



Quick User Guide

LTE CPE

OA-335/OA-336

*The figures provided in this document are just for reference only. Please prevail in kind.

About This Document

The document will serve as a quick start guide for LTE OA series device. The OA series is a 4G LTE outdoor unit. In this document, the Outdoor gateway will be replaced by the ODU.

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Note: Because of the product version upgrade or other reasons, the content of the document will not be updated on a regular basis. Unless otherwise agreed, this document is used only as a guide, all statements, information and advice in this document do not constitute any express or implied guarantee.

Set Up The Hardware

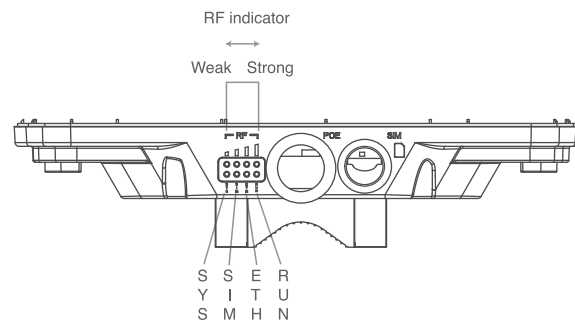
Ensure that you have everything required to properly set up your device.

ODU Unit	PoE Injector or WR-1200	Power Adapter	Cap x 2 & Strap x 2	Ethernet Cable

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Build Hardware Platform

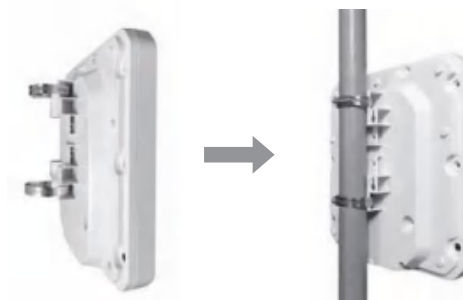
To obtain the best radio signal level and connection quality, the CPE antenna should be aimed towards the best eNB or BS directly. To search for the best eNB direction, the user can rotate the CPE slowly and tilt CPE slightly to find the best signal direction. The CPE radio signal strength level can be observed from the RF LEDs mounted on the lower panel as shown below. The more LEDs on, the better the signal strength.



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Installing Outdoor Unit

Mounting kit :



Note: Metal strap's diameter should be 33-57mm.

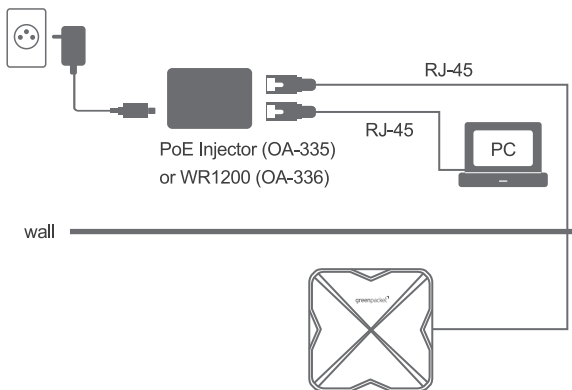
Header Installation :



Note: LAN Cable's diameter should be 5-10mm.

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Wiring Diagram



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

Step 1 Connect the CAT. 5e Ethernet cable between ODU and the "Power + Data out" port of PoE, or through WAN port on the WR-1200.

Step 2 Connect the included Ethernet cable from the computer to Data in port of the POE, or through LAN ports on the WR-1200.

