

Quick Start Guide

BEC 4900 5G

RidgeWave[®] 4900 5G

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CBRS 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

- ✓ CBRS Outdoor Router x 1
- ✓ This Quick Installation Guide x 1
- ✓ M25 Cable Gland x 1
- ✓ Gigabit Power-over-Ethernet (PoE) Injector x 1
- ✓ Mounting Kit x 1

CBRS Outdoor Router



**Quick Start Guide
(This Document)**



M25 Cable Gland



PoE Injector



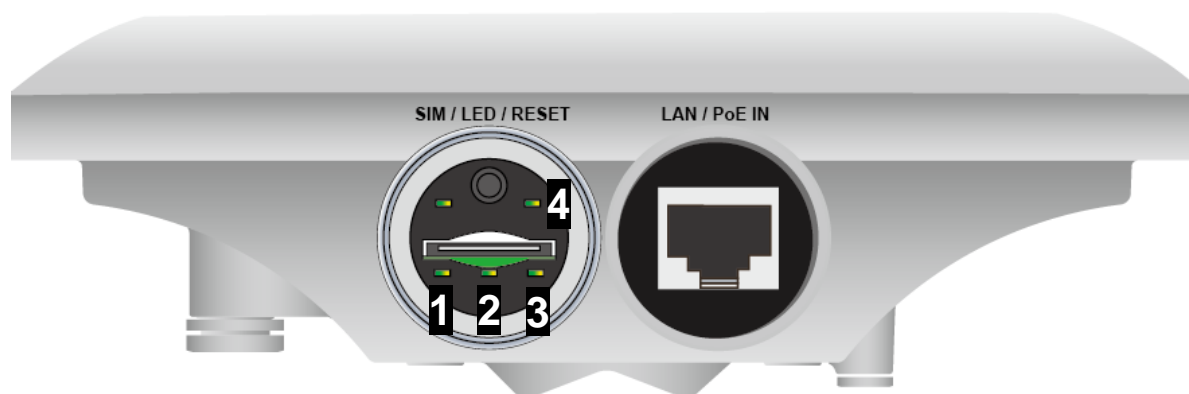
Mounting Kit



Attention

- Do not remove, open or repair the case yourself. Contact with your Internet Service Provider or have it repaired at a qualified service center.
- Use the supplied gigabit PoE (Power-over-Ethernet) injector in weather-protected indoor and to connect to the 4900 5G device only.
- It is mandatory to earth ground the device. Improper grounding not only could damage the unit but also all equipment connected to it.

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 IN	Connect the supplied BEC PoE injector to the LAN/PoE port using an Ethernet cable.

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 device system is in initial booting phase
	Green	IP connected and traffic is passing thru the device
4. Received Signal Strength	Refer to the below <u>Received Signal Strength Indicator table.</u>	
	Off	No module or module fails.

Received Signal Strength Indicator table:

Signal Strength		RSRP (dBm)			
		< -115	[-115, -110)	[-110, -105)	>= -105
SINR (dB)	< -3	Orange	Orange Flashing	Orange Flashing	Orange Flashing
	[-3, 1)				Green Flashing
	>= 1			Green Flashing	Green

Mounting Kit Installation

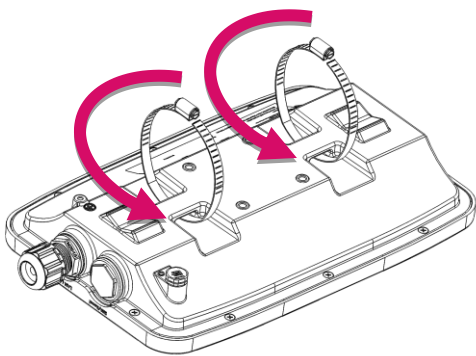
Mounting Kit includes:

