



Quick Start Guide

BEC 6900

4G/LTE Outdoor Router



❖ PLEASE READ THE QUICK START GUIDE AND FOLLOW THE STEPS CAREFULLY. THIS QUICK START GUIDE WILL HELP YOU INSTALL THE DEVICE PROPERLY AND AVOID IMPROPER USAGE. IF YOU NEED MORE INFORMATION ON THIS SOFTWARE CONFIGURATION, PLEASE REFER TO THE USER MANUAL.

❖ INDUSTRIAL SIM IS RECOMMEND!

Package Contents

- ✓ RidgeWave 6900 4G/LTE Outdoor Router
- ✓ M25 Cable Gland
- ✓ This Quick Installation Guide
- ✓ Outdoor LAN Cable
- ✓ Gigabit Power-over-Ethernet (PoE) Injector
- ✓ Grounding Wire
- ✓ Mounting Kit

LTE Outdoor Router



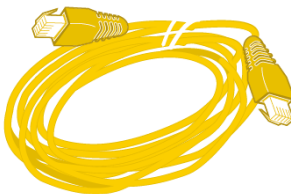
M25 Cable Gland



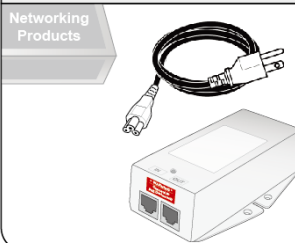
Quick Start Guide
(This document)



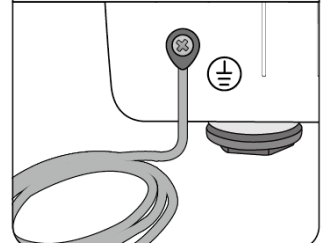
25ft Outdoor LAN Cable



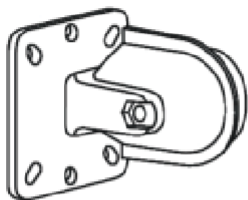
Gigabit PoE Injector



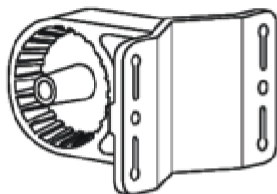
Grounding Wire



Mounting Kit Package Contents



Articulation Pole x 1



T-formed Bracket x 1



W-Bar x 1



Stainless Tie
Back Straps x 2
(Optional)



Nut x 1



M8x80
Screw Bolts x 2



M8x90
Screw Bolts x 1



M6x16
Screw x 4



Washer x 4



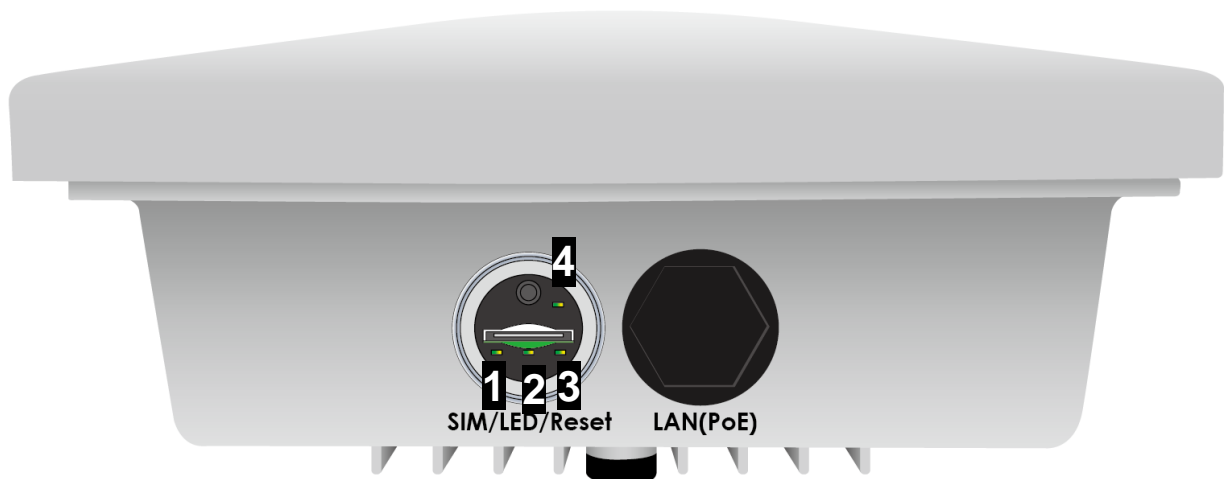
Spring Washer
x 4



Screw x 4 &
Wood/Gyprock Plug x 4



Hardware Overview



CONNECTORS	DESCRIPTION
SIM / LED / Reset	Insert the SIM card into the SIM slot. Press the reset button to reset device or restore to factory default settings
Gigabit LAN(PoE)	Connect it with the supplied PoE injector, 802.1at compliant, using an Ethernet cable.

