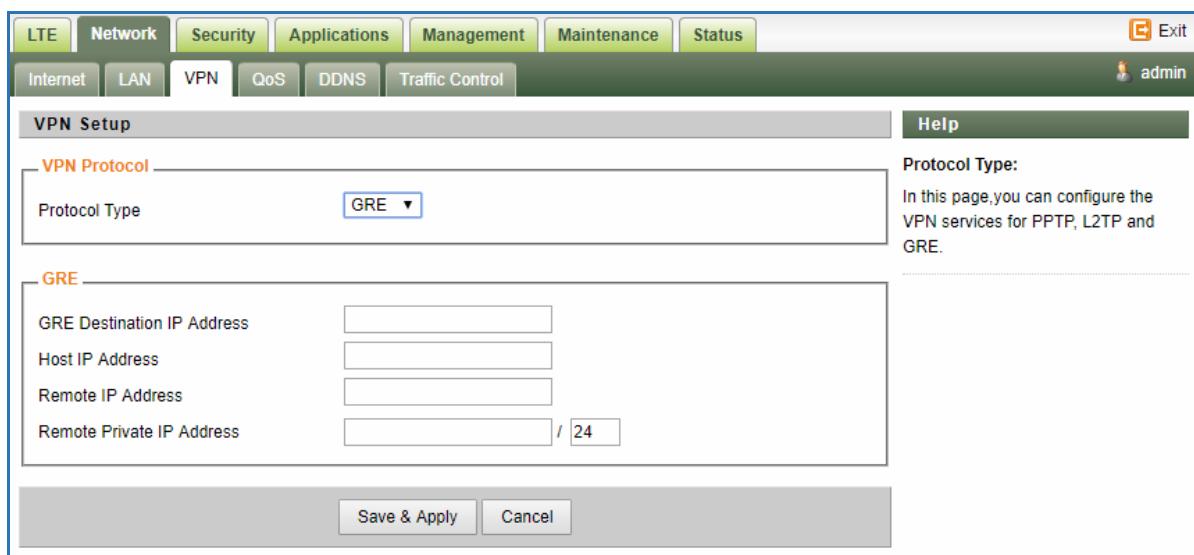


The screenshot shows the 'VPN Setup' page for L2TP configuration. The 'Protocol Type' is set to 'L2TP'. The 'L2TP' section contains the following fields:

- L2TP State: Disconnected
- L2TP IP Address: (Input field)
- Host Name: (Input field)
- User Name: (Input field)
- Password: (Input field) with an 'Unmask' link
- L2TP Server: (Input field)
- L2TP MTU: 1310
- L2TP MRU: 1310
- Require CHAP: Yes
- Refuse PAP: Yes
- Require Authentication: Yes
- Connection Strategy: Keep Alive (dropdown menu)
- Redial Period: 60 Second.

At the bottom are 'Save & Apply' and 'Cancel' buttons.

The L2 GRE configuration under router mode is shown below.



The screenshot shows the 'VPN Setup' page for L2 GRE configuration. The 'Protocol Type' is set to 'GRE'. The 'GRE' section contains the following fields:

- GRE Destination IP Address: (Input field)
- Host IP Address: (Input field)
- Remote IP Address: (Input field)
- Remote Private IP Address: (Input field) / 24

At the bottom are 'Save & Apply' and 'Cancel' buttons.

■ VPN Setting Under L2 Bridge Mode

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

VPN Setup

Protocol Type: GRE

GRE Destination IP Address: [Empty]

Save & Apply | Cancel

■ L2 Service Under L2 Bridge Mode

Under the L2 Bridge connection mode, the user can use L2 Service configuration to manage and tag 802.1p or DSCP for different VLAN packets.

ETH User VLAN Setting

Enable untagged L2 user traffic | Enable tagged L2 user traffic | Encapsulation DSCP: 0

Classification criterias list

Priority(0-255)	VLAN ID(1-4094 or untag)	802.1P or DSCP	Value (0-7) or (0-63)	E-DSCP(0-63)	Delete
					Add Cancel

Save & Apply | Cancel

■ QoS Setting

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

Quality Of Service (QoS)

DSCP Configuration

MGMT DSCP Enable ID 0 (0~63)

Data DSCP Enable ID 0 (0~63)

TOS Configuration

MGMT TOS Enable ID 0 (0~255)

Data TOS Enable ID 0 (0~255)

Help

DSCP Configuration:
In this page, you can configure data classification for DSCP and TOS.

Save & Apply Cancel

■ DDNS Setting Under Router Mode

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

Dynamic Domain Name System (DDNS)

DDNS

DDNS Service: DynDNS.org, Disable, TZO.com, ZoneEdit.com

User Name:

Password:

Host Name:

Type: Dynamic

Wildcard:

DDNS Service:

DDNS allows you to access your network using domain names instead of IP addresses. The service manages changing IP address and updates your domain information dynamically. You must sign up for service through TZO.com or DynDNS.org.

