

AM4200M Outdoor CPE

User Manual V1.0



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Getting to Know Your Device

Packing list

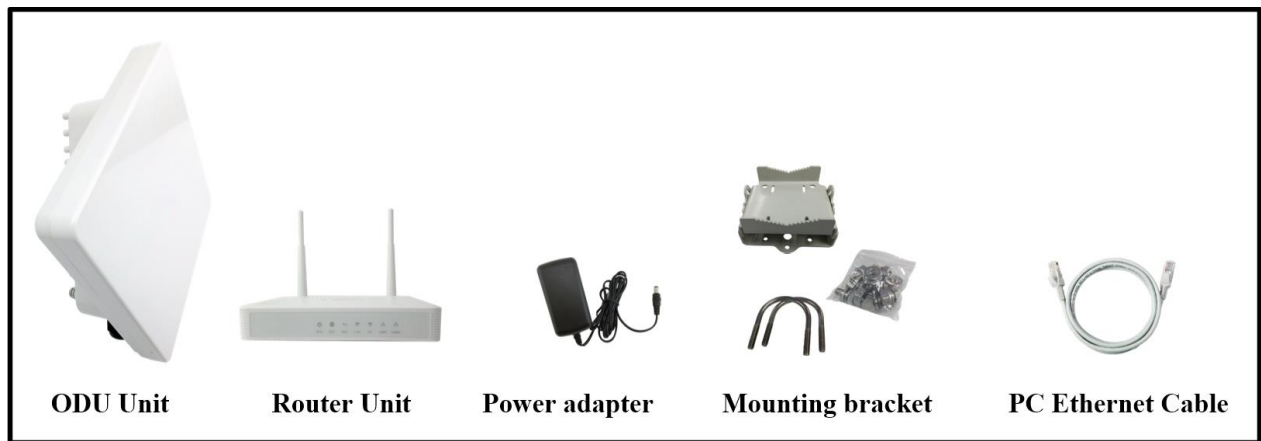
Upon receiving the product, please unpack the product package carefully. Each product is shipped with the following items:

CPE Products	Quantity
ODU unit	1
Router 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.

Unpacking the Equipment

All the standard parts that are supplied in your LTE CPE Unit Installation Package. Please take time to unpack the package and check its contents against this list.



LED Indicators

Type	LED	Function	Description
Router	SYS	Power indicator	Orange Color – Device is powered on. Blinking green – Wireless access not ready. Green Color – Network is available
	NET	WAN port status	Blinking green – The data is in transmission.
	SIG	RF signal indicator	Reserved function, not being used currently.
	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.

Type	LED	Function	Description
ODU	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<= -118dBm 2 green LEDs: -118dBm <=RSRP< -105dBm 3 green LEDs: -105dBm<=RSRP< -95dBm 4 green LEDs: -95dBm<=RSRP< -85dBm 5 green LEDs: -85dBm<=RSRP

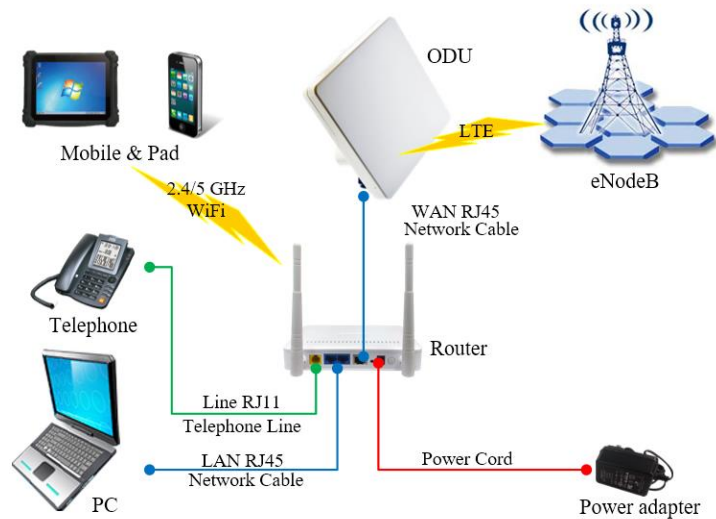
Connection Scenario

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.

