# Outdoor CPE
# Guide for installation and debugging

In order to get the best signal from eNB, please follow the under step to install and debug 4G CPE.

1、 Preparation before installation:

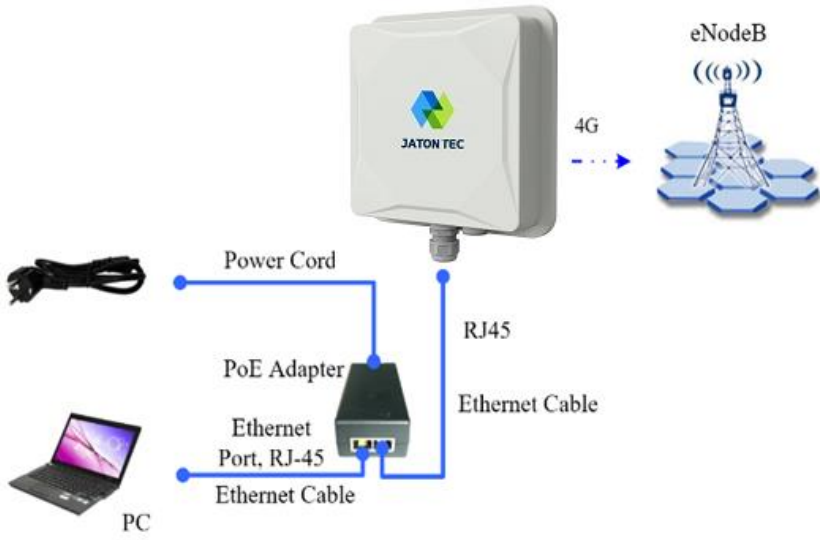
a) Please consult to Operator about the position of eNB.The CPE need to install close to the eNB, and also please ask for the horizontal angel of the transmit antenna and relevant information of eNB.

b) Please prepare handheld portable GPS and compass.

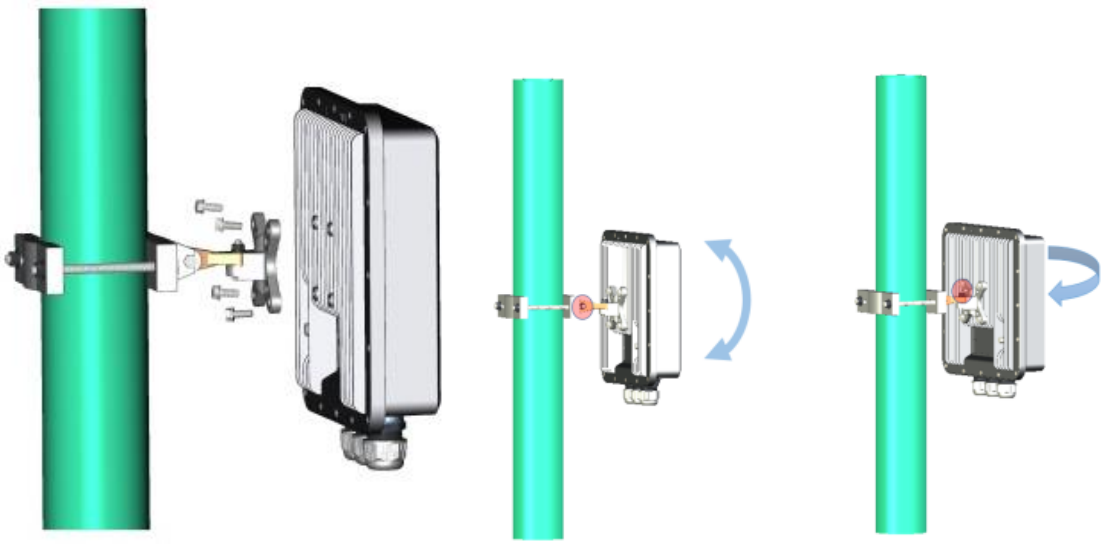
c) Please input the operator's SIM card to CPE before installation.