DDNS Status

Status: ddns.all_disabled

Internet IP Address: 10.11.102.35

Save & Apply Cancel

■ Traffic Control Setting Under Router Mode

This configuration menu allows user to configure the data priority and allowed bandwidth for LAN data traffic.

6 Security Configuration

■ Firewall

This allows user to configure CPE firewall.

■ ALG

This allows user to configure the application level gateways for many common applications.

■ Defense

This allows user to configure defense policy for the LTE and local LAN interface to prevent hostile attack.

■ Access Restrictions

This allows user to define access policy for LAN devices. It can support URL blocking as well.

Access Restrictions

Filter Access Enable

Access Policy

Policy	1	Delete	Summary
Status	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable	
Policy Name	<input type="text"/>		
PCs	<input type="button" value="Edit List of PCs"/>		
<input type="radio"/> Deny	Internet access during selected days and hours.		
<input checked="" type="radio"/> Allow			

Days:
 Everyday
 Week
 Sun Mon Tue Wed Thu Fri Sat

Times:
 24 Hours
 From To AM

Blocked Services

Catch all P2P Protocols	<input type="checkbox"/>		
P2P Protocol1	<input type="button" value="None"/>	<input type="button"/>	<input type="button"/>
P2P Protocol2	<input type="button" value="None"/>	<input type="button"/>	<input type="button"/>
P2P Protocol3	<input type="button" value="None"/>	<input type="button"/>	<input type="button"/>
P2P Protocol4	<input type="button" value="None"/>	<input type="button"/>	<input type="button"/>
<input type="button" value="Add/Edit Service"/>			

Website Blocking by URL Address

Help

Access Restrictions Policy:
 You may define up to 10 access policies. Click *Delete* to delete a policy or *Summary* to see a summary of the policy.

Status:
 Enable or disable a policy.

Policy Name:
 You may assign a name to your policy.

Days:
 Choose the day of the week you would like your policy to be applied.

Times:
 Enter the time of the day you would like your policy to apply.

Blocked Services:
 You may choose to block access to certain services. Click *Add/Edit Service* to modify these settings.

Website Blocking by URL:
 You can block access to certain websites by entering their URL.

Website Blocking by Keyword:
 You can block access to certain website by the keywords contained in their webpage.

7 Applications Configuration

■ Port Range Forwarding

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

■ Port Forwarding

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

■ DMZ

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.

■ 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.

■ Port Triggering

This menu allows user to configure forward certain port range to different port range for specific protocol.

8 Management

■ Device Management

The menu allows user to configure device management mode and various control. Telnet, SSH, and HTTPS can be enabled or disabled via configuration. Auto WEB GUI logout can also be configured.

When Telnet is enabled, user can telnet to CPE according to the below steps:

- cmd shell and run command:
- telnet 10.1.1.1
- Login: root
- Password: root123

■ TR069

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

TR069 Management Setting

TR069 Configuration

ACS URL	<input type="text"/>
ACS Username	<input type="text"/>
ACS Password	<input type="text"/>
Re-enter Password	<input type="text"/>
Periodic Inform Enable	<input checked="" type="checkbox"/>
Periodic Inform Interval	3600 seconds(90~604800)
Periodic Inform Time	2001-01-01T00:00:00
Connection Request Username	<input type="text"/>
Connection Request Password	<input type="text"/>
Re-enter Password	<input type="text"/>

ACS STUN Configuration

STUN Enable Status	<input checked="" type="checkbox"/> Enable
Server Address	<input type="text"/>
Server Port	3478 (0~65535)
Username	<input type="text"/>
Password	<input type="text"/>
Re-enter Password	<input type="text"/>
Minimum Keep Alive Period	10 seconds(10~90)
Maximum Keep Alive Period	90 seconds(10~90)

Help

TR069 Configuration
This part contains TR069 ACS server and ACS STUN server configuration.

Save & Apply Cancel Connect ACS

■ CBRS Configuration

The menu allows user to configure the necessary setting for CBRS SAS registration of the CPE device.

CBRS Management Setting

CBRS Info

CBSD SerialNumber	K6500DFEA3FA
CBSD Category	CLASS B

CBRS Configuration

Test Mode	<input type="checkbox"/> Enable
CPI Registered	<input checked="" type="checkbox"/> Enable
Single Registered	<input checked="" type="checkbox"/> Enable
SAS URL	<input type="text"/>

CBRS CPI Data

Protected Header	<input type="text"/>
Encoded CPI Signed Data	<input type="text"/>
Digital Signature	<input type="text"/>

Load CBRS Certificate

CBSD Certificate	<input type="file"/> Choose File No file chosen CBSD Certificate already exists
CBSD Key	<input type="file"/> Choose File No file chosen CBSD Key already exists
SAS CA Certificate	<input type="file"/> Choose File No file chosen CBSD SAS CA Certificate already exists
Status	<input type="text"/> Please select the update package file

Help

CBRS Configuration

This part contains CBRS Class B device related configurations for SAS registration.

