



Outdoor CPE8000
Installation and Configuration Guide V1.0

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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 people to come in close proximity to the front of the antenna while the transmitter is operating.

Protection from Lightning



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, Authorisation 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

The CPE8000 units comply with Part 25 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 15, Subpart E of the FCC Rules and Regulations. Any unauthorized modification or changes to this device may void the user'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 user's authority to operate this device and/or the manufacturer's warranty.

The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

1. Overview

The ODU is a high performance 4G LTE outdoor CPE product designed to enable quick LTE fixed data service deployment to the remote customers. It provides high data throughput and networking features to end users who need both bandwidth and quality service in the remote area.



1.1. User Interface Specification

Model	Description & User Interface
ODU	<ul style="list-style-type: none">- Panel antenna: B3_7 14dBi, B20 7dBi, B38_40_41 13dBi, B42_43 15dBi- 1 RJ45 10/100M LAN Port- PWR, RUN, LAN, SIM, LTE(1-5) LEDs- 48 VDC PoE supply, ODU Power <10 Watts- Dimensions: 203 mm (L) × 203 mm (W) × 76.5 mm (D)- Weight: < 2 Kg

1.2. LTE Interface Specification

Frequency Bands	Band 3_7 / 20 / 38_40_41 / 42_43
Radio Access	3GPP LTE Release9
Operation Mode	TDD, 2RX, 1TXD, DLMIMO
Output Power	Up to 23 dBm at antenna port
Throughput	Category 4
SIM Support	SIM card slot

2. GettingStarted

2.1. 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
Power adapter	1
Power Line	1
Mounting brackets	1
PC 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.



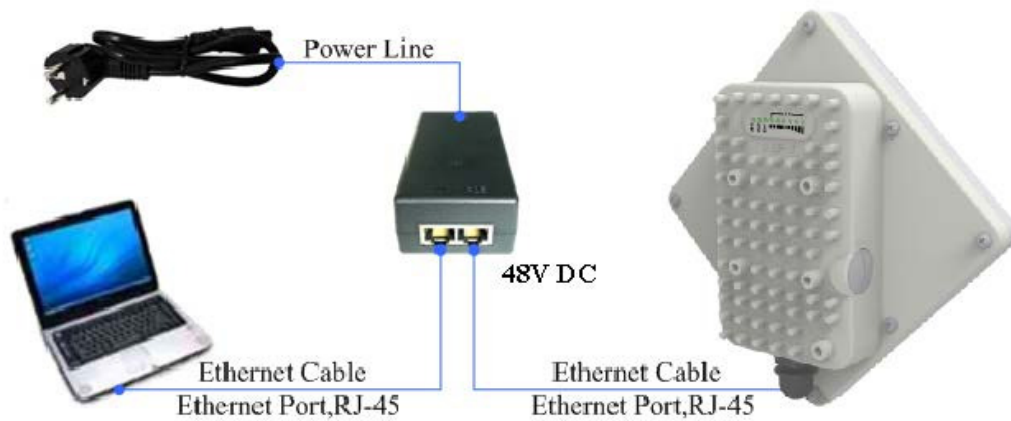
2.2. Installing the Equipment

◆ **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. The CPE should be properly grounded for proper protection against lightning or power surge. To power on the device, the outdoor CPE must uses a 48V PoE integrated DC power supply adapter. The power adapters can operate in 90-250V AC range and therefore can be used in different country. Once the device is powered up, the user should wait for about 2 minutes before

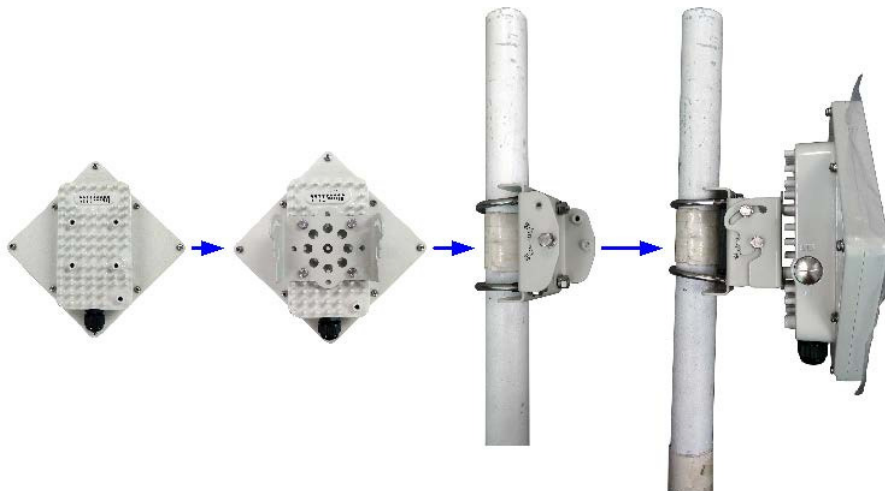
the device becomes operational. For CPE with the RUN LED indicator, a slowly flashing light indicates the system has completed the startup procedure.

