

5G CPE

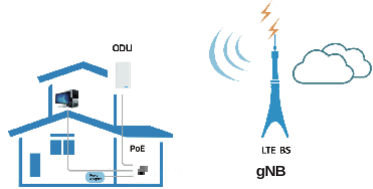
OC5SIN

Quick Start Guide ▶

Introduction

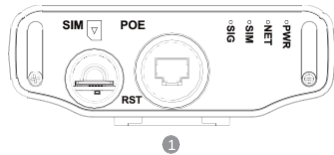
OC5SIN is an advanced LTE Advanced and 5G outdoor multi-service product solution specifically designed to meet integrated data needs for residential and enterprise users. The product supports advanced Gigabit networking functionalities. It enables wide service coverage and provides high speed data throughput and networking features to subscribers who require reliable, high performance broadband access.

End users can install it themselves.



Panel of device

· I/O panel of ODU



Packing list

Make sure you have everything you need to properly configure the device.

ODU	Power adapter	Power cable	Ethernet cable
Waterproof Ethernet cable grommet	SIM card slot cover	Body bracket	Wall mount bracket
One large clamp and one small clamp	M3 combined screws x5	Window mounting bracket	

How does it work

1. Connect the Power Adapter to PoE injector.
2. PoE injector provides the power to ODU via LAN cable.
3. PC connects LAN Cable to PoE, then PC can surf the Internet when ODU accesses the LTE network.

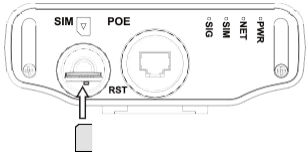
This quick installation guide shows you how to configure your ODU in order to access the Internet.

Configure hardware

Please make sure that you are familiar with all accident prevention and safety procedures necessary for working at height and with electricity before starting to install the device. DO NOT install the ODU during a lightning storm.

Insert a SIM card to the slot

Make sure the ODU is turned off before you insert your SIM card. It is recommended to Not to connect the PoE cable when you do this step. Otherwise, the SIM card may be damaged.



Mount the ODU

To connect the high speed Ethernet cable:

See the installation instructions to mount the ODU correctly.

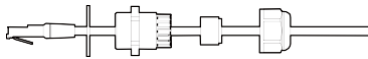
Step 1 High speed cable to thread through the cable glands.

Step 2 Connect the end of the high speed Ethernet cable to the PoE port of the ODU.

Step 3 Wiring the cable glands into ODU and seal tightly.

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

Header connection

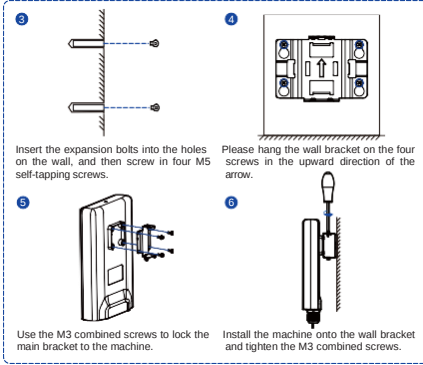
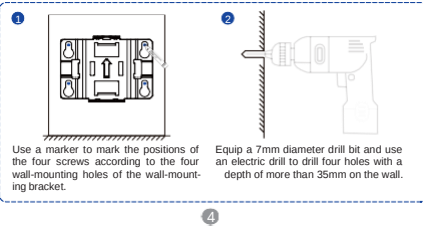


In orde to waterproof, separate the plugs and then separate through the cable in the sequence shown in the figure.

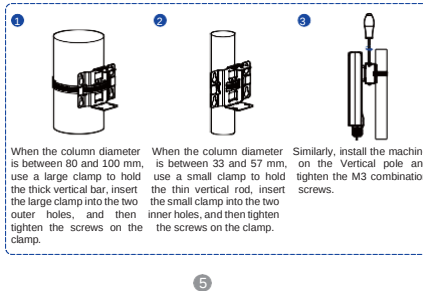
Mounting bracket

These are 4 ways to install the brackets as below figures.

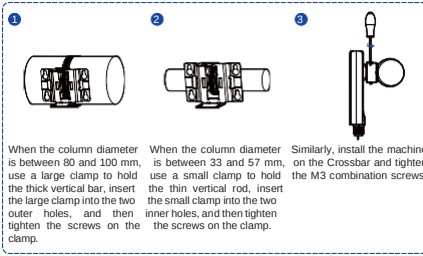
Wall Mounting :



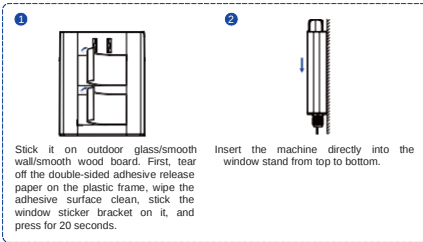
Vertical pole installation:



Crossbar installation:



Window sticker installation:



Choose location

The ODU can be mounted on a pole, mast, wall or on a smooth window using the supplied mounting bracket.