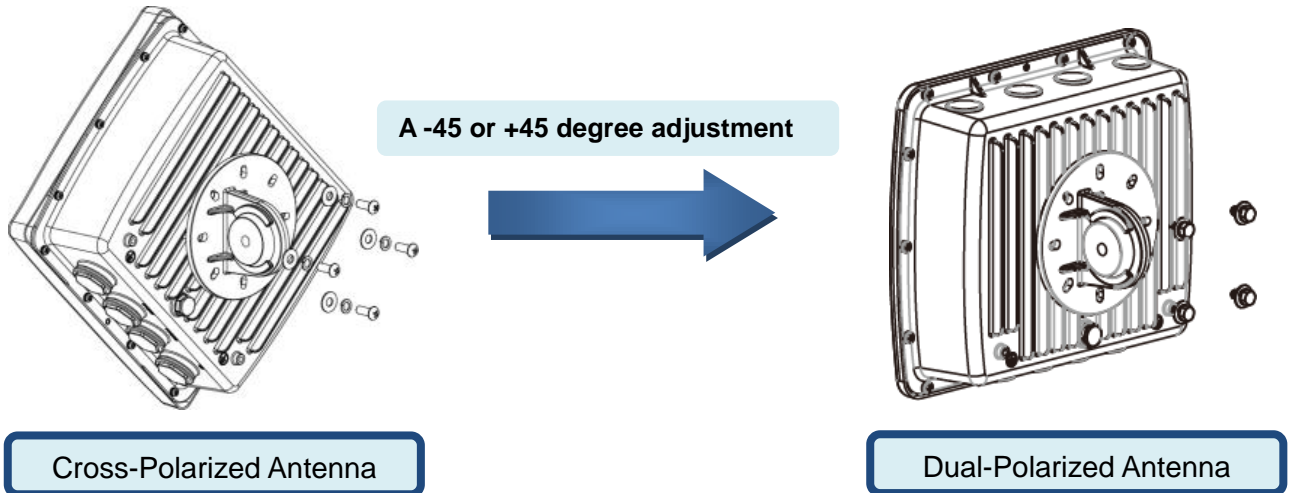
LED Description:

LED	STATUS	DESCRIPTION
1. Power	Orange	System is either in initial startup phase or has boot failure
	Green	System is up and ready
	Off	No input power
2. LAN(PoE)	Orange	Transmission speed is at 10/100Mbps
	Green	Transmission speed is at Gigabit speed (1000Mbps)
	Blinking	Data being transmitted/received
	Off	No device is being connected
3. Internet	Orange	IP request failed or System is in initial booting phase
	Green	IP connected and traffic is passing thru the device
4. 3G/4G-LTE (Received Signal Strength Indicator)	Green	RSSI greater than -69 dBm. Excellent signal condition
	Green Flashing quickly	RSSI from -81 to -69 dBm. Good signal condition
	Orange Flashing quickly	RSSI from -99 to -81 dBm. Fair signal condition
	Orange Flashing slowly	RSSI less than -99 dBm. Poor signal condition
	Orange	No signal. 4G_LTE module is still in connected mode
	Off	No LTE module or LTE module fails

Mounting Kit Installation

1. Attach the Articulation Pole to the Enclosure

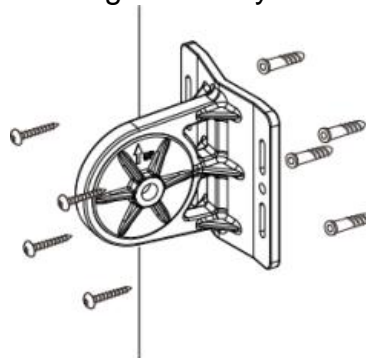
1. Attach the articulation pole to the back of the RidgeWave 6900 using M6*16 screws and washers.