2、 Hardware's connection and installation:

a) Please refer to the following picture, connect all the devices as following.please make sure all are connected correctly



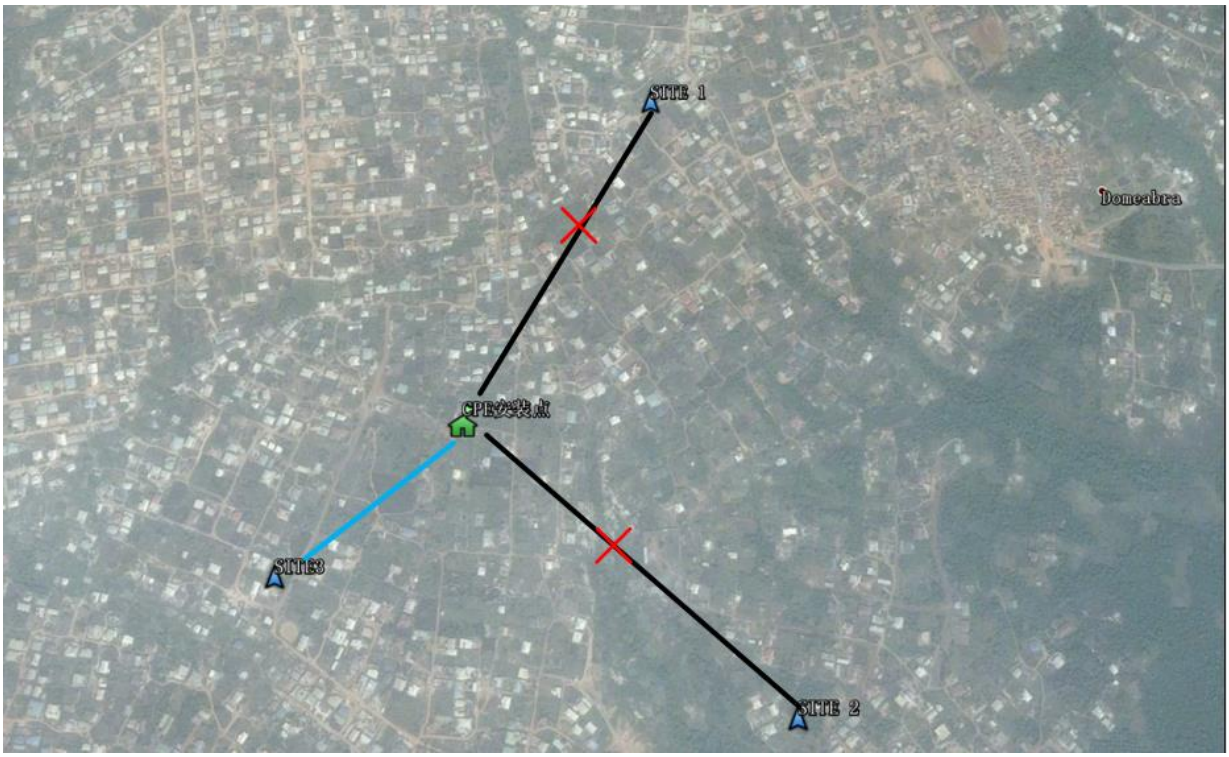

b) Please refer to the following picture to fix the CPE on the correct position. Don't totally deadlock the hoop if need to do some adjustment.



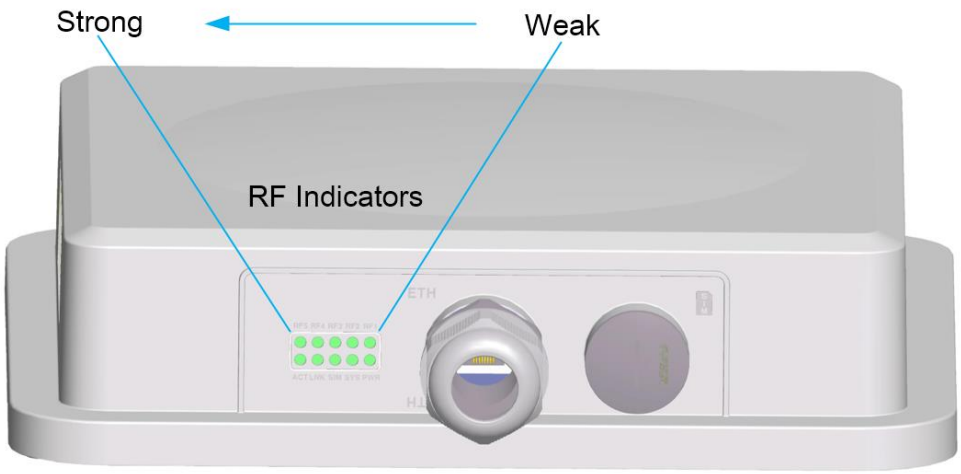
c) Make sure all device connected correctly and after confirm the electric is safe then connect the CPE to the power.