To connect PC, LAN switch or other type of IP device to the CPE product, the user should use standard CAT5 Ethernet cable and connect to the appropriate LAN port. Once connect the CPE LAN LED indicator should come on.



◆ Installing Outdoor Unit (ODU)

Mounting Bracket::



Header Connection:





◆ LED Display

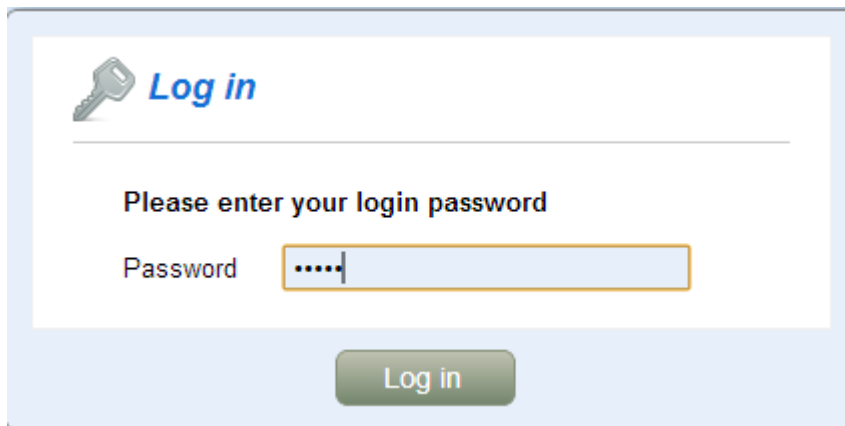
LED Indicator	Function	Description
PWR	Power Indicator	Green Color – Device is powered on
RUN	System Run Indicator	Fast Blinking – Device is rebooting Slow Blinking – Device is in normal operation
LAN	LAN port status	Solid Green – LAN port is up Blinking Green – LAN data activity in progress
SIM	SIM Card Indicator	Light is on – SIM card state ready.
RF(5LEDs)	RF Signal Strength	5 level signal strengths indication by 5 green LEDs 1 green LED: $RSRP \leq -118\text{dBm}$ 2 green LEDs: $-118\text{ dBm} \leq RSRP < -105\text{ dBm}$ 3 green LEDs: $-105\text{dBm} \leq RSRP < -95\text{dBm}$ 4 green LEDs: $-95\text{dBm} \leq RSRP < -85\text{dBm}$ 5 green LEDs: $-85\text{dBm} \leq RSRP$

3. Managing CPE Device

The ODU supports several management interfaces including TELNET, WEB, and TR-069 for local or remote managements. However normal end user is only provided with WEB based access

3.1. WEB Login--192.168.0.1

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 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://192.168.0.1> 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 that the default user password is “admin123”.



The screenshot displays a web-based login interface. At the top left, there is a key icon followed by the text "Log in". Below this, a horizontal line separates the header from the main content. The main content area contains the instruction "Please enter your login password". Underneath, the label "Password" is positioned to the left of a text input field. The input field contains five dots, indicating that the password is masked. At the bottom center of the interface, there is a green button with the text "Log in".

3.2. LTE Status Display-Overview

Once the user is logged in, the following window LTE Information window will be prompted for viewing. The page gives quite detailed LTE information including the System Information, the UL/DL Frequency, the PCI and the Connection status

LTE	Network	Security	Applications	Management	Maintenance	Status	Exit
Overview	ND&S	PLMN Selection	eNB Settings	Bearer Settings	SIM Card	PIN Management	admin

