## LTE CPE Quick installation Guide



# WLTMS-110\_384041 Connection Guide

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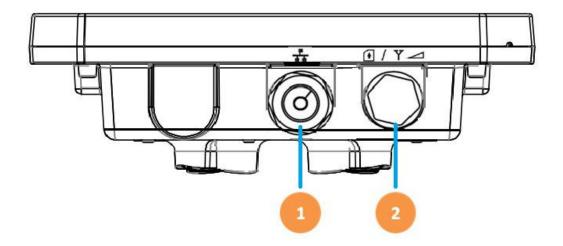
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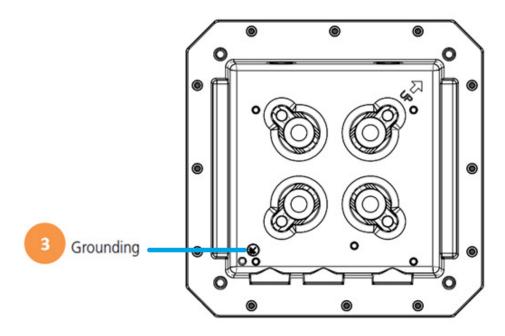
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## Connectors

- 1. One RJ-45 connector for connecting to the PoE adaptor.
- 2. LED indicator inside and SIM card slot for inserting SIM card.
- 3. A grounding screw on the rear panel.



The Grounding screw (marked  $\overline{\mathbf{T}}$  ) is located on the rear panel of the ODU.



## LED Indicators \_ODU

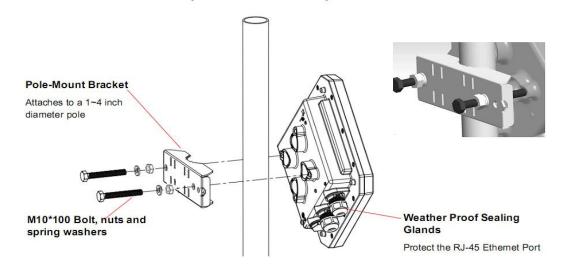
LED name	Location	Color	LED Behavior	Status Indication
LED List	•••			
MAIN power	•00	Blue	ON	Power On
	000		OFF	Power Off
Ethernet status	0 <b>0</b> 000	Yellow	Steady ON	Ethernet Connected
			Blinking	Data Transmission
			OFF	No Ethernet action
SIM status	00 <b>●</b> 000	Green	Steady ON	SIM Detected
			Blinking when On-hook	PUK / PIN Code
			OFF	No SIM Detected
LTE Status LED : Link Status			When CPE is power on, each LED indicates each link status	
LTE 1	000 •00	Red	Steady ON	CINR < 8dB
LTE 2	000 ••0	Red/ Yellow	Steady ON	8dB < CINR < 15dB
LTE 3		Red/ Yellow/ Green	Steady ON	15dB < CINR

## Installing LTE outdoor CPE

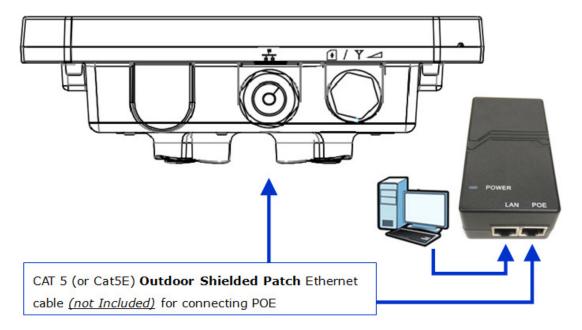
- Selecting a Location: LTE Outdoor CPE should be pole-mounted outdoors and aligned so its antenna faces the nearest LTE eNB.
   When selecting a suitable location for the unit, consider these quidelines:
  - Place LTE Outdoor CPE as high as possible to achieve the best possible link quality.
  - Place the LTE Outdoor CPE away from power and telephone lines.
  - Avoid placing LTE Outdoor CPE too close to any metallic reflective surfaces.
  - Be sure to ground LTE Outdoor CPE with an appropriate grounding wire (not included) by attaching it to the grounding screw on the unit and to a good ground connection.
- Mounting the ODU: Mount LTE Outdoor CPE on a 1"-4" pole using the supplied kit, or the optional tilt accessory.

## Using the clamp

- 1. Thread the M10\*100mm bolt through a spring washer, flat washer and the bracket holes.
- 2. With the connector facing downward, attaché LTE Outdoor CPE to a 1"-4" pole.
- 3. Attach the bracket to the other side of the pole.
- 4. Thread the M10\*100mm bolts through both holes on either side, and tighten the nuts.



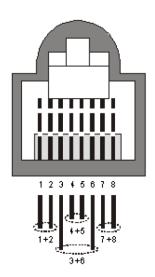
## **Connecting the Cables**



- Outdoor Connection: Connect a grounding cable between the Ground terminal of the LTE outdoor CPE and a good ground connection.
- Preparing and connecting the cable: Use only UTP-FTP
   4x2x24AWG CAT. 5E outdoor cable from an approved
   manufacturer. The cable provides pin-to-pin connection on both
   ends.
  - **1. Prepare the cable:** Use a crimp too for RJ-45 connectors to prepare the wires. Insert them into the appropriate pins and use the tool to crimp the connector. Make sure to do the following:
    - Remove as small a length as possible of the external jacket.
       Verify that the external jacket is well inside the sealing cover when connected to the unit, to ensure good sealing.
    - Pull back the shield drain wire before inserting the cable into the RJ-45 connector, to ensure a good connection with the connector's shield after crimping.