3、 Adjustment for the direction of CPE

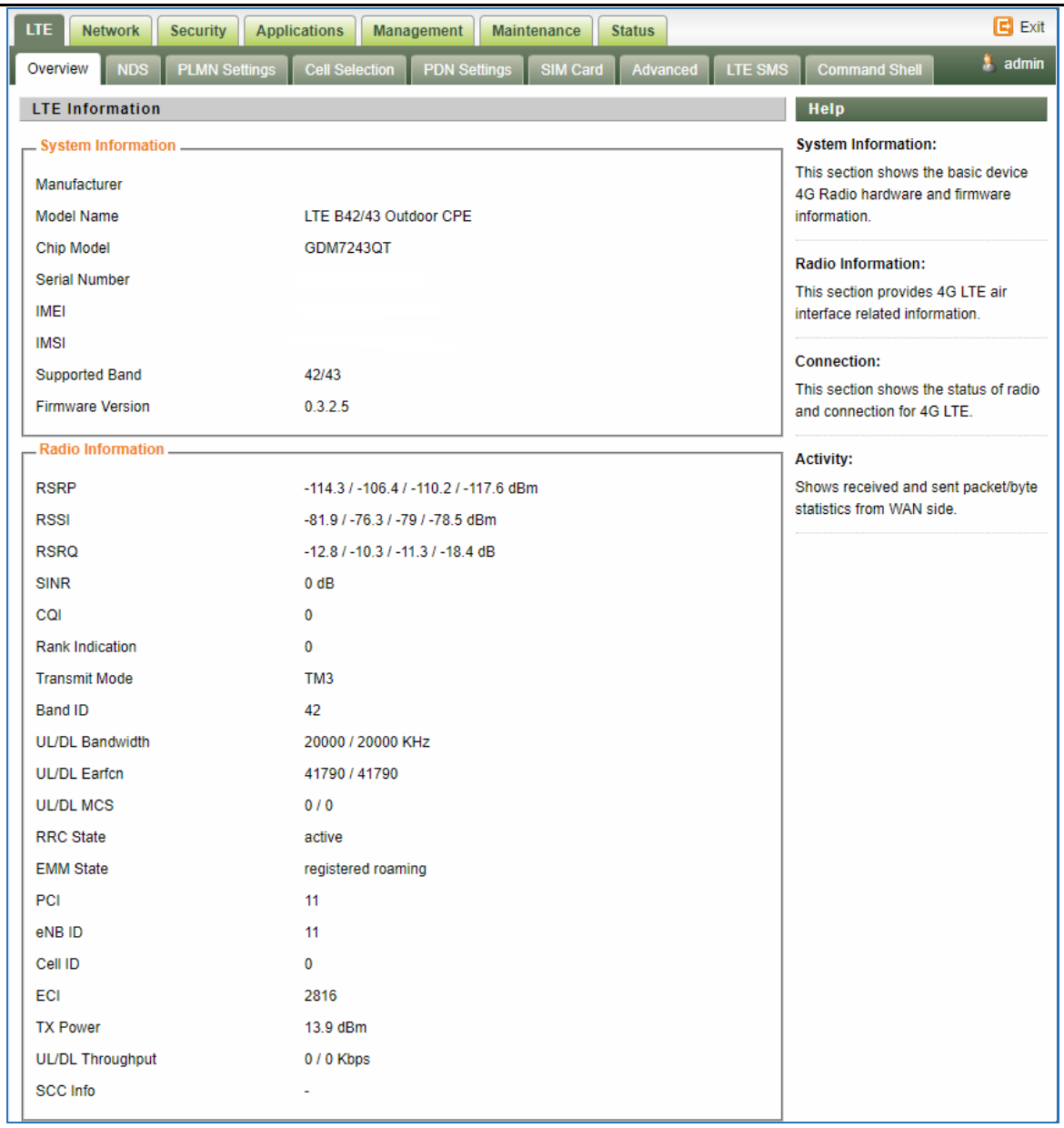
a) After confirm the installation position for CPE which is close to eNB, make the installation CPE's horizontal direction point to the nearest eNB through GPS and compass. refer to the following picture




b) After power to the CPE for 2 minutes, It can search the signal and connect to the network of operator. By the lights on bottom(more RF lights on ,the signal stronger),adjust the CPE's direction angel flatly(each horizontal angel by 15° as one point, each point, observe for 2 minutes),adjust the horizontal position until getting the best signal.




c) Visit the WEB management page on PC to check the current RSRP and SINR value.




d) Keeping the CPE vertical, observe the current data of CPE， at the same time, adjust the CPE's antenna around slightly. the ideal condition is antenna 0 and antenna 1's RSRP values gap not exceeding 8dBm,and the SINR value should stay above 5dB.

e) After checking the CPE's signal receipt is on best status, please fasten the hoop to make sure that any outside force will not change the height and direction of the CPE.

4、 Network interference factor

If after the above adjustment, the CPE can't get the best and high quality of connection with eNB, please contact with the operator network department to make sure no interference around the installation place. please troubleshoot with the engineer from operator.