2. Wall or Pole Mounting

2.1 Mounting on Wall

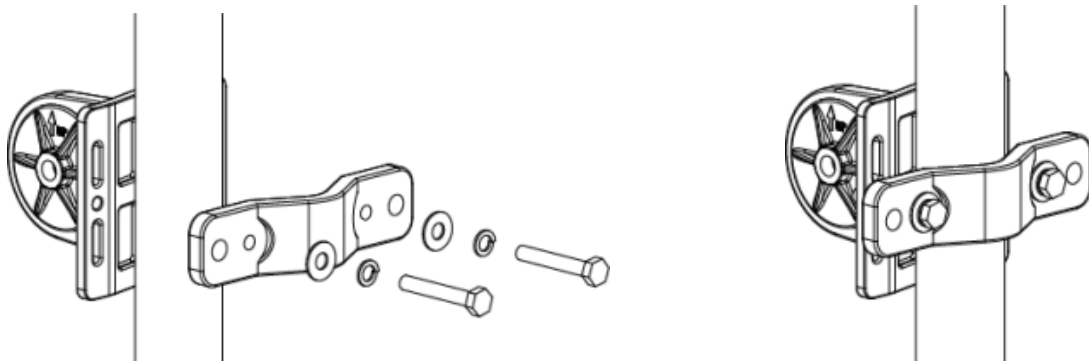
Fix the T-formed Bracket to the wall using wood/ drywall screws.



2.2 Mounting on a Pole

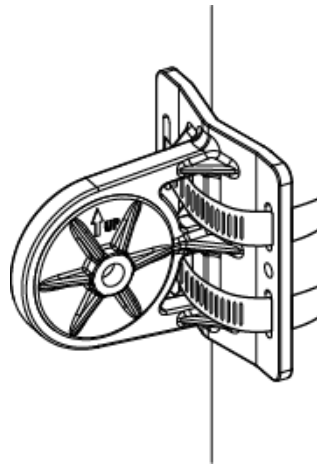
2.2.1a Mounting for pole smaller than 1.5" (38mm)

Attach the T-formed Bracket and the W-bar to the pole then use M6x60 bolts, spring washer and washer to fix the mounting kit onto the pole.



2.2.1b Mounting for pole larger than 1.5" (38mm)

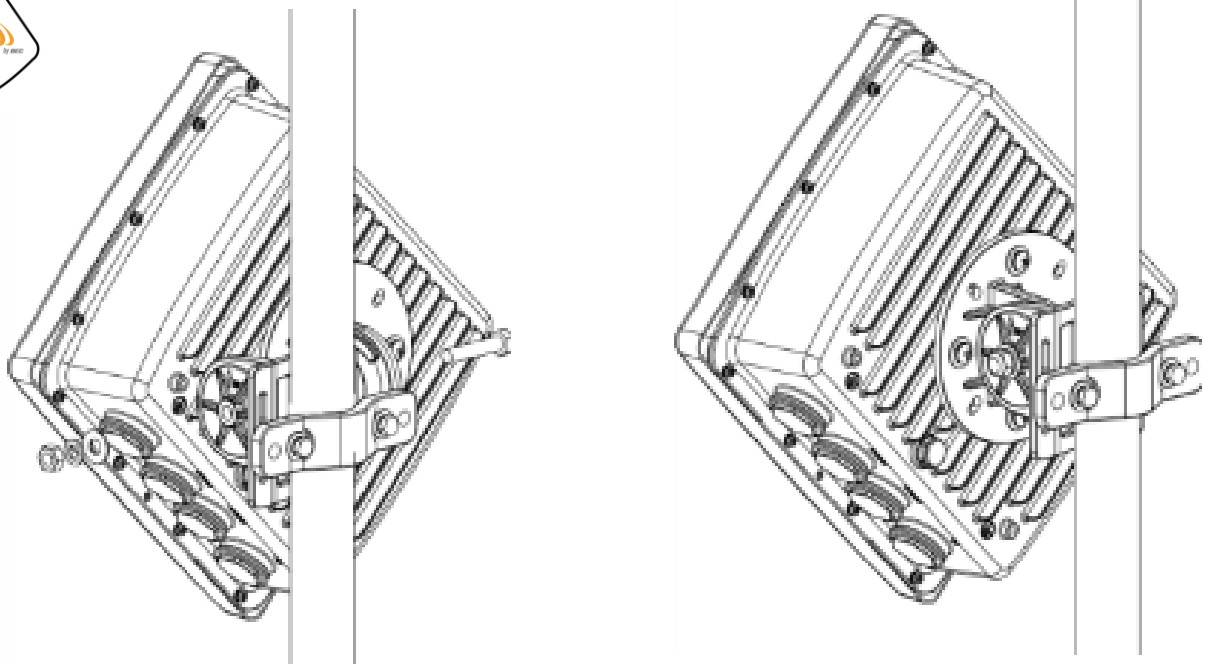
Fix the T-formed Bracket to the pole by using the stainless hose clamp.