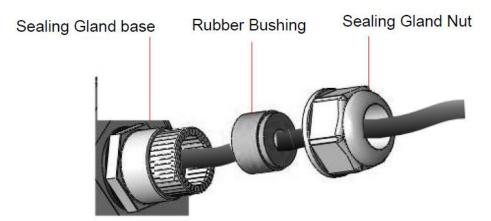
The following figure shows the required wire pair connections. The color codes used in standard cables supplied by the manufacturer are as listed in the table.

Wire color	Pin
Blue	1
Blue/white	2
Orange	3
Orange/white	6
Brown	4
Brown/white	5
Green	7
Green/white	8



#### 2. Connect the cable

- Remove the sealing cable gland plug from the gland nut.
- Open the sealing gland nut and remove it. Don not disassembles the gland base from the bracket.
- Insert the cable into the sealing gland base and connect it to the RJ-45 connector at the bottom of the CPE. Make sure the connector is completely inserted and tightened.
- Insert the rubber bushing on the cable into the gland base.



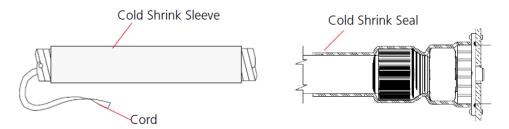
 Tighten the gland nut. Use the dedicated tool for fastening the sealing glands.

## 3. Seal the connector

- Attach the mastic tape (Scotchfil<sup>™</sup> Electrical Insulation Putty)
   and wrap it around the connector butting up against the
   connector. Do not over stretch.
- · Squeeze to tighten the mastic sealer. Make sure there are no

air bubbles.

 Slide the cold shrink sleeve on top of the connector. Make sure that the sleeve covers both cable connector and unit connector.



· Pull the cord slowly to shrink the sleeve.

#### Indoor Connection

- 1. It is assumed that the RJ-45 is already connected to the LTE outdoor CPE. Assemble an RJ-45 connector with a protective cover on the other end of the LTE outdoor CPE cable.
- Connect the other end of the cable from ODU to the PoE adaptor which labeled "POE".
- 3. Connect RJ45 cable from PoE adaptor which label "LAN" to a PC/NB/Hub/Switch.

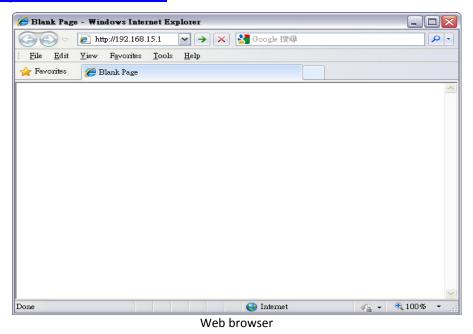


## Web Interface

Please follow the steps below to configure your device through the web interface:

**Step1:** Open the Web browser (Internet Explorer) and enter the default IP address of the ODU CPE, which is :

http://192.168.15.1



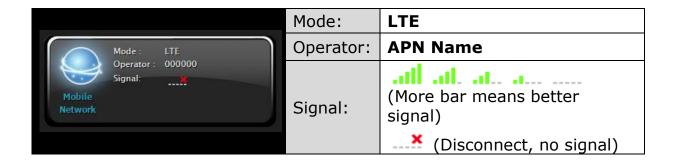
**Step2:** Enter ODU administrator login username/password to access the web management interface. The default username/password is **administrator/administrator.** 



**Step3:** The page shown here gets displayed in your browser after login; you can now configure the device settings.



GUI Interface



#### **Federal Communication Commission Interference Statement**

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 23 cm between the radiator & your body.

## Professional installation instruction

Please be advised that due to the unique function supplied by this product, the device is intended for use with our interactive entertainment software and licensed third-party only. The product will be distributed through controlled distribution channel and installed by trained professional and will not be sold directly to the general public through retail store.

#### 1. Installation personal

This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

#### 2. Installation location

The product shall be installed at a location where the radiating antenna can be kept 23cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.

#### 3. External antenna

Use only the antennas which have been approved by the applicant. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC limit and is prohibited.

## 4. Installation procedure

Please refer to user's manual for the detail.

#### 5. Warning

Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.

## Instructions d'installation professionnelle

Veuillez noter que l'appareil etant dedie a une fonction unique, il doit etre utilise avec notre logiciel proprietaire de divertissement interactif. Ce produit sera propose par un reseau de distribution controle et installe par des professionels; il ne sera pas propose au grand public par le reseau de la grande distribution.

1. Installation

Ce produit est destine a un usage specifique et doit etre installe par un personnel qualifie maitrisant les radiofrequences et les regles s'y rapportant. L'installation et les reglages ne doivent pas etre modifies par l'utilisateur final.

- 2. Emplacement d'installation
  - En usage normal, afin de respecter les exigences reglementaires concernant l'exposition aux radiofrequences, ce produit doit etre installe de facon a respecter une distance de 23cm entre l'antenne emettrice et les personnes.
- 3. Antenn externe.

Utiliser uniiquement les antennes approuvees par le fabricant. L'utilisation d'autres antennes peut conduire a un niveau de rayonnement essentiel ou non essentiel depassant les niveaux limites definis par FCC, ce qui est interdit.

- 4. Procedure d'installation Consulter le manuel d'utilisation.
- 5. Avertissement

Choisir avec soin la position d'installation et s'assurer que la puissance de sortie ne depasse pas les limites en vigueur. La violation de cette regle peut conduire a de serieuses penalites federales.