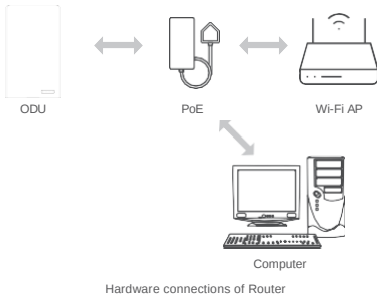
- Choose a mounting point that is sturdy enough to hold the ODU, even in high winds.
- When choosing a location to install the ODU, please note that the ODU's front panel should point towards your service provider's nearest base station. You do not need to be able to see the base station from the ODU's position. However, if you experience difficulties with signal reception, a Line of Sight (LoS) connection may produce better results.
- It is suggested that you transport the ODU to its intended installation location in its original protective package.

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 tilt 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. The most left Signal LED bar shows green is mean the signal is strong.

Connect the PoE

Place a CAT5e (or above) Ethernet cable (not included) from the location of your intended Router to the desired PC, Switch or Wi-Fi AP.

If you intend to use cable clamps or other methods to secure the cable, do not tighten them until you finish installing the Router and ODU.



Step 1 Connect the CAT5e (or above) Ethernet cable to PoE.

Do not connect a computer or switch directly to the PoE port (Power+Data out) to avoid any equipment damage.

- Step 2** Connect the power supply cable to the PoE. The POWER LED turns on a solid green once connected.
- Step 3** Connect the included Ethernet cable from the computer to one of the Router's Ethernet ports.

LED behavior

When setting up the Outdoor Unit, the LED will have the following behavior:

ODU LEDs Display		
	Green	Power on
	Off	Power off
	Always green	Internet available
	Off	Internet unavailable
	Green flashes per 0.5s	Searching network
	Green	SIM enable
	Off	SIM unable
	Always green	Signal strong
	Always yellow	Signal good
	Always red	Signal weak
	Blinking green and red	Firmware upgrade

Configure the CPE

Login to the website

Use a browser to access the management web page to configure and manage the CPE.

The following procedure describes how to use a computer running Windows 7 or above version and Internet Explorer to connect to the CPE webpage.

Step 1 Connect to the CPE correctly.

Step 2 Start Internet Explorer, type http://192.168.0.1 in the address bar, and press Enter.

Step 3 Enter the user name and password, and click Log In. (The user name and password are shown on the body tag at the back of the ODU.)

You can connect to the management web page after the password is verified.

Configuration of 5G

Step 1 Connect to the CPE correctly.

Step 2 Login the CPE .

Step 3 Choose Advanced Settings → Cellular Network.

Cellular Status

5G Status		
DL MCS		3
UL MCS		2
DL Frequency		3550.000MHz
UL Frequency		3550.000MHz
Band		N78
Bandwidth		100MHz
RSRP		-87dBm
RSSI		-87dBm
RSRQ		-5dB
SINR		24dB
PCI		121
Cell ID		N/A
MCC		460
MNC		99

The default setting is automatic connection and full band scanning, if you want to connect to the 5G/LTE network according to your needs, you can set the connection mode as manual, and simply scan a specific band.

FAQs

The power indicator does not turn on.

- Make sure that the power cable is connected to the PoE, and the CPE is connected to the right port of the PoE.
- Make sure that the power adapter and PoE are compatible with the CPE.

Fails to log in to the web management page.

- Make sure that the CPE is powered on.
 - Verify that the CPE is correctly connected to the computer through a network cable.
- If the problem persists, contact authorized local service suppliers.

The CPE fails to search for the 5G/LTE network.

- Check that the power adapter and PoE have connected to the CPE properly.
- Check that the CPE is placed in an open area that is far away from obstructions, such as concrete or wooden walls.
- Check that the CPE is placed far away from household electrical appliances that generate strong electromagnetic field, such as microwave ovens, refrigerators, and satellite dishes.

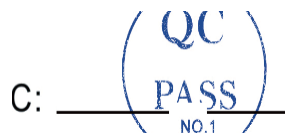
- If the problem persists, contact your Internet Service Provider.

The CPE power adapter has overheated

- The CPE is hot after being used for long time. Turn off the CPE when not in use.
- Check that the CPE is properly ventilated and protected from direct sunlight.

The parameters are restored to default values.

- If the CPE powers off unexpectedly while being configured, the parameters may be restored to the default settings.
- After configuring the parameters, download the configuration file to quickly restore the CPE to the desired settings.



Notice

Some features of the product and its accessories described herein rely on the software installed, capacities and settings of local network, and may not be activated or may be limited by local network operators or network service providers, thus the descriptions herein may not exactly match the product or its accessories you purchase.

We reserve the right to change or modify any information or specifications contained in this manual without prior notice or obligation.

FCC Regulations:

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.

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 to 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.

Changes or modifications not expressly approved by the manufacturer could void both the product warranty and 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 45 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.