LTE Information	Help																														
<p>System Information</p> <table border="1"> <tr><td>Manufacturer</td><td></td></tr> <tr><td>Model Name</td><td></td></tr> <tr><td>Chip Model</td><td>SQN31X0</td></tr> <tr><td>Serial Number</td><td>KZT081FFF233</td></tr> <tr><td>IMEI</td><td>864423020000211</td></tr> <tr><td>IMSI</td><td>200010001001310</td></tr> <tr><td>Duplexing Scheme</td><td>TDD</td></tr> <tr><td>Supported Band</td><td>42/43</td></tr> <tr><td>Firmware Version</td><td>3.3.2.0-18727</td></tr> </table>	Manufacturer		Model Name		Chip Model	SQN31X0	Serial Number	KZT081FFF233	IMEI	864423020000211	IMSI	200010001001310	Duplexing Scheme	TDD	Supported Band	42/43	Firmware Version	3.3.2.0-18727	<p>System Information: This section shows the basic device 4G Radio hardware and firmware information.</p> <hr/> <p>Radio Information: This section shows the basic wireless information.</p> <hr/> <p>Connection: This section shows the status of connecting for 4G Radio.</p> <hr/> <p>Activity: Shows the number of receiving and sending packets</p> <hr/>												
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<p>Radio Information</p> <table border="1"> <tr><td>RSRP</td><td>-97.95 / -96.07 dBm</td></tr> <tr><td>RSSI</td><td>-96.5 dBm</td></tr> <tr><td>RSRQ</td><td>-7.23 dB</td></tr> <tr><td>CINR</td><td>28.66 dB</td></tr> <tr><td>CQI</td><td>11</td></tr> <tr><td>Rank Indication</td><td>1</td></tr> <tr><td>UL/DL Bandwidth</td><td>20000 / 20000 KHz</td></tr> <tr><td>UL/DL Frequency</td><td>3540000 / 3540000 KHz</td></tr> <tr><td>RRC State</td><td>active</td></tr> <tr><td>EMM State</td><td>registered</td></tr> <tr><td>CRNTI</td><td>114</td></tr> <tr><td>PCI</td><td>3</td></tr> <tr><td>eNodeB ID</td><td>3</td></tr> <tr><td>TX Power</td><td>-3.71 dBm</td></tr> <tr><td>UL/DL Throughput</td><td>0 / 9 Kbps</td></tr> </table>	RSRP	-97.95 / -96.07 dBm	RSSI	-96.5 dBm	RSRQ	-7.23 dB	CINR	28.66 dB	CQI	11	Rank Indication	1	UL/DL Bandwidth	20000 / 20000 KHz	UL/DL Frequency	3540000 / 3540000 KHz	RRC State	active	EMM State	registered	CRNTI	114	PCI	3	eNodeB ID	3	TX Power	-3.71 dBm	UL/DL Throughput	0 / 9 Kbps	
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3.3. LTE Configuration

◆ Radio Settings-ND&S Configure

There is a LTE radio button which is used for the user can turn the radio on or off to restart the LTE module.

The CPE would scan frequency auto as soon as the system has completed the startup procedure, and you can configure the fixed Frequency manual as follow:

The screenshot shows the 'ND&S' configuration page. The '4G Radio' is set to 'ON'. The 'Discrete Band Setting' table is as follows:

Band ID	Start Frequency(MHz)	End Frequency(MHz)	Start Earfcn	End Earfcn	Delete
42	3540	3540	42990	42990	Delete

The 'Save & Apply' button is highlighted with a red box.

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.

◆ APN Setting-Bearer configure

The Bearer List is design for the operator to configure the APN. You can configure the only one APN for all the service classes, as follow:

The screenshot shows the 'Bearer Settings' page. The 'Bearer List' table is as follows:

Index	APN Name	Class ID	IP Type	Priority	Delete
1	internet	1	IPv4v6	Up	Delete

The 'Save & Apply' button is highlighted with a red box.

And the operator also can configure two APNs for Manage and data service classes. As follow picture, the Management Data Class will be transport via the “internet“ network and the Data Traffic Class will be transport via the “ctlte” network.

LTE Network Security Management Maintenance Status

Overview ND&S PLMN Selection eNB Settings **Bearer Settings** SIM Card PIN Management admin

Bearer Settings

Bearer List

Index	APN Name	Class ID	IP Type	Priority	Delete
1	internet	1	IPv4v6	Up	Delete
2	ctite	2	IPv4v6	Up	Delete

Add Cancel

Save & Apply Cancel Changes

Help
Bearer List:
 Setting up to 8 Bearer, The most length of APN Name is 64 bytes.

