4G CPE AirSpot

Let's go
Getting started with your device.





ABOUT THIS DOCUMENT

The document will serve as a quick start guide for AirSpot, LTE CPE. The LTE CPE is a 4G LTE outdoor unit. In this document, the Outdoor Unit will be replaced by the ODU.

SET UP THE HARDWARE

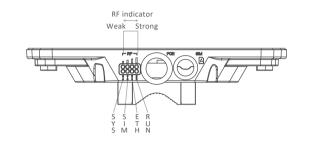
Ensure that you have everything required to properly set up your device.

ODU Unit	PoE	Power Adapter	Mounting Bracket	Ethernet Cable
	POLY Service Manual Service S		30	

Build Hardware Platform

To obtain the best radio signal level and connection quality, the CPE antenna should be aimed towards the best eNB or BS directly. To search for the best eNB direction, the user can rotate the CPE slowly and title CPE slightly to find the best signal direction.

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

Mounting Bracket:



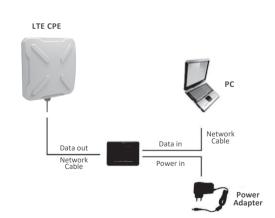
Anchor ear's diameter should be 33-57mm.

Header Connection



LAN Cable's diameter should be 5-10mm

Connect The ODU



NOTE: Make sure you have inserted your SIM card into the ODU.

Connect the CAT5e Ethernet cable which is connected to the ODU to the PoE port.

Connect the included Ethernet cable from the computer to Data port of the POE.

OUTDOOR (ODU) LED BEHAVIOR

When set up the Outdoor Unit, the LED will have the following behaviors.

State	Description	LED Behavior	LED illustration
Signal Strength weak Signal strength is weak		Only first signal LED on, the other three off	● ○ ○ ○ _{RF}
Signal Strength medium	Signal Strength is normal	The first two lights on, the last two off	● ● ○ ○ RF
Signal Strength good	Signal strength is good	The first three lights on, the last one off	● ● ● ○ RF
Signal Strength strong	Signal strength is strong	Four signal LEDs on	● ● ● ● RF
LAN Connected	a device is connected to CPE	The ETH LED On	O O O O S S E R U S M H N
LAN Disconnected	No device is connected to CPE	The ETH LED Off	O O O O S S E R Y I T U S M H N
SIM card abnormal	SIM Card in abnormal state	The SIM LED Blinking	○ - ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
SIM card normal	Sim card is working properly	The SIM LED On	O O O O S E R U S M H N
No SIM card	No SIM card is detected	The SIM LED Off	O O R U N S M H N
Access in LTE network	CPE is registered to LTE network	The SYS and SIM LED On	O O O S S E R U S M H N
No access in LTE network	CPE is not registered to LTE network	The SYS LED OFF, SIM LED on	O O O R U S M H N
Firmware Upgrading	CPE Started firmware upgrade	The first four RF LEDs blinking alternately.	* * * * * RF

CONNECT TO THE INTERNET

Open a web browser, set the computer as DHCP, enter the URL http://192.168.0.1 of

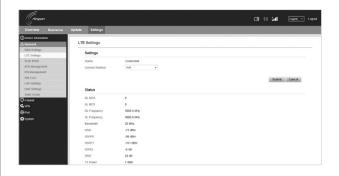
2

Enter the default Username and Password. Click Login. (Fields are case-sensitive.)



If the login screen does not open, make sure internet browser's proxy settings disabled, and also make sure the computer already obtain a correct IP address, then you can login to the web page.

Current Connection Current: 0 Bytes/s | Max : 150 Bytes/s | Min : 0 Bytes/s Current: 0 Bytes/s | Max : 170 Bytes/s | Min : 0 Bytes/s 255.255.255.0 172.16.34.120



If the SINR is below 10db, re-planning or repositioning of the outdoor (ODU) antenna is required.

