

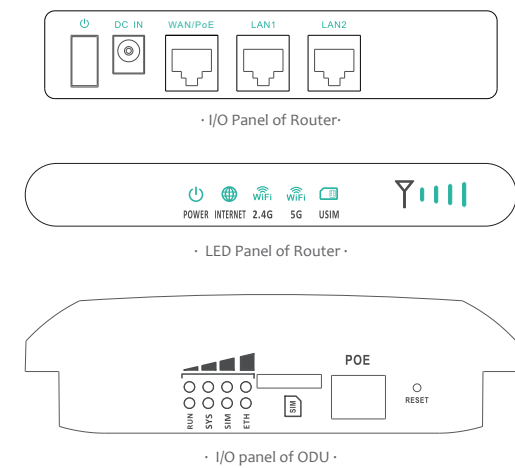
LTE CPE MF256 Series

Quick Start Guide ►

About this document

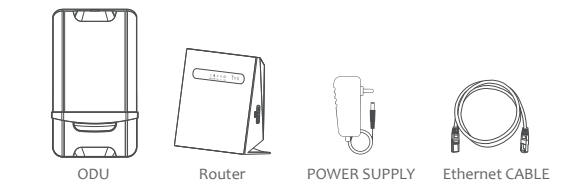
This manual will serve as a Quick Start Guide to the LTE Device Model MF256 series. It includes two parts, an indoor unit and an outdoor unit. In this paper, the indoor unit will be replaced by Router, and the outdoor unit will be replaced by ODU.

Panel of device

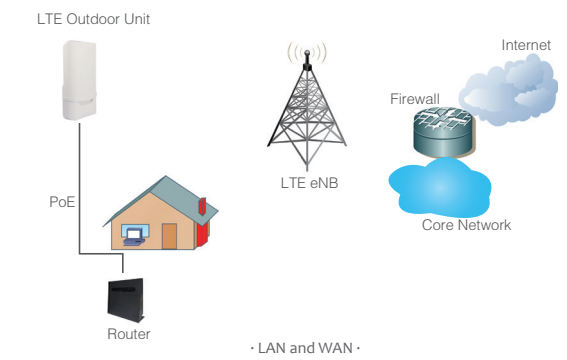


What do you need

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



How does it work



1. The ODU connects to the LTE network.
2. The ODU is connected to the Router, operated with Router to provide Internet services.
3. The ODU is power supplied by the Router with PoE.
4. The Router functions as a LAN & Wi-Fi gateway.

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

Configure hardware

CAUTION

Before you begin, make sure that you are familiar with all accident prevention and safety procedures necessary for working at height and with electricity. DO NOT install the ODU during a lightning storm.

Choose Location

The ODU can be mounted on an antenna pole or mast or on a wall using the supplied mounting bracket.

- Choose a mounting point that is sturdy enough to hold the ODU, even during high winds.
- When choosing a location to install the ODU, remember 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 packaging.

Insert a SIM Card to the Slot

CAUTION

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

Step 1 Remove the cover .



Step 2 Insert your SIM card.



Step 3 Insert the cable



Step 4 Align and put the cover to protect it in the ODU.



Connect the Router to ODU

Place a CAT5e Ethernet cable from the location of your intended Router to the desired ODU location.

The maximum distance of the CAT5e cable is limited to 100 meters. If you use cable extenders to cover a greater distance, signal attenuation may occur.

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

To connect the CAT5e Ethernet cable:

- Step 1 Open the ODU cover by taking the screws from the housing.
- Step 2 Connect the end of the CAT5e Ethernet cable to the PoE port of the ODU.
- Step 3 Place the cover on the ODU housing and turn the screw.

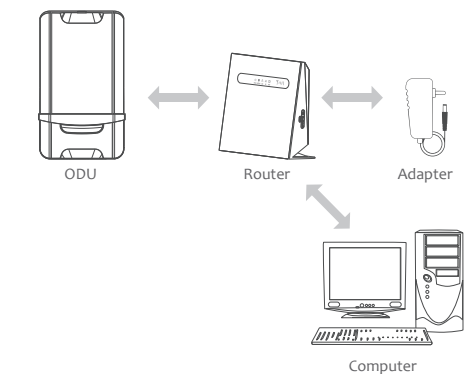
NOTE: Make sure you have inserted the SIM card into the ODU.

Connect the Router

Place a CAT5e Ethernet cable (not included) from the location of your intended Router to the desired ODU location.

The maximum distance of the CAT5e cable is limited to 100 meters. If you use cable extenders to cover a greater distance, signal attenuation may occur.

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



Step 1 Connect the CAT5e Ethernet cable to the Router WAN/PoE port.

CAUTION

Do not connect a computer or switch directly to the PoE port of the Router due to high PoE power.

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

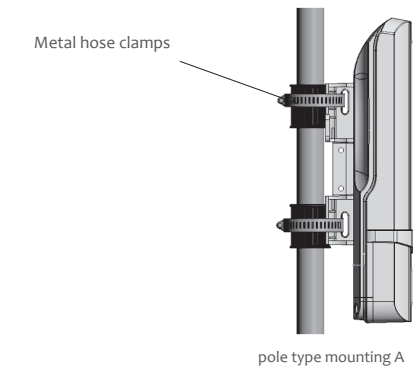
Mount the ODU

See the installation instructions to mount the ODU correctly.