And the CPE will obtain two different IP for two networks, as follow:

LTE Network Security Applications Management Maintenance **Status**

System **Network** LAN admin

Network Status

PDN Info

PDN Index: 1
 APN: internet
 IP Address: 10.12.100.5
 DNS: 8.8.8.8 4.2.2.1
 IPv6 Address:
 IPv6 DNS:
 CID: 1

Route

Destination	Default Gateway	Genmask	Flags	Metric	Ref	Use	Iface
default	*	0.0.0.0	U	0	0	0	icc0.1121
10.1.1.0	*	255.255.255.0	U	0	0	0	br0
127.0.0.0	*	255.0.0.0	U	0	0	0	lo
192.168.0.0	*	255.255.255.0	U	0	0	0	br0

ARP

IP Address	HW type	Flags	HW Address	Mask	Device
119.84.87.7	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
192.168.0.100	0x1	0x2	78:2b:cb:e8:58:6f	*	br0
8.8.8.8	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
8.8.8.8	0x1	0x2	6c:ad:ef:14:ba:96	*	icc0.1121
94.245.121.253	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
106.120.167.26	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
165.254.27.83	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
184.25.56.76	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
220.181.131.226	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
10.3.0.14	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
220.181.156.118	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
106.120.167.7	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
4.2.2.1	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
4.2.2.1	0x1	0x2	6c:ad:ef:14:ba:96	*	icc0.1121

Help
PDN Info:
 When the wanprotol is PDN show PDN IP Map.
Route:
 The routing table information.
ARP:
 The ARP table information.

LTE Network Security Applications Management Maintenance **Status** Exit

System **Network** LAN admin

Network Status

PDN Info

PDN Index:

APN: ctite.mnc011.mcc200.gprs

IP Address: 10.11.100.4

DNS: 8.8.8.8 4.2.2.1

IPv6 Address:

IPv6 DNS:

CID: 2

Route

Destination	Default Gateway	Genmask	Flags	Metric	Ref	Use	Iface
default	*	0.0.0.0	U	0	0	0	icc0.1121
10.1.1.0	*	255.255.255.0	U	0	0	0	br0
127.0.0.0	*	255.0.0.0	U	0	0	0	lo
192.168.0.0	*	255.255.255.0	U	0	0	0	br0

ARP

IP Address	HW type	Flags	HW Address	Mask	Device
192.168.0.100	0x1	0x2	78:2b:cb:e8:58:bf	*	br0
8.8.8.8	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
74.125.204.120	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
94.245.121.253	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
8.8.8.8	0x1	0x2	6c:ad:ef:14:ba:96	*	icc0.1121
101.199.103.180	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
220.181.131.226	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
10.3.0.14	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
74.125.204.94	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
165.254.146.203	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
4.2.2.1	0x1	0x2	6c:ad:ef:15:ba:97	*	icc0.1122
4.2.2.1	0x1	0x2	6c:ad:ef:14:ba:96	*	icc0.1121

Help

PDN Info:
When the wanprotol is PDN show PDN IP Map.

Route:
The routing table information.

ARP:
The ARP table information.

3.4. eNodeB Selection

The CPE would lock on the ND&S to connecting after the operator enabled the **Lock ND&S** when the Co-Channel Interference (CCI) is around.

◆ PLMN Selection

Setting “**Network Mode**” as **Nomadic**, then click the “**Search**” button, After the CPE searched the “**PLMN ID**”, select the applicable PLMN ID and click “**Add Info list**” button to add the PLMN ID to the PLMN-List.

The screenshot displays the 'PLMN Selection' configuration page. The 'PLMN Selection' section includes a dropdown for 'Network Mode' set to 'Nomadic', a 'Search' button, a 'PLMN ID' dropdown set to '200 11', an 'Add into list' button, a 'Home PLMN-ID' field with the value '200,01', and a checked 'Allow Roaming' checkbox. The 'Equivalent PLMN-ID list' section features a table with the following data:

Index	MCC	MNC	Priority	Delete
1	200	11	Up	Delete

Below the table are 'Add' and 'Cancel' buttons. The 'Help' section on the right explains that 'PLMN Selection' enables manual search, which may interrupt the current data network. It also notes that the 'Equivalent PLMN-ID list' is used for configuration and priority setting, and that the Home PLMN should be selected if the equivalent is not configured. At the bottom of the page, there are 'Save & Apply' and 'Cancel Changes' buttons.