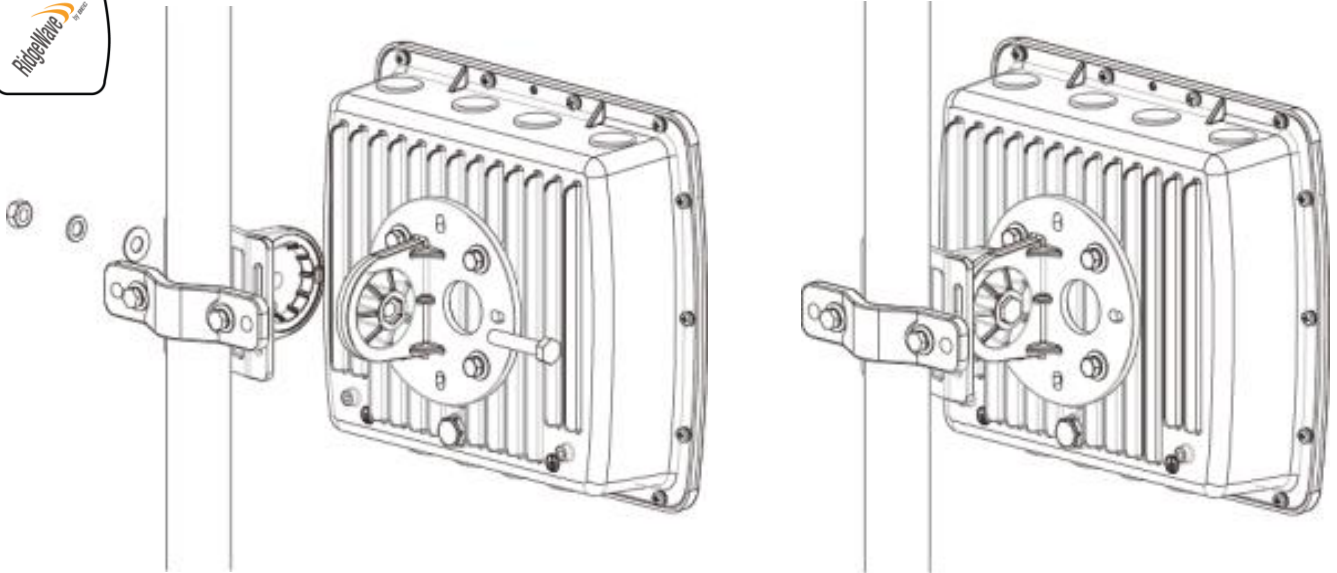
3. Mounting the RidgeWave 6900 to the T-formed Bracket

Attach the articulation pole (the RidgeWave 6900 enclosure) to the T-formed bracket by using M8x40 bolts, nut, spring washer and washer.

Cross-Polarized Antenna – The original of the source position, the nominal position, is seeing the **RidgeWave logo** when facing toward the RidgeWave 6900,



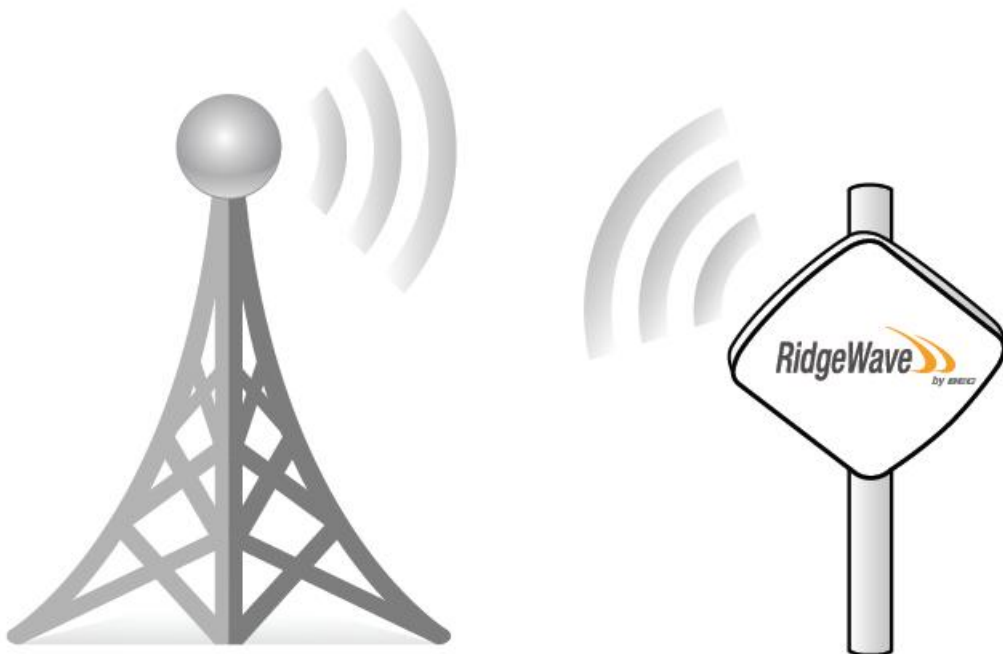
Dual-Polarized Antenna – From the nominal position, adjusting and rotating the RidgeWave 6900 in -45 or +45, anticlockwise or clockwise, degree angle.



