

TE720 Quick Start Guide

Dear Customer

Thank you for Purchasing the Outdoor LTE CPE. Have a wonderful experience with lightning speed downloads.

This device must be installed by professional installer.

For information LTE stands for “Long Term Evolution” and CPE stands for “Customer Premises Equipment”.

Before you Begin

Check the following items in this package:

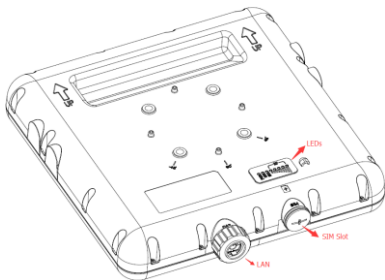
CPE Package:

Item	Quantity
LTE Outdoor CPE	1
AC/DC Adapter(Optional)	1
Installation kit	1
U shape bolt	4
Screws	6
Bolts	8
PoE connector(Optional)	1

Getting to know the CPE

Note:

The figures below are provided only for reference purposes. See the actual product for more details.

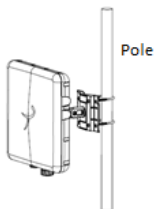


LED

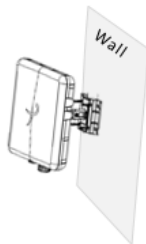
LED Indicator	Color	Status	Description
Signal	Blue	Level -5	$24 \leq \text{SINR}$
		Level -4	$16 \leq \text{SINR} < 24$
		Level -3	$12 \leq \text{SINR} < 16$
		Level -2	$8 \leq \text{SINR} < 12$
		Level -1	$1 \leq \text{SINR} < 8$
		Level 0-LED	
		Off	$\text{SINR} < 1$
PWR	Blue	ON	Device is Powered On
		Off	Device is Powered Off
ETH	Blue	ON	Ethernet connection is established.
		Off	Ethernet connection is not established
SIM	Blue	ON	SIM card is inserted/ detected
		Off	SIM card is not detected/Inserted

How to Install the CPE

CPE support both Wall mounting and Pole mounting, please refer to below pictures for overview.



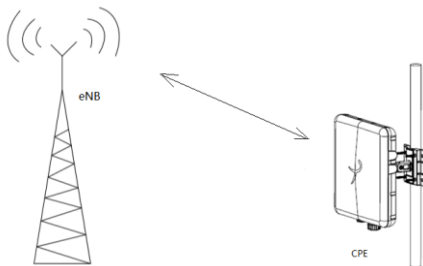
Pole Mounting



Wall Mounting

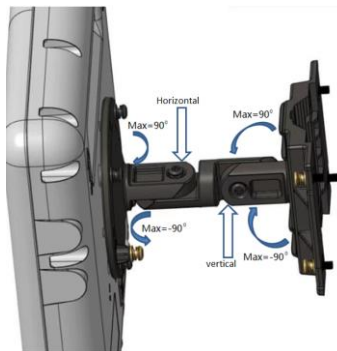
Step 1: Align CPE with eNB (Coarse Adjustment/Direction)

Let CPE front side face to eNB, like below pictures



Step 2: Select the best location and lockdown (Fine Adjustment/Direction, Degree)

Adjust Horizontal and Vertical degree of mounting kits, find a best signal (best location) and then lockdown, tighten the screws.

**How to find best signal (best location)**

1. You can find signal level information via Signal LEDs, Signal LEDs are on the rear side of CPE.

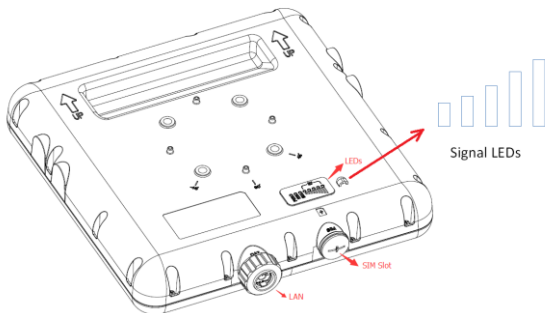
1 Signal Bar: Poor Signal

2 Signal Bar: Normal Signal

3 Signal Bar: Good Signal

4 Signal Bar: Very Good Signal

5 Signal Bar: Excellent Signal



2. You can find signal level information via CPE Website
 Power up CPE, and connect CPE with PC via Ethernet cable, you can find Signal level in CPE Website also.