◆ eNodeB Setting

After Enable the **Preferred eNB List** and configure the **Earfcn/PCI**, the CPE will scan the corresponding ND&S and connecting to

LTE—>eNB Settings—>Enable Preferred eNB List—>Enable Lock ND&S to the preferred list—>add the Earfcn and PCI—>Save & Apply

LTE Network Security Applications Management Maintenance Status Exit

Overview ND&S PLMN Selection **eNB Settings** Bearer Settings SIM Card PIN Management admin

eNB Settings Help

Preferred eNB Settings

Preferred eNB List Enable

Lock ND&S to the preferred list Enable

Auto-Rescan Duration Mins(15-65535)

Priority	Earfcn	PCI(0-503)	Delete
1	<input type="text" value="42990"/>	<input type="text" value="3"/>	<input type="button" value="Delete"/>

Sorted eNB List

Index	Earfcn	PCI	RSRP(dBm)	RSRQ(dB)	RSSI(dBm)	CINR(dB)
1	42990	3	-94.7	-7	-79.9	29.2

eNB Settings:
UE selects eNB from the preferred eNBs preferentially only when enabled.

Earfcn Range:
B42 41590 - 43589
B43 43590 - 45589

Auto-Rescan Duration:
Range 15-65535 mins; 0 - timer is disabled!

3.5. Network Configuration

◆ Modify MTU Size

The default Operation Mode is Router, and the PC of the user that connected to device LAN port will obtain IP address via DHCP server of the device. The default MTU Size is 1428, user can modify the MTU Size if necessary

The screenshot shows the 'Internet Setup' configuration page. The 'Network' tab is selected. Under 'Internet Connection', the 'Connection Mode' is set to 'Router / NAT'. In the 'Optional' section, the 'MTU' is set to 'Manual' with a value of '1300'. The 'DS-Lite Connection' section is set to 'Disable'. The 'Save & Apply' button is highlighted with a red box.

◆ **Change model from Router to Bridge**

The operation mode could be changed from Router to Bridge if necessary .Change model as follow picture: **Network→Internet→L3 Bridge→Save & Apply**

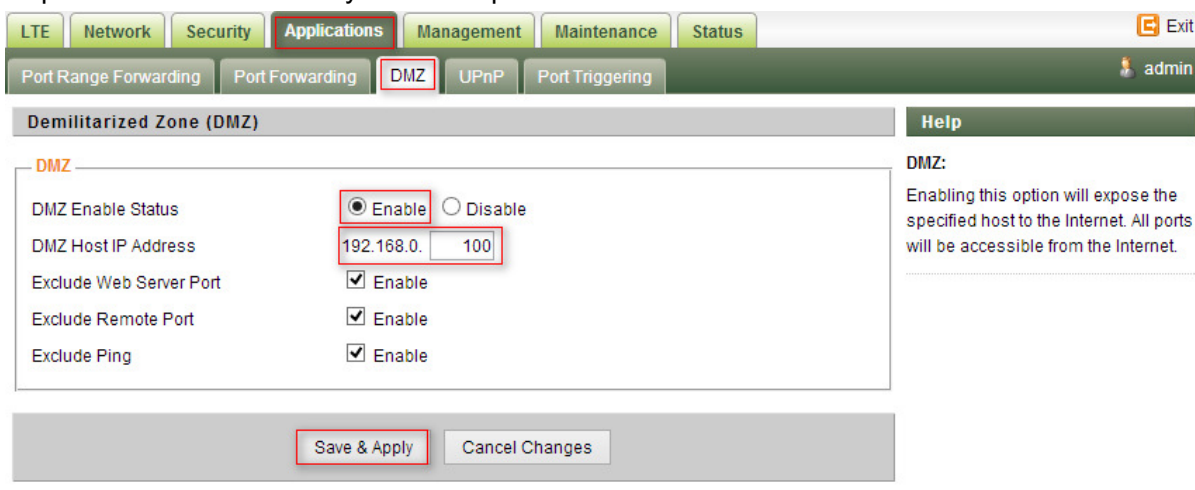
The screenshot shows the 'Internet Setup' configuration page with the 'Connection Mode' changed to 'L3 Bridge'. The 'Optional' section shows the 'MTU' set to 'Default' with a value of '1500'. The 'Save & Apply' button is highlighted with a red box.

The operator’s PC which connected the LAN port of CPE will auto obtain the IP of APN Net when the CPE attached to the APN network, then you can connected to the APN network for

data services. And the PC should configure a static IP address as 10.1.1.x manual in order to visit the CPE managing page <http://10.1.1.1> .