4. Position Adjustment

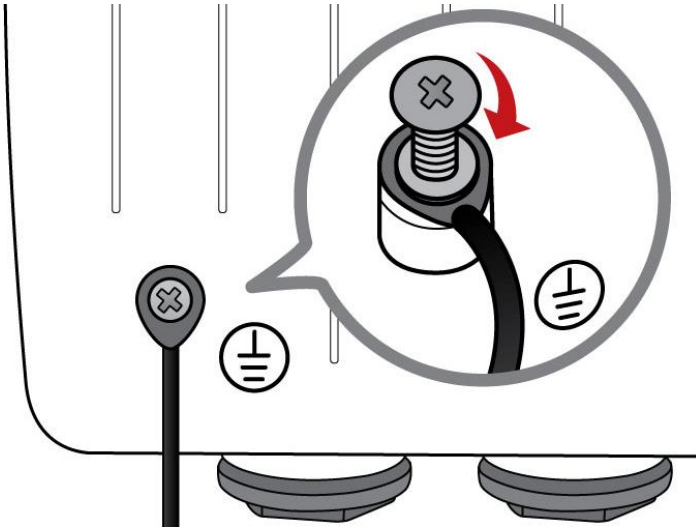
Find the location and best angle for getting the strongest signal from the base station. The RidgeWave 6900 must be directed towards the nearest base station.

Adjusting the router position to get a better reception and/or fine-tuning the router orientation (in horizontal/vertical position or 45 degree angle position) to have the best signal strength



5. Grounding the RidgeWave 6900 to Complete the Installation

Attach the grounding wire to the RidgeWave 6900 and tighten the screw



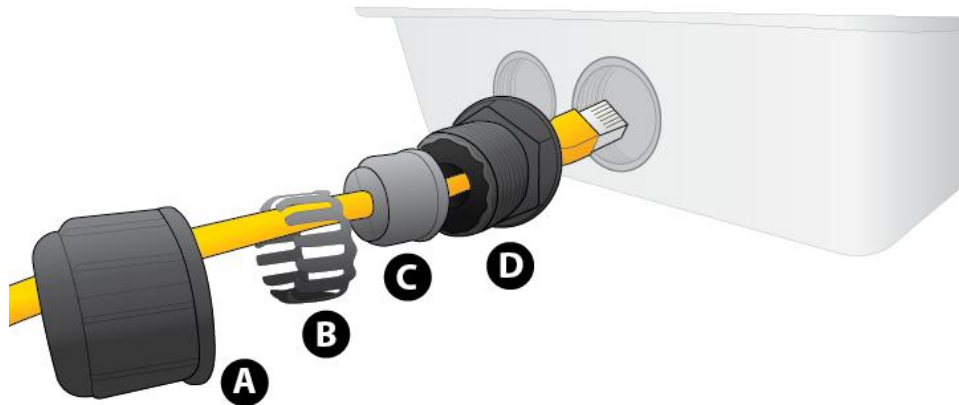
Router Installation Instructions

1. Power on your RidgeWave 6900

Step 1: Assemble M25 cable gland



Step 2: Unscrew the LAN (PoE) port and insert the supplied outdoor Ethernet cable (RJ-45) through material A-D, and then connect the RJ-45 Ethernet cable into the LAN (PoE) port.



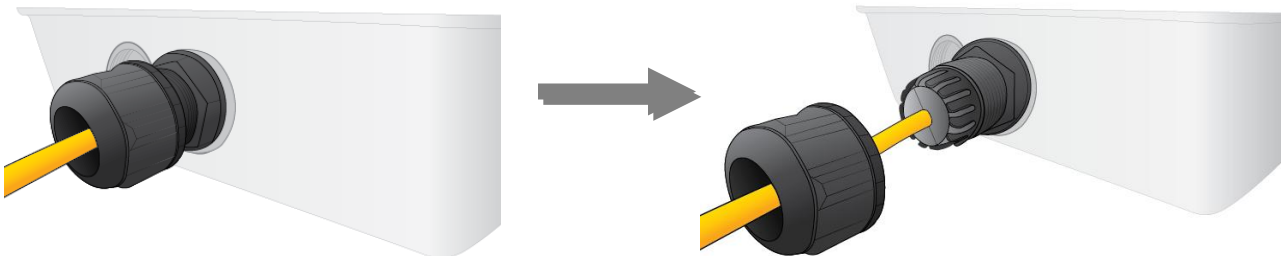
Step 3:

3.1: Insert (C) at the back end of (D)

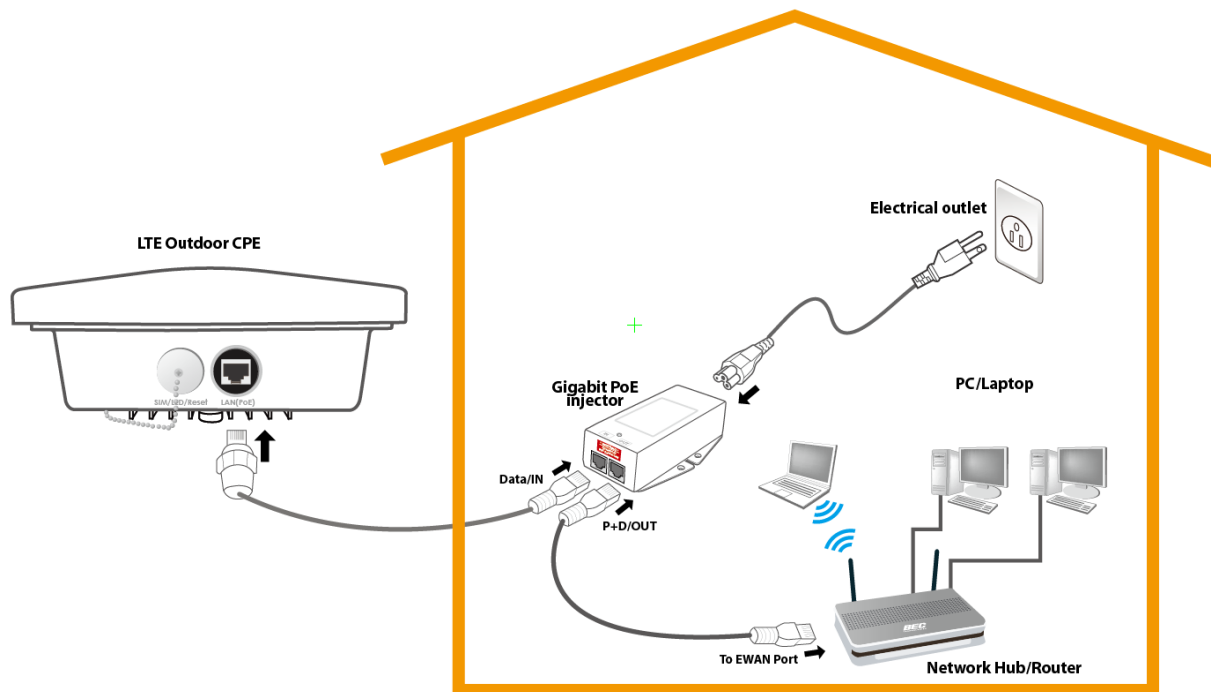
3.2: clip (B) on (C)

3.3: keep (B) close to (D)

3.4: then tighten (A).