Note:

SINR threshold parameters is ≥10 dB

FAQ AND TROUBLESHOOTING

Problem	Suggested Solution	
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 injector LED is on. If it is not, make sure the power adapter and the POE injector is connected properly. Also verify that the AC power supply is available. •If the PC LAN shows no link and POE injector LED is off but the power adapter and ETH cable are connected properly and the AC power supply is available, then it is likely the power adapter is damaged. Please contact distributor to obtain replacement part.	
My PC cannot acquire IP address 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 the PC can obtain IP correctly. •If the problem persists, please contact the operator or distributor for further diagnoses.	
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 in the WEB GUI using "user" 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.	

WARNING AND NOTICE

To the Owner

Some electronic devices are susceptible to electromagnetic interference sent by your device if inadequately shielded, such as the electronic system of vehicles. Please consult the manufacturer of your device before using if necessary.

- Operating your device may interfere with medical devices like hearing aids and pacemakers. Please always keep them more than 20 centimeters away from such medical devices when they are turned on. Turn your device off if necessary. Consult a physician or the manufacturer of the medical device before using your device.
- Be aware of the usage limitation when using your device at places such as oil warehouses or chemical factories, where there are explosive gases or explosive products being processed. Turn off your device if required.
- The use of electronic transmitting devices is forbidden in aircrafts, at petrol stations and in hospitals. Please observe and obey all warning signs and switch off your device in these conditions.
- Do not touch the inner antenna area if not necessary. Otherwise it will affect your device's performance.
- \bullet Store your device out of the reach of little children. Your device may cause injury if used as a toy.
- \bullet Do not touch the metallic parts of your device so as to avoid a burn, when your device is working.
- CPE doesn't support SIM card hot plug.

۵

Problem Suggested Solution I forget the login password and like to reset the unit to factory configuration. *User can contact the operator or distributor and submit the MAC address of the unit. The operator or distributor can provide you a RESET password to reset the unit to default status. *After the unit is reset, you can login using the default

password.

Using Your Device

- Please use original accessories or accessories that are authorized. Using any unauthorized accessories may affect your device's performance, and violate related national regulations about telecom terminals.
- Avoid using your device near or inside metallic structures or establishments that can emit electromagnetic waves. Otherwise it may influence signal reception.
- Your device is not waterproof. Please keep it dry and store in a shady and cool place.
- Do not use your device immediately after a sudden temperature change. In such case, it will produce dew inside and outside your device, so don't use it until it becomes dry.
- Handle your device carefully. Do not drop, bend or strike it. Otherwise your device will be damaged.
- No dismantling by non-professionals and only qualified technicians can undertake repair work.
- Operating temperature range of -40 \sim +45 $^{\circ}\mathrm{C}$ and humidity range of 5% $^{\sim}$ 95% are recommended.

10

FCC Regulations

I This device complies with part 15 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.

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

- Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/ TV technician for help.
- I Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with FCC RF Exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Limited Warranty

- This warranty does not apply to defects or errors in the Product caused by: i.Reasonable abrasion.
- ii.End User's failure to follow manufacturer's installation, operation or maintenance instructions or procedures.

iii.End User's mishandling, misuse, negligence, or improper installation, disassembly, storage, servicing or operation of the Product.

iv.Modifications or repairs not made by manufacturer or a manufacturer-certified individual.

v.Power failures, surges, fire, flood, accidents, actions of third parties or other events

outside manufacturer's reasonable control.
vi.Usage of third-party products, or usage in conjunction with third-party products

vi.Usage of third-party products, or usage in conjunction with third-party product provided that such defects are due to the combined usage.

vii.Any other cause beyond the range of normal usage intended for the Product.

End User shall have no right to reject or return the Product, or receive a refund for the Product from manufacturer under the above-mentioned situations.

This warranty is End User's sole remedy and manufacturer's sole liability for defective
or nonconforming items, and is in lieu of all other warranties, expressed, implied or
statutory, including but not limited to the implied warranties of merchantability and
fitness for a particular purpose, unless otherwise required under the mandatory
provisions of the law.

Limitation Of Liability

•Manufacturer shall not be liable for any loss of profits or indirect, special, incidental or consequential damages resulting from or arising out of or in connection with using of this product, whether or not manufacturer had been advised, knew or should have known of the possibility of such damages, including, but not limited to lost profits, interruption of business, cost of capital, cost of substitute facilities or product, or any downtime cost.

11

12