3.6. Service Configuration-DMZ Setting

By enabling this option will make the specified local LAN host (DMZ IP) was exposed to the Internet, all ports can be accessed by other computers on the Internet.

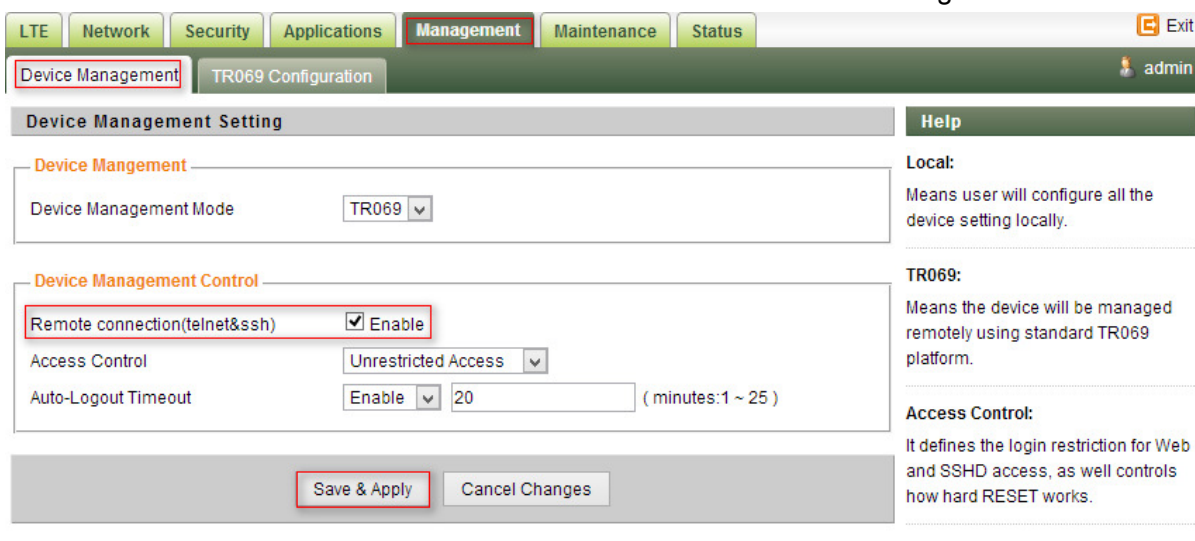


3.7. System Maintenance

WEB GUI menu to configure the device in more details (see diagram below). The configuration is easy to use and self explanatory.

◆ Telnet Enable(for beta release)

The users can telnet to the CPE in the beta release when set Telnet Management as Enable All.



cmd shell and run command:

```
telnet 192.168.0.1
```

```
Login: admin
```

```
Password: root123
```


◆ TR069 Configuration

After setting the Device Management Mode as TR069, you must also configure the validity acs url for monitoring the device via standard TR-069 ACS systems.

The screenshot shows the 'Device Management Setting' page. The 'Management' tab is selected. The 'Device Management Mode' is set to 'TR069'. Under 'Device Management Control', 'Remote connection(telnet&ssh)' is checked 'Enable', 'Access Control' is 'Unrestricted Access', and 'Auto-Logout Timeout' is 'Enable' with a value of '20' minutes. A 'Save & Apply' button is highlighted with a red box. A 'Help' section on the right explains 'Local' (user configures all settings locally) and 'TR069' (device managed remotely via standard TR069 platform). 'Access Control' defines login restrictions for Web and SSHD access.

Device Management Setting	Help
Device Management Device Management Mode: TR069	Local: Means user will configure all the device setting locally.
Device Management Control Remote connection(telnet&ssh): <input checked="" type="checkbox"/> Enable Access Control: Unrestricted Access Auto-Logout Timeout: Enable 20 (minutes:1 ~ 25)	TR069: Means the device will be managed remotely using standard TR069 platform.
Save & Apply Cancel Changes	Access Control: It defines the login restriction for Web and SSHD access, as well controls how hard RESET works.