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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 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	

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IDU LED BEHAVIOR

Indicator	Status	Description
Power	Steady on	Power on
	Off	No Power Supply
Internet	Steady on	Network available
	Off	Network unavailable
	Blinking (500ms interval)	Data transmission
2.4G Wi-Fi	Steady on	2.4G Wi-Fi available
	Blinking (500ms interval)	Data transmission
	Blinking (1000ms interval)	Setting up WPS connection
5G Wi-Fi	Off	2.4G Wi-Fi unavailable
	Steady on	5G Wi-Fi available
	Blinking (500ms interval)	Data transmission
USIM	Blinking (1000ms interval)	Setting up WPS connection
	Off	5G Wi-Fi available
	Steady on	SIM Ready
TEL	Steady on	SIM Ready
	Off	No SIM
	Blinking (1sec interval)	PIN lock/PUK lock/SIM lock
Signal	Steady on	Registered
	Blinking (500ms interval)	Connection has been established and is in a state with hook or ringing
	Off	Unregistered
Signal	Steady on	Display the current LTE network signal, the stronger signal the more bars on
	Off	No Signal
	Blinking (1sec interval)	Searching network of LTE
	Blinking one by one	Firmware upgrade

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Use PC to Configure the ODU

When Outdoor CPE device being booted up properly, refer to User Guide to configure the ODU. After the ODU successfully connects to Base Station, service personnel can fine tune the azimuth and elevation of ODU to get optimum RSSI value.

Access the Web Management Page

The web-based configuration utility can be used for initial device installation, parameter configuration, and function management through the browser. Ensure that the device is connected to the computer. Follow these steps to log in to the web management page:

1. Open the browser, enter <http://192.168.0.1> or <http://192.168.1.1> in the address box, and login Username and Password.

Default IP address:
192.168.0.1 (OA-335)
or **192.168.1.1 (OA-336)**

Username: **admin** ←

Password: **admin** ←



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2. Once login, the overview will be displayed, and you can have a status overview on device activity.



Note:

1. If the device operates in routing mode, it is recommended you automatically obtain the IP address and DNS server address.
2. The Username and Password to the device may vary depending on your LTE service providers.



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

Note: SINR threshold parameters is ≥ 10 dB. More Information of the webui, Refer to the User Guide.

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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 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.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Before Installing the Outdoor Gateway

It is important to comply with the precautions listed below before installing.

- It must be installed by qualified service personnel who are well-trained in the correct procedures for installing the equipment.
- Avoid installing or working on equipment in adverse weather conditions.
- Do not disassemble the product. Warranty void if seal is broken.
- Please install the device underneath the eaves of house, or the eaves of equipment room on rooftop.
- Do not install the device on the lightning rod pole. A random lightning could easily cause fatal damage to the device.
- Ensure that the device is within the shielding angle of the lightning rod.
- Lightning / Lightning induction / EMD damage is NOT covered under warranty.

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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.

Basic Troubleshooting

Q1: For No Internet

Ans: Check PoE LED if lit, check if black LAN cable is plug to ODU.

Q2: For No Wifi connection

Ans: Check white LAN cable is plug to LAN of the PoE injector and the other end to Wifi router (blue port color). PC must be connector to wifi router (yellow port color)

Q3: LED (on the bottom side) does not light up

Ans: Make sure the ODU is correctly connected to PoE injector - Connect RJ-45 port (marked as ODU) of PoE injector to ODU's RJ-45 port by using Ethernet cable.

Q4: Unable to get access to the "Info Page"

Ans:

- Power supply (ODU to PoE injector and power adapter) is correctly connected.
- Please enable the Laptop PC to automatically obtain IP address.
- IP address is correct? Default IP address is **http://192.168.0.1** or **http://192.168.1.1**

Note: Refer to Wifi router manual to configure Wifi, this is supplied separately.

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Warranty

Hardware warranty is for one year (12 months) from the date of purchase. Customer's unit and his accessories under normal use for warranty period is free from error, improper or inferior workmanship, material, and design.

This Warranty does not cover damage resulting from:

1. Defects and damages due to the equipment being used other than its normal and customary manner.
2. An unauthorized disassembly, repair, alteration or modifications being carried out, misuse, abuse, negligence or accident howsoever caused.
3. Defects or damage arising from improper testing, operation, maintenance, installation, or any alteration or modification.
4. Use other than in accordance with the user manual, rough handling, exposure to extreme thermal or environmental conditions or a rapid change in such conditions, corrosion, oxidation, unauthorized modifications or connections, unauthorized opening or repair, repair by use of unauthorized spare parts, accidents, forces of nature, or other actions beyond the reasonable control of GP.

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