Hose Clamp x 2



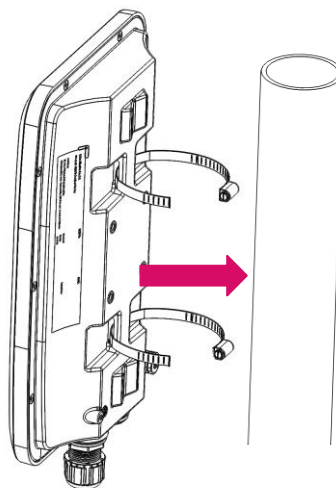
Outdoor Installation- On A Pole

1. Pole Mounting for Pole 1" ~ 3" (25.4 ~ 76.2mm)



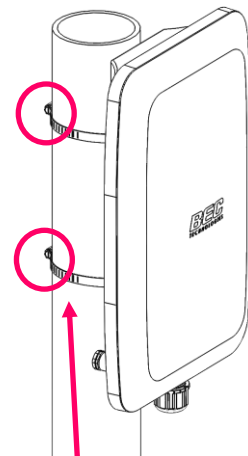
Step 1

Insert the two hose clamps through the holes on the pole-mounted mounting bracket of the 4900 5G enclosure.



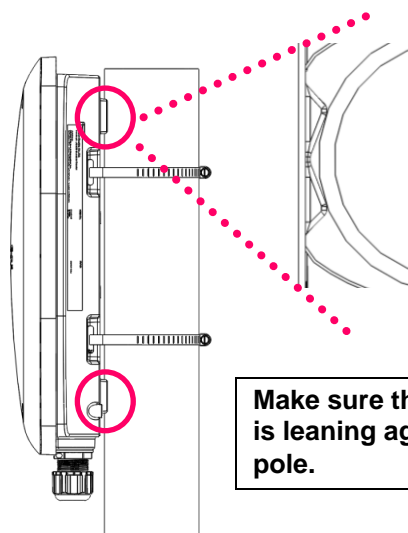
Step 2

Attach and secure the hose clamps to the pole by using the supplied stainless hose clamps (1" ~ 3").



Step 3

Use a flat-head screwdriver to turn the head of the screw clockwise to tighten the clamps.

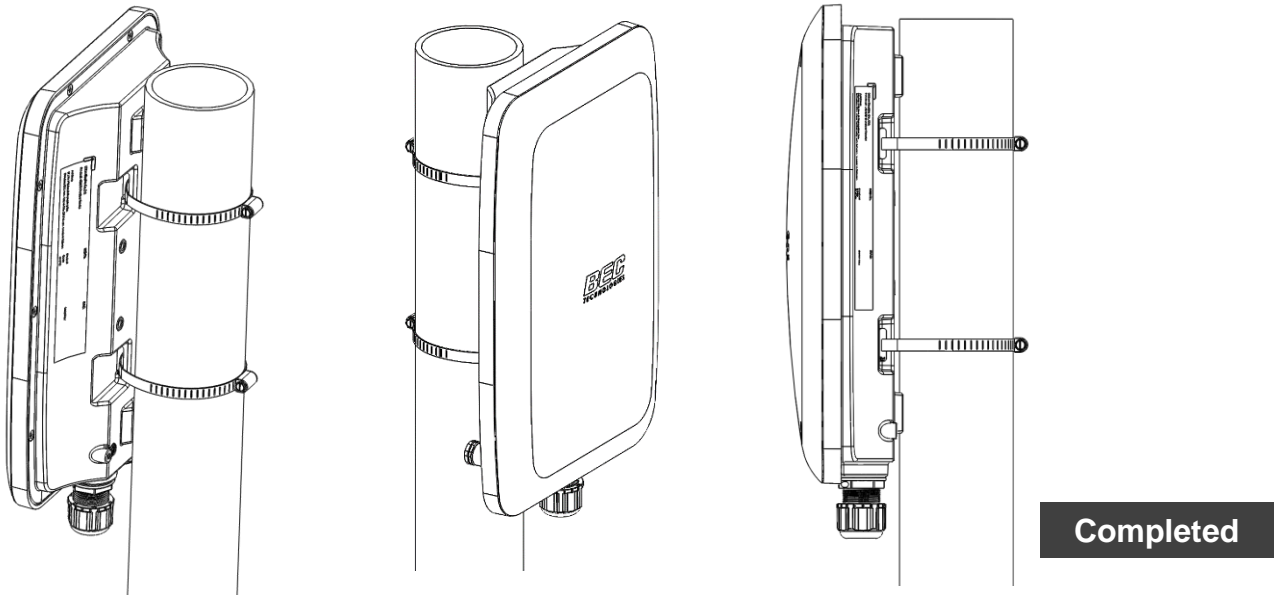


Make sure the 4900 5G is leaning against the pole.