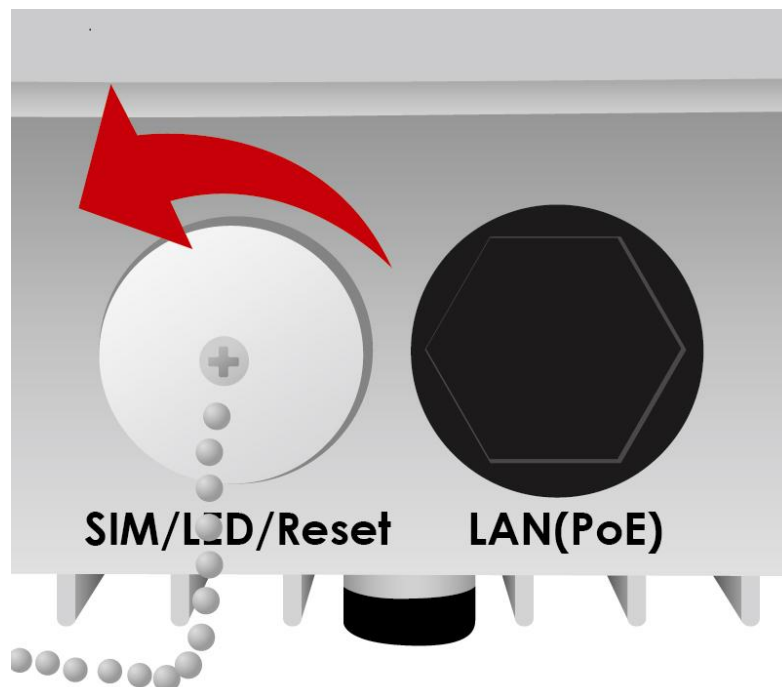


Step 4: Insert the other end of outdoor Ethernet cable (RJ-45) to the supplied Gigabit PoE injector, IEEE 802.1at compliant, **Power+Data (P+D)/OUT** port. Connect another Ethernet cable (RJ-45) directly to the **Data/IN** port and the other end of cable to a switch or broadband router. Plug the PoE power cable to an electrical outlet to power on your LTE router.



2. Set up your 4G/LTE Internet Connection

Step 1: Unscrew the cap of SIM card slot.

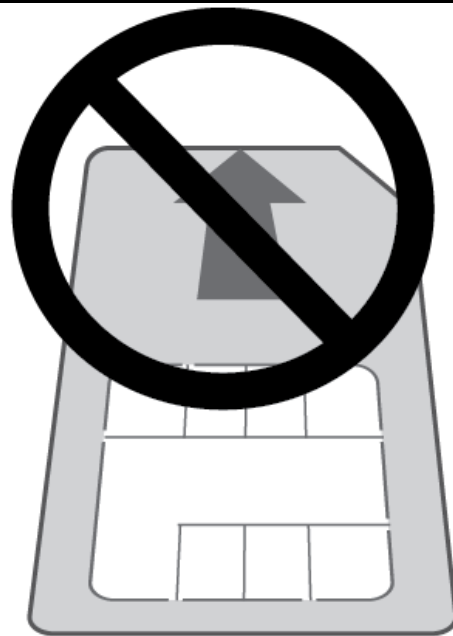
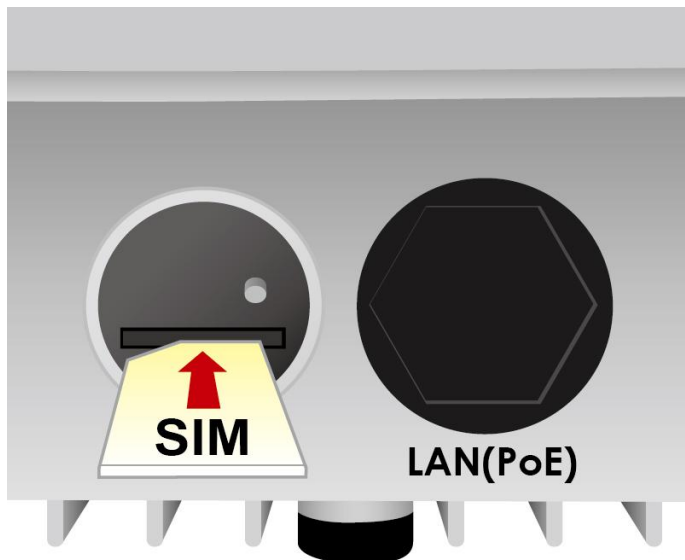


Step 2: Slide the SIM card with the metal contacts (gold plate) facing down to the SIM slot then push it all the way in until you hear the clicking sound.

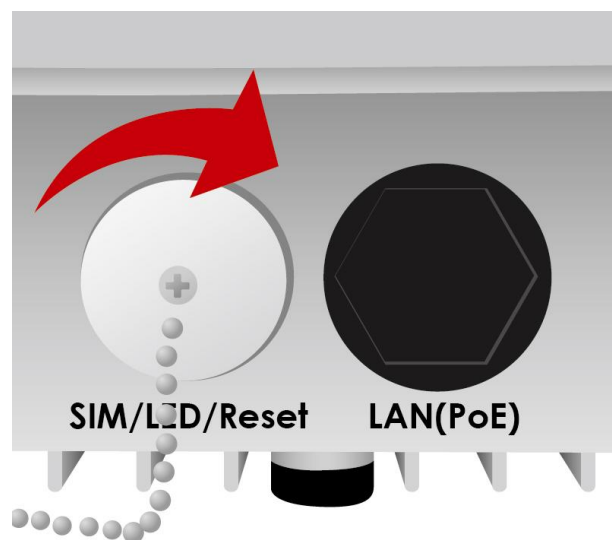


Attention

It is recommended to use an Industrial Grade SIM card.