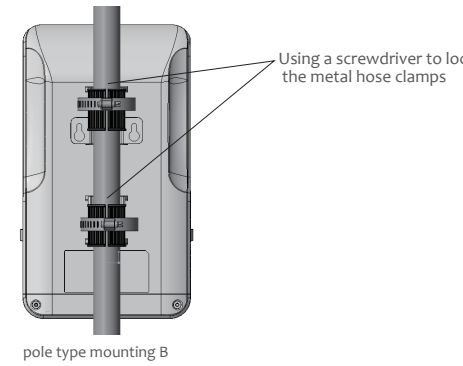
Pole mounting ►

Pole diameter type: The mounting pole diameter is from $\Phi 25\text{mm}$ to $\Phi 45\text{mm}$; If the pole diameter is less than $\Phi 30\text{mm}$, you need to add a C-type ring to make sure the device can be mounted on the pole. The specific mounting steps are as follows:

1. Using a screwdriver to loosen the metal hose clamps, through the terminal equipment mounting hole, the metal hose clamps and the pole is fixed;



2. Using a screwdriver to lock the metal hose clamps, fixed terminal equipment. Adjust the terminal equipment to align the direction of the base station for the best effect.



Note: terminal equipment cable outlet must be installed downward direction.

3. If the diameter of pole is between $\Phi 25\text{mm}$ and $\Phi 30\text{mm}$, it's needed to use the rubber C-type rings to add the diameter of the pole.



LED Behavior

When set up the Outdoor Unit, the LEDs of Router will have the following behavior.

State	Description	LED Behavior	LED illustration
Signal Strength weak	Signal strength is weak	Only first signal LED steady on, the other three off	
Signal Strength medium	Signal strength is medium	The first two signal LEDs steady on, the last two off	
Signal Strength good	Signal strength is good	The first three signal LEDs steady on, the last one off	
Signal Strength strong	Signal strength is strong	All signal LEDs steady on	
LTE Scanning	The CPE is searching for a frequency channel or is performing network entry	All signal LEDs blinking simultaneously	
LAN Connected	The CPE has a successful connection with a device on the LAN	The ETH LED On	
LAN Disconnected	The CPE does not have an Ethernet connection with the LAN	The ETH LED Off	
SIM card abnormal	The SIM Card in abnormal state	The SIM LED Blinking	
No SIM card	The SIM Card is Undetected	The SIM LED Off	
SIM card normal	The SIM Card is ready	The SIM LED On	
SYS linked	The CPE attached to LTE network	The SYS LED On	
SYS no link	The CPE not attached to LTE network	The SYS LED Off	
CPE Operation	The CPE is operating properly	The RUN LED Blinking	
Firmware Upgrading	The CPE is upgrading the firmware	All signal LEDs scrolling blink one by one	

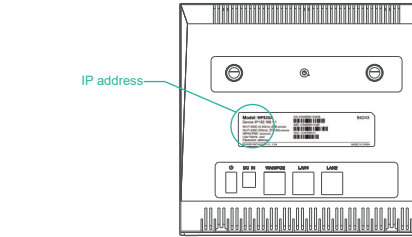
Configure the CPE

Login to the Management page

Using 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 and Internet Explorer to connect to the CPE webpage.

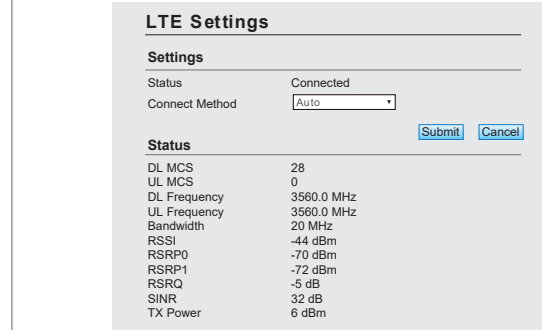
Step 1 Connect the CPE correctly.
Step 2 Start Internet Explorer, go to <http://192.168.8.1> in the address bar, and press Enter.



Step 3 Enter the user name and password, and click Log In. You can connect to the management web page after the password is verified.

Configuration of LTE

Step 1 Connect the CPE correctly.
Step 2 Enter the management website.
Step 3 Choose Settings → Network → LTE Settings.
Step 4 Set the connection mode and scan mode.

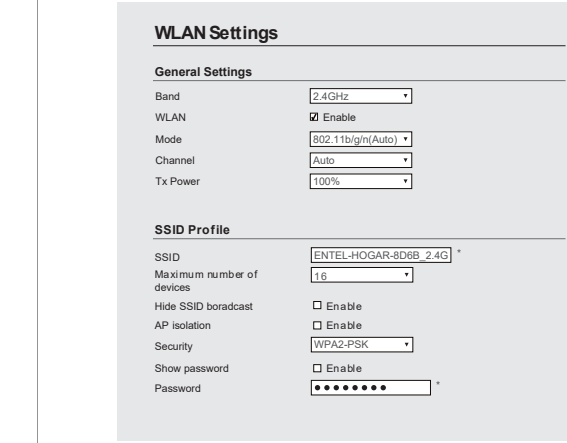


The default setting is automatically connection and full band scanning, if you want to connect the LTE network according to your needs, you can set the connection mode as manual, and simply scan a specified band.

Configuration Wi-Fi

Step 1 Connect the CPE correctly.
Step 2 Enter the management website.
Step 3 Choose Settings → Wi-Fi → WLAN Settings.
Step 4 In the General Settings area, set Wi-Fi Enable or enable Wi-Fi with the Wi-Fi button.
Step 5 In the Setting area, change the SSID, such as: "LTE-Router"

Step 6 To ensure data security, it is recommended that you change the Wi-Fi password by default.
Step 7 Click Submit to save the settings.



Frequently Asked Questions

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 started.
· 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 LTE network.

· Check that the power adapter and PoE have 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 authorized local service suppliers.

The CPE power adapter has overheated

· The CPE is reheated after being used for long time. Therefore, you must turn off the CPE when not you are using.
· 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.
ZTE reserves the right to change or modify any information or specifications contained in this manual without prior notice or obligation.

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.