Tool Advice :
Use a power tool to lock and secure the metal hose clamp on the pole.

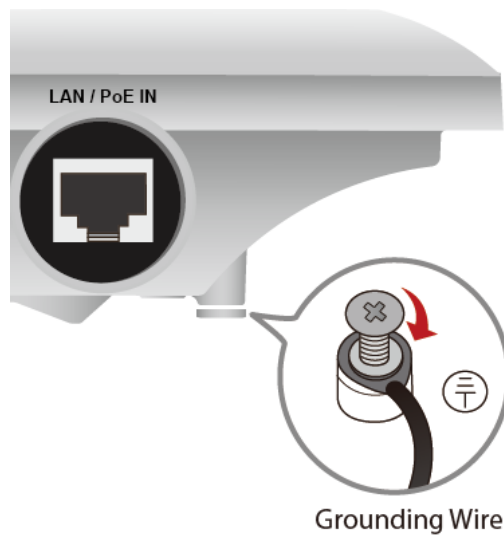


The 4900 5G must be directed towards the nearest base station.



2. Proper Grounding to Complete the Installation

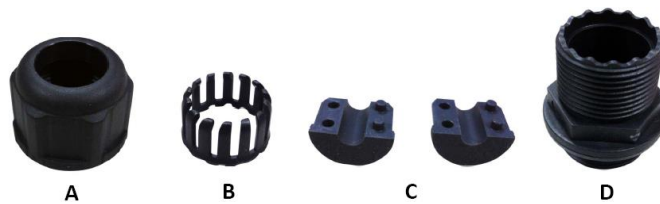
Attach the grounding wire to the 4900 5G and tighten the screw.



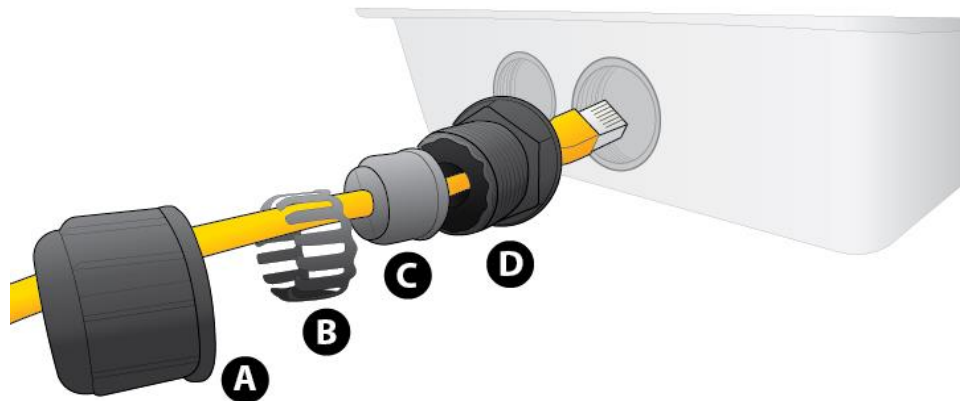
Router Installation Instructions

1. Power on your 4900 5G

Step 1: Assemble M25 cable gland



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



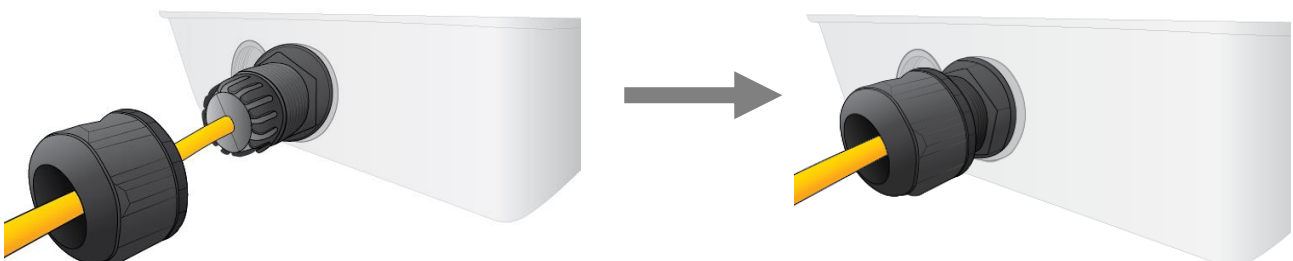
Step 3:

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

3.2: clip (B) on (C)

3.3: keep (B) close to (D)

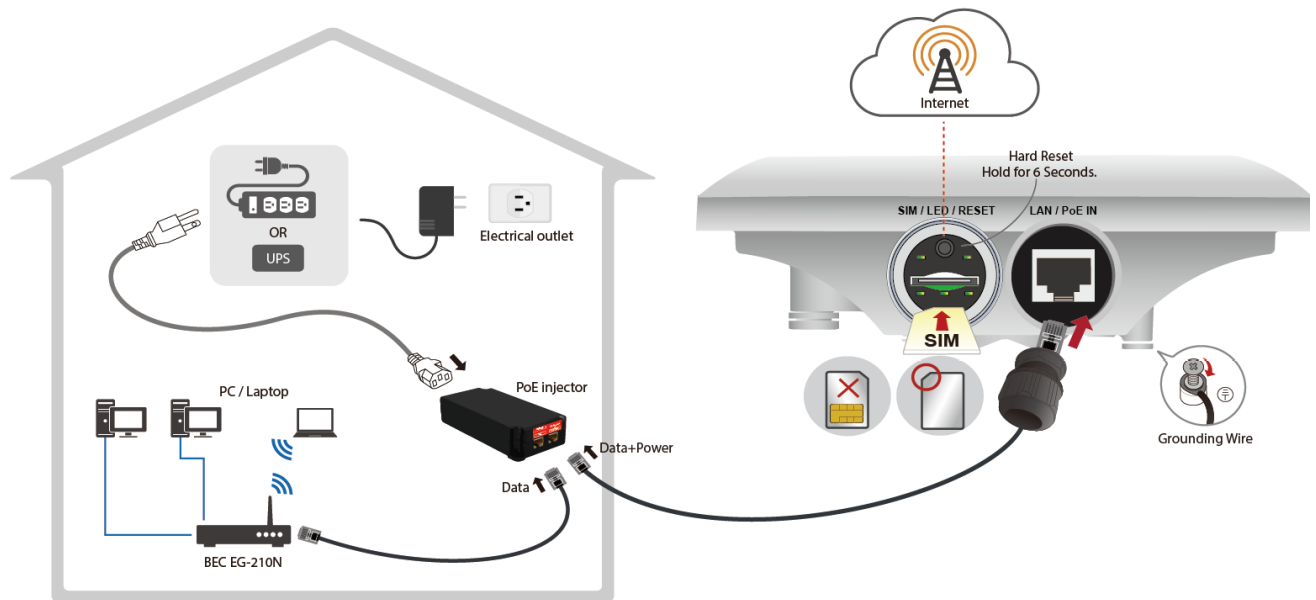
3.4: then tighten (A).



Step 4:

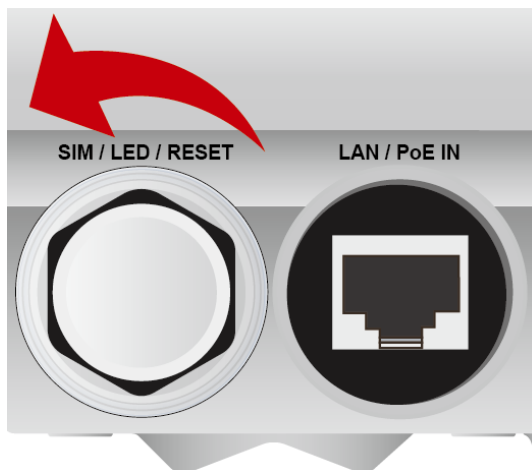
Insert the other end of outdoor Ethernet cable (RJ-45) to the supplied Gigabit PoE injector **Data+Power** port. Connect another Ethernet cable (RJ-45) directly to the **Data** port and the other end of cable to a switch or broadband router.