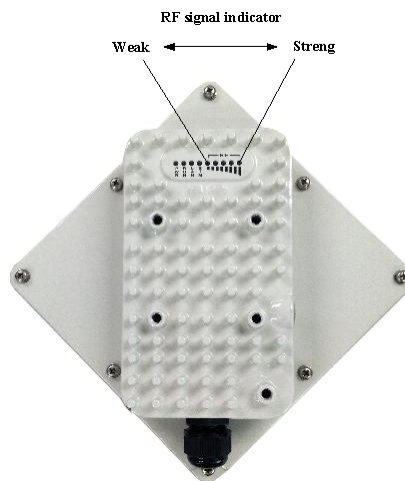
To power on the device, the CPE must use a 48V DC power supply adapter. The power adapters can operate in 90-250V AC range and therefore can be used in different country. An Ethernet cable is required to connect the WAN port of IDU with the POE(LAN) port of ODU. By the way, the ODU don't support the hot-plugging. Once the device is powered up, the user should wait for about 1 minute 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 FTP (Foil Twisted Pair) and connect to the appropriate LAN port. Once connected, the CPE LAN LED indicator should be on.

To use the phone service, user 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 (the ROUTER Only).

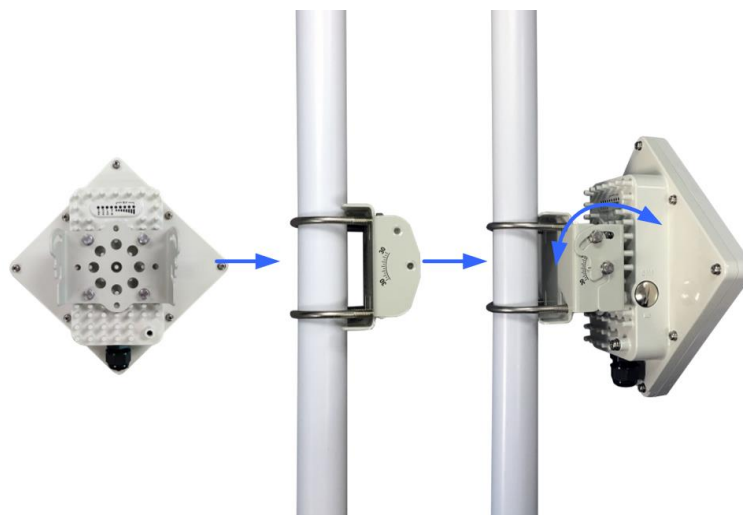


To obtain the best radio signal level and connection quality, the user can rotate the CPE slowly in horizon direction to find the best signal direction, then fixed it with the anchor ear. The CPE radio signal strength level can be observed from the RF LEDs mounted on the lower panel as shown below. The more LEDs on, the better the signal strength.

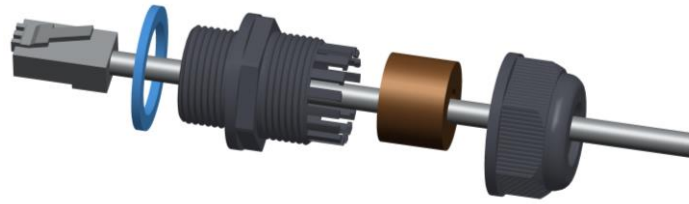


◆ Installing Outdoor Unit (ODU)

Mounting Bracket:



Header Connection:



Grounding

Make sure that the installation of the outdoor unit, antenna and cables is performed in accordance with all relevant national and local building and safety codes. Even where grounding is not mandatory according to applicable regulation and national codes, it is highly recommended to ensure that the outdoor unit and the antenna mast are grounded and suitable lightning protection devices are used so as to provide protection against voltage surges and static charges. In any event, Jaton is not liable for any injury, damage or regulation violations associated with or caused by installation, grounding or lightning protection.

The Grounding screw is located on the lower part at the back of the unit (see Figure below). Use 10 AWG cable for grounding.



Connect one of a grounding cable to the grounding screw and firmly tighten the grounding screw. Connect the opposite end of the grounding cable to a good ground(earth) connection.

