

Omnipoint Gateway Hardware Guide

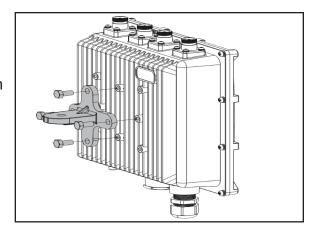




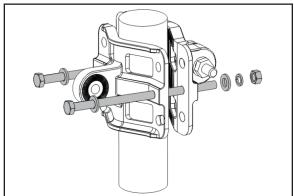
Mount and Secure Kit

To mount and secure the kit to the enclosure and pole, follow the steps below.

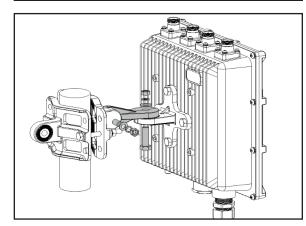
1. Fix the cross bracket on the bottom of the enclosure with 4 M6*12 bolts.



2. Place 2 pieces of the clamp around the pole and tighten them with M6*110 bolts, washers, and nuts.



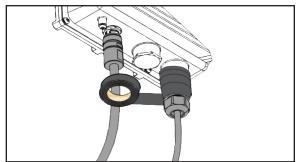
3. Connect pole clamp and cross bracket by securing the last piece of the mounting kit in place using M6*30 bolts, washers, and nuts.



Weather Protection

Devices may be network-connected (via internet) or cellular-connected. For a network-connected device, protect the Ethernet cable with PVC tape.

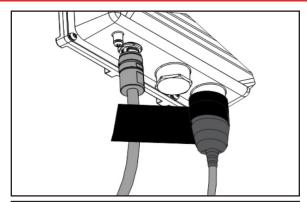
 Clean the surface area of the connector that will be wrapped. Wrap a layer of PVC tape with a 50% overlap: follow the rotation direction of the connector. Continue wrapping PVC tape to 10 mm below the end of the connector.



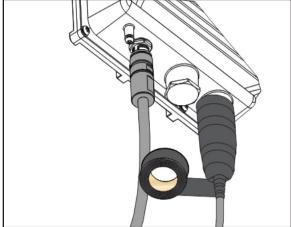


Total Property Wireless Access by Mccellgate

2. Cut off 50 cm (roughly 20 in) of waterproof tape. Stretch the tape to 100 cm (roughly 40 in). Wrap 3 layers around the connector with a 50% overlap. Using your hand, hold the tape in place for a few seconds.



3. Wrap another 3 layers with PVC tape, using the natural uncoiling force and 50% overlap. Cover the head and the tail of the connector.



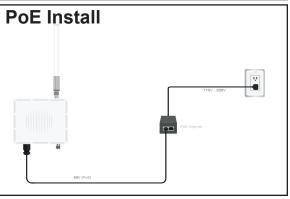
Attach the antennas

1. Screw on the antennas. All antennas should be installed as follows: LoRa, LTE-MAIN (on top).



Do not power on the device if any antenna port is left open. If you do **not** want to use an antenna feature, terminate the port with a 50 Ohm load.

2. Verify the PoE runs to the PoE injector or PoE switch.

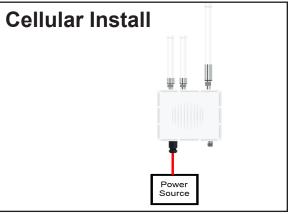


Power on the Gateway

Use a CAT5 Cable to provide power to the Gateway. Attach one end to the PoE (Power over Ethernet) injector and the other end to the Ethernet Port on the bottom of the casing.



Cellular Installation requires **only** power input and grounding.

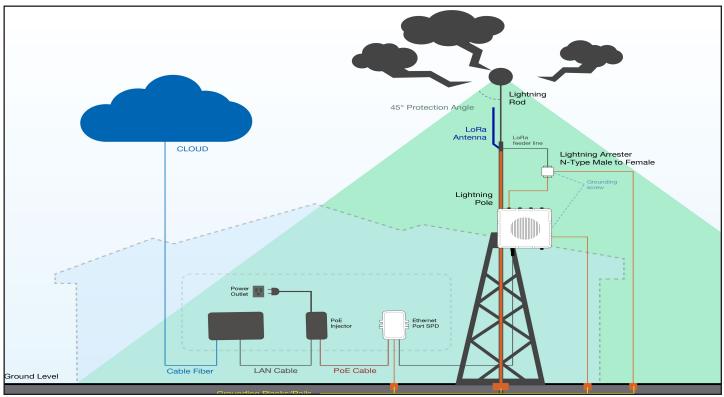






Device Protection

Indoor and outdoor systems require lightning surge protection. See below:



Outdoor Surge Protection System Antenna Grounding

We recommend installing a lightning arrestor on all antenna N-Type terminals (LoRa, LTE). Use 10AWG or greater grounding wire to connect the arrestor to the tower-mounted LoRa antenna. The arrestors must be Female to Male to fit the antenna and housing connectors. Use a 10 AWG or greater wire to connect the arrestors' terminals to the grounding rail on the building.

Gateway Grounding

We recommend using a separate 10 AWG or greater grounding wire to connect the screw terminal (on the bottom right of Gateway casing) to the grounding rail or bar.

Indoor Surge Protection

To protect indoor equipment connected to the Gateway, install an Ethernet port SPD lightning arrester (controller). Position SPD lightning arrester along the cable connecting the Gateway to the PoE injector. Connect the grounding wire to an appropriate grounding point.

Your PoE injector, network switch, and router *must* be surge protected.



If you fail to follow these recommendations we carry no responsibility for damage your equipment incurs due to lightning strike!





Lightning Controller

You **must** use the lightning controller on your on your Gateway. If you do not the device can be damaged by lightning. If you do not use the lightning protector, you devoid warranty for your device.

The lightning controller is to the right.

The lightning controller arrives with protective blue caps. Remove these caps before you install your lightning controller to you Gateway device.

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VPN (Internet Mode)



Cellular



Once the lightning controller is attached, you can install the antenna. The antenna attaches to the lightning controller, so the device is protected form potential lightning strike.



Attach Antennas VPN (Internet Mode)



The number and location of antennas to attach to your Omnipoint device depends on whether you use an Omnipoint Cellular device or an Omnipoint VPN device. See below for further details.

Cellular

For the cellular device, you can attach the main antenna. You can also attach an antennas to LTE-DIV\LoRa2 and you can attach a different antenna to LTE-MAIN as shown below.





Connection

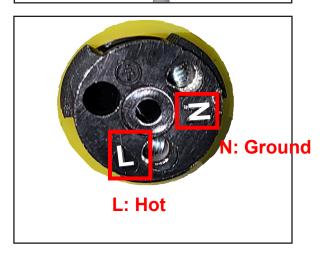
You must open the Gateway device to set up the set up the device correctly. These actions need apply to the connector--see the example to the right.

1. Unscrew the top of the connector.





- 2. Connect the Gateway as shown:
- L = Hot, 12 V DC
- N = Ground





Gateway Status

To use the Omnipoint successfully, verify the Gateway is online.



Do not power on Gateway until antenna has been installed.

When you log in, you can see whether the Gateway is online or offline.