IMPORTANT: It is recommended to put the Gigabit PoE Injector on an UPS or Surge Protector. Use a grounding wire to ground your 4900 5G is REQUIRED!

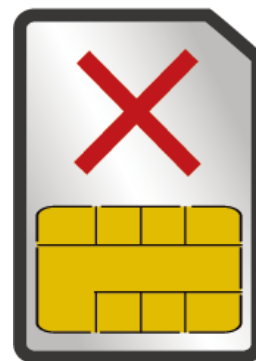
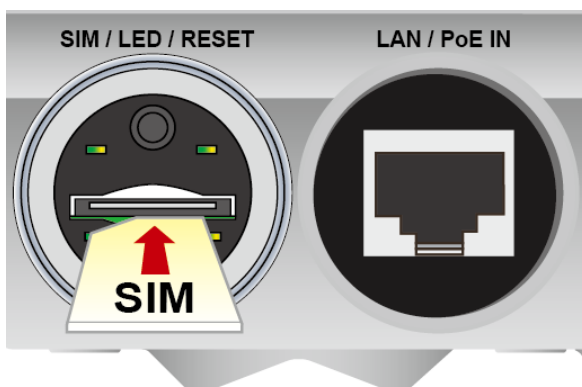


2. Set up your 5G NR/LTE Internet Connection

Step 1: Unscrew the cap of SIM card slot.

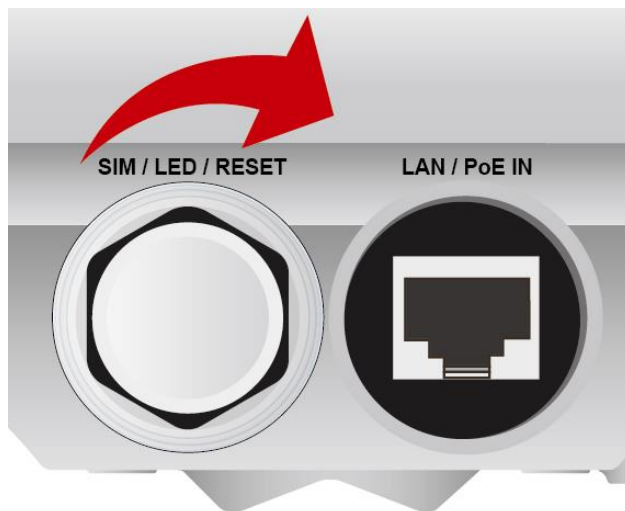


Step 2: Slide the SIM card with the mental contacts (gold plate) facing down to the SIM slot then push it all the way in until you hear the clicking sound.



It is recommended to use an industrial-grade SIM card.

Step 3: Screw the cap back tightly.

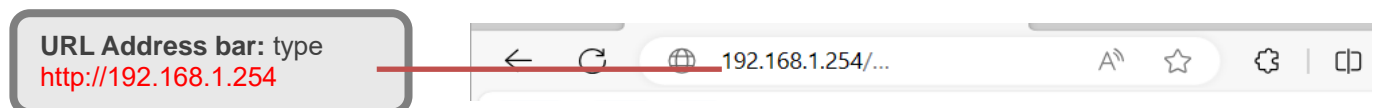


Please power off the device before inserting or removing the SIM card.

Step 4: Login to your 4900 5G

The default IP of the router 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 4900 5G.

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.*

New Password: assign a new, unique password

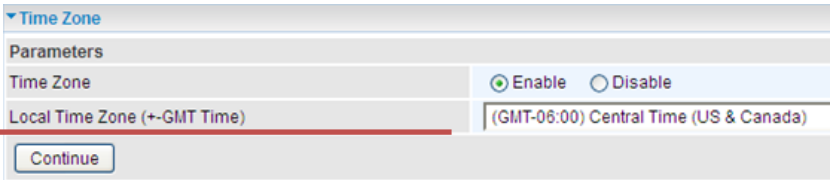
Confirm Password: re-enter the new password again

Next Step: click Next

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

Time Zone: select your **time zone**

Next Step: click **Next**



5.3 5G NR/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 5G NR/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.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to FCC 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

RF Exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.



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