■ SNMP

The menu allows user to configure the SNMP setting.

SNMP

SNMP

SNMP Agent	<input type="checkbox"/> Enable
Read-Only Community	public <input type="text"/>
Read-Write Community	private <input type="text"/>
Agent Port	161 <input type="text"/>

Help

SNMP:
Simple Network Management Protocol.

Read-Only Community:
Enables a remote host to retrieve 'read-only' information from this device.

Read-Write Community:
Used in requests for information from a remote host and to modify settings on this device.

Agent Port
The listening UDP port number on this device.

9 Maintenance

■ General

The menu allows user to configure the WEB GUI login password, time and language setting.

System Maintenance

Change Password

Old Password:
 New Password:
 Re-enter to Confirm:

Time Settings

NTP Enable Status: Enable
 Time Zone / Summer Time (DST): UTC / none
 NTP Server: 0.pool.ntp.org (e.g. time.nist.gov)
 Use Local Host Time: Tue 28 Apr 2020 09:10:24 Sync
 Refresh Interval: 720 (minutes: 5 ~ 1440)

Auto-Refresh

Auto-Refresh: Enable

Help

Old Password:
 The password currently in use.

New Password:
 The new password length is 4 to 20 characters, the characters of 0~9 or a~Z. Enter the new password a second time to confirm it.

Time Settings:
 Choose the time zone you are in and Summer Time (DST) period. The device can use local time or UTC time.

Auto-Refresh:
 This option controls whether the Web page contains dynamic data will be automatically refreshed when the page is open.

Save & Apply **Cancel**

■ Firmware Upgrade

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

Firmware Management

Local Firmware Upgrade

Reset to defaults after upgrade: No Reset Reset to Factory Defaults
 Please select a file to upgrade: Choose File | No file chosen

Upgrade

Firmware Rollback

Current Firmware Version: V1.5.0.P0.2022 Build on: Apr 28 2020
 Rollback Firmware Version: V1.5.0.P0.2003 Build on: Apr 08 2020

Rollback

Remote Firmware Upgrade

Update Method: None

Help

Local Firmware Upgrade:
 Click on the *Browse...* button to select the firmware file to be uploaded to the device.
 Click the *Upgrade* button to begin the upgrade process which must not be interrupted.

Remote Firmware Upgrade:
 You need to fill in the connection configs of HTTP,FTP or TFTP server.
 Click the *Upgrade* button to begin the upgrade process which must not be interrupted.

Upgrade:
 Link with eNB is reached in less than 5 minutes since reboot after firmware flashing, and the link is stable during 1 minute, then after 1 minute of link CPE will set the running version as Main automatically

Save & Apply **Cancel**

■ Config Management

This menu allows user to backup or restore device configuration file.

Backup Configuration

Backup Settings

Click the "Backup" button to download the configuration backup file to your computer.

Restore Configuration

Restore Settings

Please select a file to restore

Choose File No file chosen

WARNING

Only upload files backed up using this firmware and from the same model of device.
Do not upload any files that were not created by this interface!

Help

Backup Settings:
You may backup your current configuration in case you need to reset the device back to its factory default settings.

Click the **Backup** button to backup your current configuration.

Restore Settings:
Click the **Browse...** button to browse for a configuration file that is currently saved on your PC.

Click the **Restore** button to overwrite all current configurations with the ones in the configuration file.

■ Ping

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

Ping Test

Ping Test

IP Protocol IPv4 IPv6

Ping Start

Help

Ping Test:
The Ping test tool is used to check the network connectivity and latency. Enter the destination address and click on the start button to begin the Ping test.

■ TraceRoute

This menu allows user to configure traceroute testing

TraceRoute Test

TraceRoute Test

IP Protocol IPv4 IPv6

MaxHopCount

IP Address or Domain Name: Start

Help

TraceRoute:
TraceRoute is an important tool to detect the routing between the host and the destination host. Enter the ip address or domain name: and click on the start button to begin the traceroute test.

■ 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.

■ System Reset

This menu allows user to reboot the device or restore the device to factory defaults. Special care needs to be taken when restoring factory defaults.

10 Status

■ System

The menu shows the general system info of the CPE device. It includes connection, system, CPE and memory usage information.