The screenshot shows the 'TR069 Management Setting' page. The 'Management' tab is selected. The 'ACS URL' is 'http://10.3.0.15:8080/im2000/acs'. Other fields include ACS Username, ACS Password, Re-enter Password, Periodic Inform Enable (checked), Periodic Inform Interval (3600 seconds), Periodic Inform Time (2001-01-01T00:00:00), CPE Username (admin), CPE Password, and Re-enter Password. Under 'ACS STUN Configuration', 'STUN Enable Status' is unchecked, and other fields are empty. A 'Save & Apply' button is highlighted with a red box. A 'Help' section on the right explains 'TR069 Configuration' (contains TR069 ACS server and ACS STUN server configuration).

TR069 Management Setting	Help
TR069 Configuration ACS URL: http://10.3.0.15:8080/im2000/acs ACS Username: <input type="text"/> ACS Password: <input type="password"/> Re-enter Password: <input type="password"/> Periodic Inform Enable: <input checked="" type="checkbox"/> Periodic Inform Interval: 3600 seconds(90~604800) Periodic Inform Time: 2001-01-01T00:00:00 (eg2000-01-01T01:01:01) CPE Username: admin CPE Password: <input type="password"/> Re-enter Password: <input type="password"/>	TR069 Configuration This part contains TR069 ACS server and ACS STUN server configuration.
ACS STUN Configuration STUN Enable Status: <input type="checkbox"/> Enable Server Address: <input type="text"/> Server Port: 3478 (0~65535) Username: <input type="text"/> Password: <input type="password"/> Re-enter Password: <input type="password"/> Minimum Keep Alive Period: 10 seconds(10~90) Maximum Keep Alive Period: 90 seconds(10~90)	
Save & Apply Cancel Changes undefined	

◆ Firmware Upgrade over HTTP

Select the **Default settings** to reset the CPE after upgrade

Click on the **Browser** button to select the firmware file to be uploaded to the device.

Click the” **Upgrade**” button to begin the upgrade process.

The screenshot shows the 'Firmware Upgrade' page in a web interface. The 'Maintenance' tab is selected. Under 'Local Firmware Upgrade', the 'After flashing, reset to' section has 'Default settings' selected. A file named 'AM4000D_V1...8_R1485.PRG' is selected for upload. An 'Upgrade' button is visible. The 'Remote Firmware Upgrade' section shows 'Update Method' set to 'None'. There are 'Save & Apply' and 'Cancel Changes' buttons at the bottom.

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.

Please do not interrupt the upgrade process and continue to wait for the following pop window to appear. The CPE will reboot after upgrade successful.

The screenshot shows the 'Firmware Upgrade' page with a 'WARNING' message: 'Upgrading firmware may take a few minutes. Do not turn off the power or press the reset button!'. Below the warning is a progress bar. The bottom of the page shows a 'Upgrade successful. Equipment is rebooting now. Please wait a moment..' message with another progress bar.

WARNING
Upgrading firmware may take a few minutes.
Do not turn off the power or press the reset button!

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 successful.
Equipment is rebooting now. Please wait a moment..

◆ Change Password

You can select the language or modify the web login password via the Maintenance page.

The screenshot shows the Maintenance page with the following sections:

- Change Password:** Includes fields for Username (admin), Old Password, New Password, and Re-enter to Confirm.
- Time Settings:** Includes NTP Enable Status (checked), Time Zone / Summer Time (DST) (UTC+08:00 / last Sun Mar - last Sun Oct), NTP Server (0.pool.ntp.org), Use Local Host Time (Tue 24 Mar 2015 19:31:30), and Refresh Interval (720 minutes).
- Language Management:** Includes Language Selection (English).
- Auto-Refresh:** Includes Auto-Refresh (checked).

Buttons at the bottom include "Save & Apply" and "Cancel Changes".

◆ Load Factory Default

Click the "Restore" button will restore the device to original factory setting. User will need to reconfigure the authentication setting in order to get the device operational.

Maintenance → System Reset → Restore

The screenshot shows the System Reset page with the following sections:

- System Reboot:** Includes a Reboot button.
- Reset Device Settings:** Includes a Restore button.

Buttons at the bottom include "Save & Apply" and "Cancel Changes".

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

2) My PC cannot acquire IP from the CPE.

- First check if the NIC is up and working properly. Then check the PC NIC configuration and make sure the DHCP is enabled.
- Open the MS-DOS window, enter “ipconfig /release” and “ipconfig /renew” commands and see if PC can obtain IP correctly.
- 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 “admin” 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 contact the operator or distributor and give them the MAC address of the unit. The operator or distributor can issue you a RESET password for you to enter in the WEB login window.
- After the unit is reset to factory default, you can login using the default password.