Step 3: Screw the cap back tightly.



Please power off the device before inserting or removing the SIM card.

Step 4: Login to your RidgeWave 6900 LTE

The default IP of modem is **192.168.1.254** with subnet 255.255.255.0. Make sure the attached PC to this router is in the same subnet and has an IP address in the range between 192.168.1.1 ~ 192.168.1.253.

Open a web browser and type **http://192.168.1.254** in the URL address bar.



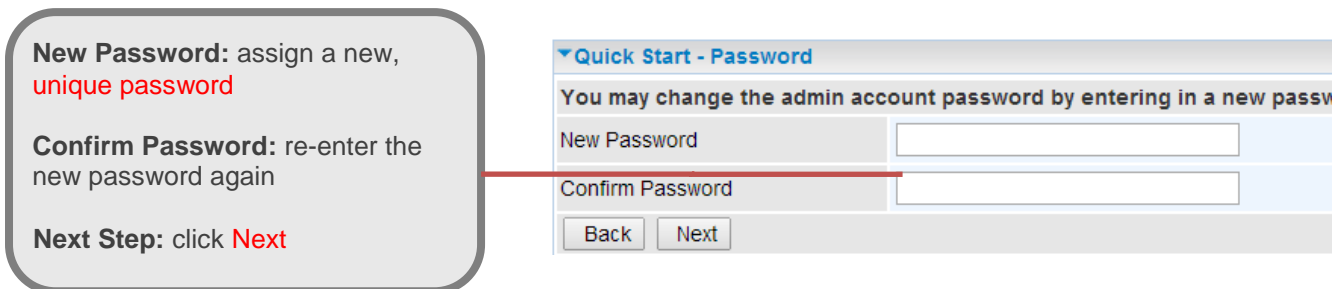
The login prompt will appear. Input the default username (**admin**) and password (**admin**) for Account type, Administrator. *This username / password may vary by different Internet Service Providers.

Please see the relevant sections of user manual for detailed instructions on how to configure your RidgeWave 6900 router.

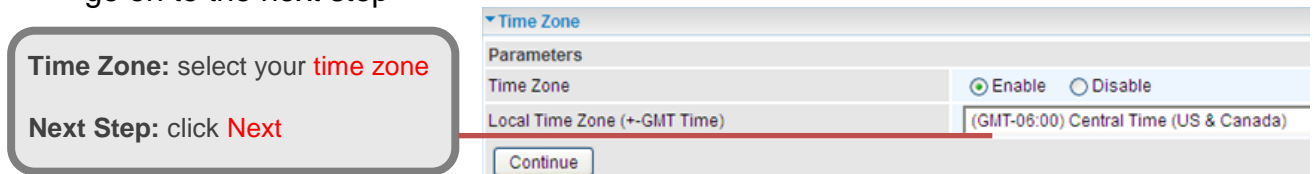
Step 5: Use the **Quick Start** wizard for fast Internet connection setups.

- 5.1 Change administration password:** Setup a new password for “admin” account for device management. The default password is “admin”. Click Continue to go on to the next step.

**The password may vary by different Internet Service Providers.*



- 5.2 Time Zone Configuration:** Enable and select your Time Zone then click Continue to go on to the next step



- 5.3 3G/4G-LTE Internet Connection Setup:** Fill out all relevant parameters provided by your ISP.

- 5.4 Saving Configuration Settings:** The Setup Wizard has completed. Click **BACK** to make changes or correct mistakes. Click **NEXT** to save settings. If the Internet connection is not ready, please double check your 3G/4G-LTE settings again.

Troubleshooting

1. None of the LEDs are on when you turn on the Router.

Check the connection between the adapter and the router. If the error persists, you may have a hardware problem. In this case you should contact technical support.

2. You have forgotten your Router login and/or password.

Try the default login and password, please refer to User Manual or consult with your Internet Service Provider. If this fails, you can restore your router to its factory settings by holding the Reset button on the back of your router for 6 seconds or more. **This username / password may vary by different Internet Service Providers.*

3. Can't ping any PCs on the LAN.

Check the LAN(PoE) LED on the Router. The LED should be on for the port that has a PC connected. If it is off, check the cables between your Router and the PC. Make sure you have uninstalled any software firewall for troubleshooting. Verify that the IP address and the subnet mask are consistent between the router and the workstations.

Product Support and Contact Information

Most problems can be solved by referring to the **Troubleshooting** section in the User Manual. If you have other inquiries or need further technical support, please contact with your Internet Service Provider or visit us at www.bectechnologies.net.