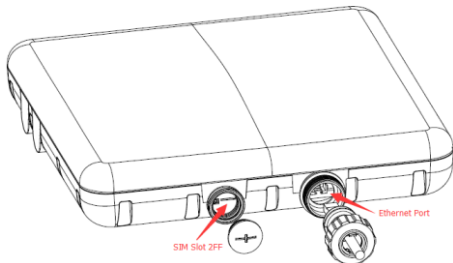
The screenshot displays the CPE12000U Pro website interface. The left sidebar shows connection status: Connected, RRC Status: RRC_CONNECTED, Signal Strength: (indicated by a bar chart icon), and SIM Card State: READY. The main content area is divided into sections: Network (IPv4 DNS: 192.168.1.122, IPv6 Address: N/A, IPv6 DNS: N/A), Radio Statistics (Tx Power: -44.0 dBm, RSSRP (dBm): -69.9, -74.3, 0.0, 0.0, RSSRQ (dB): -7.6, -7.6, 0.0, 0.0, SINR (dB): 30.9, 31.1, 0.0, 0.0, DL Earfcn: 53490, PCI: 4, CQI/RI: CWO-0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 7, CWI-0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 7), and Secondary cell Radio (Index: 1, RSSRP (dBm): -75.8, -75.3, 0.0, 0.0, RSSRQ (dB): -7.6, -7.6, 0.0, 0.0, SINR (dB): 31.2, 31.1, 0.0, 0.0, DL Earfcn: 53290, PCI: 1).

Connecting the CPE

Install the USIM card

This CPE is specially designed for the 4G LTE network. Please check that you have a valid USIM card from the service provider.

1. Open the USIM Card Slot lid.
2. Insert a valid USIM card into the USIM card slot.
3. Connect Ethernet cable.



4. Put the lid cover back.

Remove the USIM card

Open SIM Slot Lid cover and Push USIM card to eject it from the slot.

Connecting External Device(s) to the CPE

To use the Internet connection and configure the CPE settings, you must connect your CPE to a computer.

1. Insert the other end of the Ethernet cable to the port of the POE power supply (Port marked POE) to be kept inside the premises near the AC outlet.
2. Connect one end of another Ethernet cable to a Wireless Router or directly to a PC/Laptop and the other end to the port marked LAN on the POE Power Supply. For setting up Wireless router, please refer to the User Manual supplied with wireless router.
3. Plug the POE Power Supply to an electrical outlet using the AC cord supplied with POE power supply.
4. Connect LAN devices such as computer or switches to the LAN ports of the CPE by using good quality Ethernet cables or use Wi-Fi.

Accessing the Web based Utility

The web based utility of the CPE is a web browser based configuration interface that allows easy device set up, configuration and management through internet browser. For example: on a PC with Windows XP or higher version:

1. Connect the hardware of the CPE correctly.
2. Set the IP address of the connected computer and ensure that the IP address of the computer is in the same segment as that of CPE.

Note:

By default the IP address of the CPE is 192.168.254.251, the subnet mask is 255.255.255.0 and the user log in password is admin and password is admin. It is recommended that the IP address and DNS settings are obtained automatically.

3. Run internet explorer. Enter `http:// 192.168.254.251` . In the address bar and press enter.
4. Enter the correct user name and password in login window and login. After the password verification, the web based utility functions can be performed.
5. The HOME screen of the CPE will be displayed.

For more information

Refer to the User Manual on home screen of the GUI of the CPE.

FAQ:

The power indicator is not ON.

- Check if the POE Power Supply is plugged properly into AC socket.
- Check if the LED on the POE power supply is Green indicating it is correctly plugged in AC.
- Check if the power adapter meets the requirement and specification.
- Check if the Ethernet Cable used to carry power to CPE is a four pair cable.

Web Based Utility cannot be accessed

- Ensure that the CPE is powered on.
- Ensure that network cable between LAN port on POE power supply (or wireless router) and computer is properly connected.
- Ensure that IP address of the computer is correct.

Device cannot access the network

- Check if the SIM card is inserted properly.
- Check LTE network status from Web GUI and Minimum RSRP should be greater than -120 dBm for access to the network. Typically should be around -90 dBm.

Device cannot access the internet

- Check that Operator has provided internet access services.
- Check that IP address is automatically taken.
- Check that firewall rules are not blocking your internet service.

Throughput performance is not OK

- Ensure that there are not too many users under the same LTE Cell.
- Ensure the wireless environment is good.

- Check the value of SINR thru GUI. >10 dB is a good value for good throughput.