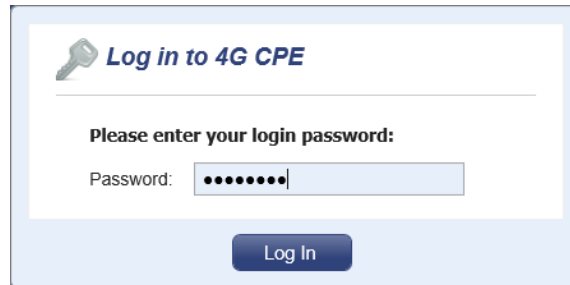
Connecting to Your Device

AM4200M 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.

WEB Login

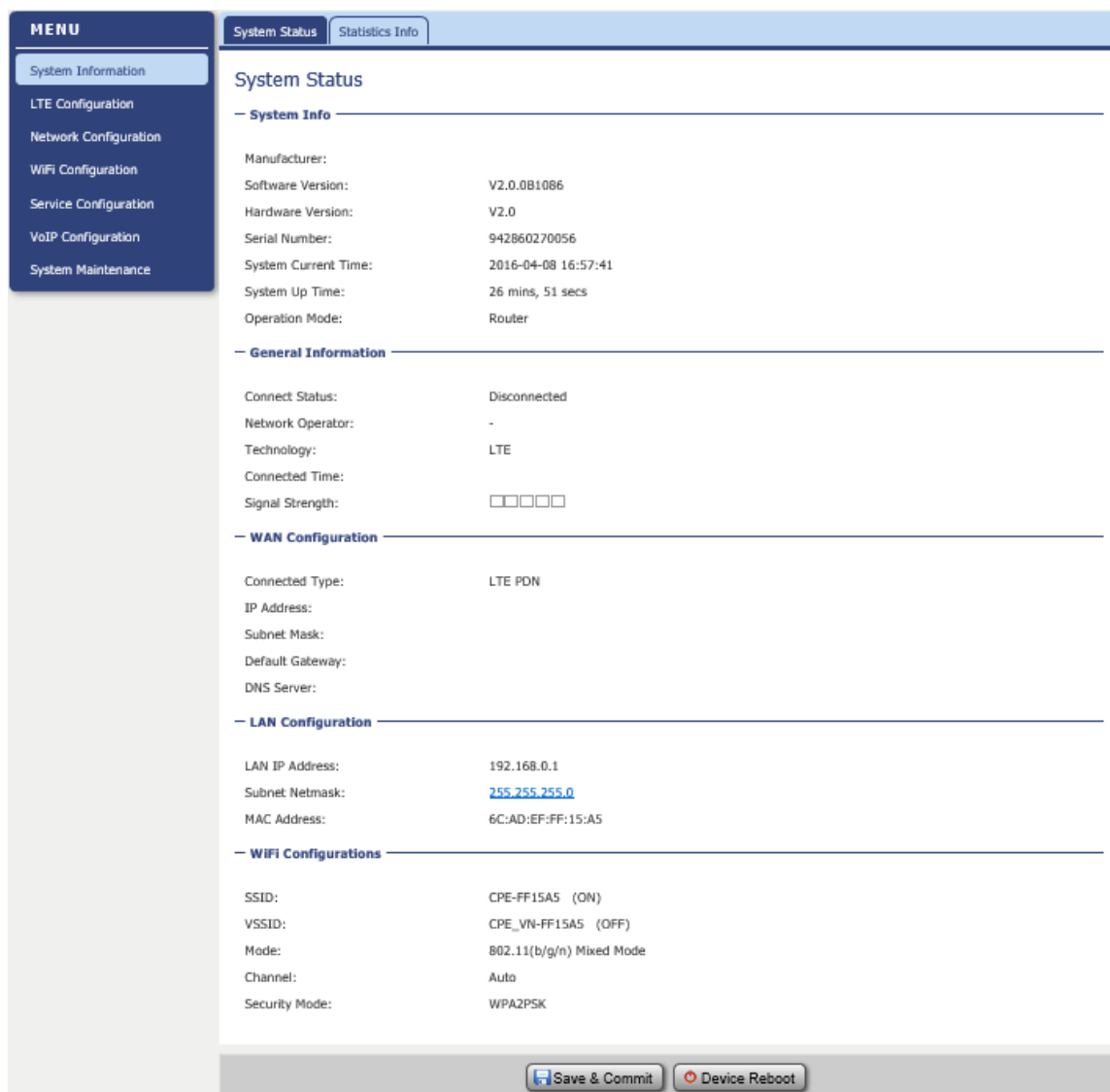
It is a preferred to setup the CPE using a Web browser from a local PC connected to device LAN port. The user should ensure that the connected PC have acquired IP address via DHCP from the device. After IP connectivity is established between the PC and CPE device, the user may

launch a Web browser and specify <http://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 that the default user password is “user123”.