Internet

Connection Info

Login Type	LTE PDN
IP Address	10.14.100.205
Subnet Mask	255.255.255.255
DNS	8.8.8.8
IPv6 Address	
IPv6 DNS	

Device Info

System

Manufacturer	
Product Class	
Board Name	GDM7243A-ODU-C-B48
Hardware Version	
Firmware Version	
BootRom Version	-
MAC Address	
Host Name	
Domain Name	
Current Time	Tue 28 Apr 2020 09:16:08
Up Time	40 min
Load Average	0.01, 0.05, 0.10

CPU

CPU Model	GDM7243A R0A [0x72430400]
CPU Clock	400 MHz

Memory

Total Available	188084 kB / 262144 kB	72%
Free	133488 kB / 188084 kB	71%
Used	54596 kB / 188084 kB	29%
Buffers	0 kB / 54596 kB	0%
Cached	10788 kB / 54596 kB	20%
Active	9284 kB / 54596 kB	17%
Inactive	7200 kB / 54596 kB	13%

■ Network

The menu shows the general network status that includes PDN interface info, device routing info, and ARP table.

Network Status

PDN Info

APN	internet.mnc088.m
IP Address	10.14.100.205
DNS	8.8.8.8
IPv6 Address	
IPv6 DNS	

Route

Destination	Default Gateway	Genmask	Flags	Metric	Ref	Use	Iface
0.0.0.0	0.0.0.0	0.0.0.0	U	0	0	0	lte0pdn0
10.0.0.50	0.0.0.0	255.255.255.255	UH	0	0	0	lte0pdn0
10.1.1.0	0.0.0.0	255.255.255.0	U	0	0	0	br0
127.0.0.0	0.0.0.0	255.0.0.0	U	0	0	0	lo
192.168.0.0	0.0.0.0	255.255.255.0	U	0	0	0	br0

ARP

IP Address	HW type	Flags	HW Address	Mask	Device
192.168.0.71	0x1	0x2	ac:a2:13:6a:12:09	*	br0
10.1.1.71	0x1	0x2	ac:a2:13:6a:12:09	*	br0

■ LAN

The menu shows the local LAN network status including the LAN interface and DHCP Server setting and current DHCP clients connected.

The screenshot shows the LAN configuration page with the following sections:

- Local Network** (LAN Status):

MAC Address	192.168.0.1
IP Address	255.255.255.0
Subnet Mask	
Local DNS	
Port Status	Up
Speed / Duplex	100Mbps / Full
Sent(Errors/Dropped)	0 packets / 0 packets
Received(Errors/Dropped)	0 packets / 0 packets
RX CRC Errors	0 packets
Collisions	0 packets
Sent	2,681,535 bytes / 6,319 packets
Received	490,098 bytes / 5,938 packets
- Dynamic Host Configuration Protocol** (DHCP Status):

DHCP Server	Enabled
Min IP Address	192.168.0.100
Max IP Address	192.168.0.254
Client Lease Time	86400 seconds
- DHCP Clients** (Table):

Host Name	IP Address	MAC Address	Expires
- None -			
- Help** (MAC Address, IP Address, Subnet Mask, DHCP Server, DHCP Clients)

■ CBRS

The menu shows the CBRS status info.

The screenshot shows the CBRS configuration page with the following sections:

- CBRS Status Info** (CBSD status):

Registration State	Unregistered
Grant State	Idle
Report Time	2020-04-28 09:19:20 UTC
Protocol Running	Config Parameter Error
Grant Expire Time	
Transmit Expire Time	
Low Frequency Limit	
High Frequency Limit	
Max EIRP Limit	
- Running Information** (Large empty box)
- Help** (CBRS Status Info)

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 PoE power adapter 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 PoE adapter LED is off but the power cord is connected properly and there is AC supply, then it is likely the PoE adapter is damaged. Please contact distributor to obtain replacement part.

2) My PC cannot acquire IP from the CPE.

- First check if the PC NIC interface is up and working properly. Then check the PC NIC configuration. If the device is running in router mode, then make sure the PC DHCP is enabled. Open the MS-DOS or CMD window, enter “ipconfig /release” and “ipconfig /renew” commands and see if PC can obtain IP correctly.
- If the device is configured to operate in bridge mode, the PC NIC IP should be manually configured to be 10.1.1.X / 255.255.255.0 in order to gain access to the device WEB GUI. When you are done with the device configuration, the PC NIC IP should be reconfigured to use DHCP for proper LTE networking.
- If the problem persists, please contact the operator or distributor for further diagnose.

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 the “admin123” administrator 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 diagnose.

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

- Please look up the IMEI number in the CPE unit label. The unit can be reset to factory default setting by entering the IMEI number in the WEB login window.
- After the unit is reset to factory default, you can login using the default password.