Device Status

Once the user log in, the following window device status window will be prompted for viewing. It contains both the wireless link information, networking and device information configured for the device. For wireless info gives quite detailed information about the radio connection and user can use it to determine the receiving signal strength and transmit power of the device.



MENU

- System Information
- LTE Configuration
- Network Configuration
- WiFi Configuration
- Service Configuration
- VoIP Configuration
- System Maintenance

System Status | Statistics Info

System Status

— System Info —

Manufacturer:	
Software Version:	V2.0.0B1086
Hardware Version:	V2.0
Serial Number:	942860270056
System Current Time:	2016-04-08 16:57:41
System Up Time:	26 mins, 51 secs
Operation Mode:	Router

— General Information —

Connect Status:	Disconnected
Network Operator:	-
Technology:	LTE
Connected Time:	
Signal Strength:	□□□□□

— WAN Configuration —

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

— LAN Configuration —

LAN IP Address:	192.168.0.1
Subnet Netmask:	255.255.255.0
MAC Address:	6C:AD:EF:FF:15:A5

— WiFi Configurations —

SSID:	CPE-FF15A5 (ON)
VSSID:	CPE_VN-FF15A5 (OFF)
Mode:	802.11(b/g/n) Mixed Mode
Channel:	Auto
Security Mode:	WPA2PSK

Save & Commit | Device Reboot

Maintenance

The screenshot shows the 'Maintenance' configuration page. The sidebar on the left includes: System Information, LTE Configuration, Network Configuration, WiFi Configuration, Service Configuration, VoIP Configuration, and System Maintenance (highlighted). The main content area has tabs for General Setting, TR069, NTP Setting, Auto Update, Maintenance (selected), and Ping. The 'Maintenance' section is divided into four sub-sections:

- Firmware Upgrade over HTTP:** A 'Location:' text box containing 'C:\Users\Administrator\Docume' with a 'Browse...' button next to it. Below it is an 'Apply' button.
- Firmware Upgrade over FTP:** Fields for 'FTP Server Address:', 'Port:' (with value '21' and range '(0 ~ 65535)'), 'Username:', 'Password:', and 'Firmware Name:'. Below these fields are 'Apply' and 'Cancel' buttons.
- Configuration File Management:** A 'Config file location:' text box with a 'Browse...' button. Below it is a checkbox for 'Import & Overwrite SIP Account:' which is checked. Below the checkbox are 'Apply', 'Import', and 'Backup' buttons.
- Load Factory Default:** A 'Load Factory Default:' button with a warning icon and the text '(Device Will Reboot)'.

At the bottom of the page, there are two buttons: 'Save & Commit' and 'Device Reboot'.

Firmware Upgrade over HTTP:

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. Upgrade must not be interrupted.

Load Factory Defaults:

This will restore the device to original factory setting. User will need to reconfigure the authentication setting in order to get the device operational.

Device Reset

In case the user forgets the login password, a reset button is designed between WAN port and DC port. The user can pull down the reset button for 10 seconds with power on, then a system reset will be performed and the unit will be rebooted. The user can then be allowed to use the original default login password to gain access to the unit WEB GUI again.

After factory reset, the device may need to be reconfigured by the user or even operator to gain network access. This is not a recommended operation and special care must be taken to ensure the device will be properly re-configured after factory reset.

FAQ and Troubleshooting

Problem	Suggested Solution
My PC cannot connect to the CPE.	<ul style="list-style-type: none"> • 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.
My PC cannot acquire IP from the CPE.	<ul style="list-style-type: none"> • First check if the NIC is up and working properly. Then check the PC NIC 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 diagnose.
My CPE networking is not working properly.	<ul style="list-style-type: none"> • 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 “user123” password and 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.
I forget the login password and like to reset the unit to factory default.	<ul style="list-style-type: none"> • User can hold the RESET button between WAN port and DC port for 10 seconds to clear and reset the unit to factory default setting. • After the unit is reset to factory default, you can login using the default password.