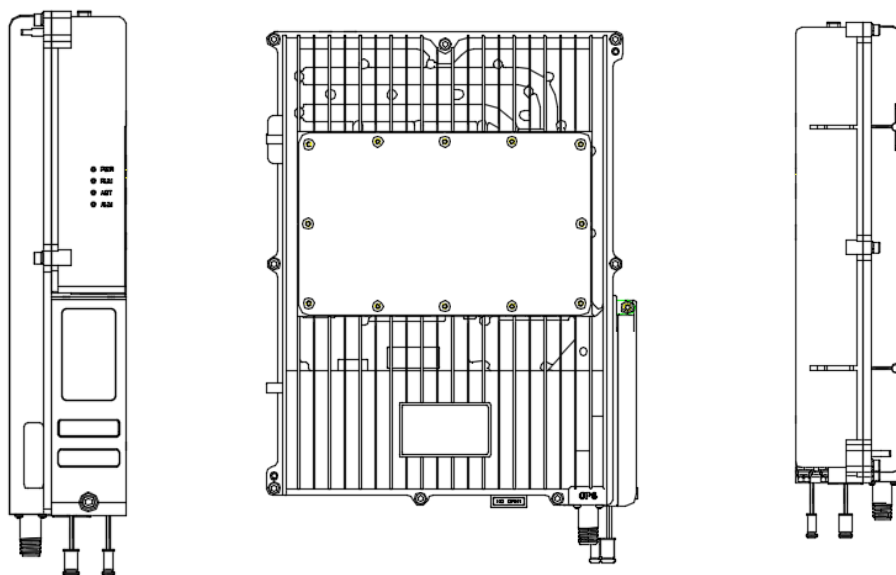


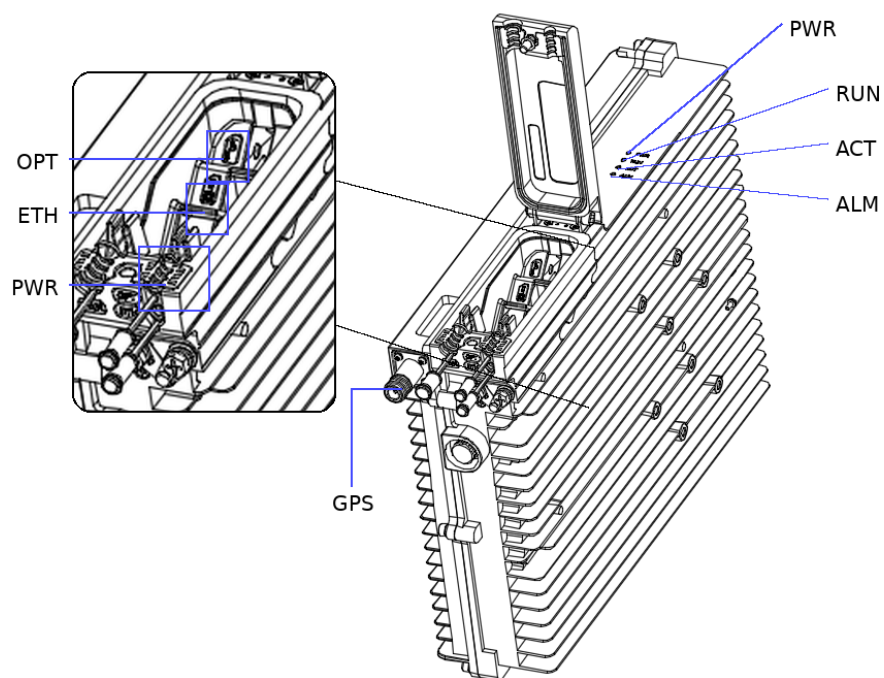
mmW gNB

Quick Guide

Document version: 01

1. Appearance





Interface Description

Interface	Description
PWR	Power interface. Connect the AC model to a 90–264 VAC power supply (nominal voltage: 110/220 VAC), or connect the DC model to a -40VDC – -57VDC power supply(nominal voltage: -48 VDC).
ETH	RJ-45 interface used for debugging or data backhaul.
OPT	Optical interface (SFP+) used to connect to an external transmission network for data backhaul.
GPS	External GPS antenna, N-female connector.

Interface Indicators

Indicator	Color	Status	Description
PWR	Green	Steady ON	Power is on.
RUN	Green	Steady ON	The device has been activated. (The device transmits power normally.)
		Fast flashing: 0.125 s on, 0.125 s off	The device is starting up.
		Slow flashing: 1 s on, 1 s off	The device is operating normally.
		OFF	No power supply or device fault.
ACT	Green	Steady ON	The cell is active.
		Slow flashing: 1 s on, 1 s off	The cell is deactivated.
ALM	Red	Steady ON	The device is faulty.
		OFF	No alarm.

2. Installation

2.1 Installation Materials

In addition to industry-standard tools, you will need the materials described in Table 2-1 during the installation.

Table 2-1 Support Materials

Item	Description
AC cord	The AC power cable must be a three-core cable of AWG 13 (2.5 mm ²) or larger, such as AWG 12.

Item	Description
DC cord	The DC power cable must be a two-core cable of AWG 14 or larger, such as AWG 13.
Ethernet cable	Outdoor CAT6 cable shorter than 100 m (approximately 109 yd).
Optical fiber	Armored optical fiber The recommended cable diameter is 7 ± 1 mm.
Ground cable	The cross-sectional area of the grounding cable must be at least 10 mm ² .

2.2 Installation Tools

				
Leveling instrument	Marker pen	Knife	Vise	Wrench
				
Percussion drill	Hammer	Phillips screwdriver	Cable vice	Tape measure

NOTE: Other accessories are included in the package.

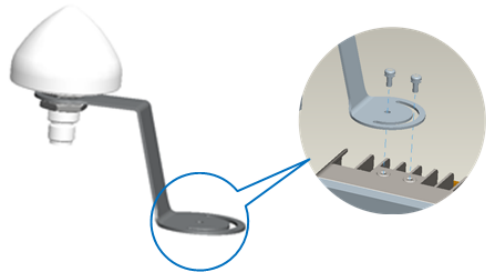
2.3 Install GPS Antenna

Read the following GPS antenna installation requirements before installing it on the base station.

- There should be no major obstructions from nearby buildings. Ensure that the antenna has an unobstructed view of the sky above a 45-degree elevation angle.
- Do not install the GPS antenna near other transmitting or receiving devices, as they may cause interference.

- The GPS antenna should be installed within 45 degrees to the lightning rod.

The GPS antenna system is preassembled at the factory before shipment. The only installation step is to secure the GPS mounting bracket to the base station using M4 × 14 screws.



NOTE: The base station may use different GPS antenna models, so the GPS antenna may not be the same as the one shown in the figure above. However, the steps for securing it to the base station are the same.

2.4 Weatherproofing

To protect the connection points from weather conditions, clean each connection point before installing cold-shrink tubes, as shown in the following figure.

1. Insert the cable into the cold-shrink tube.
2. Tighten the connector.
3. Push the cold-shrink tube over the connector joint, and pull out the strip.
4. Ensure that the cold-shrink tube fits tightly over the connection.



2.5 Pole Mounting

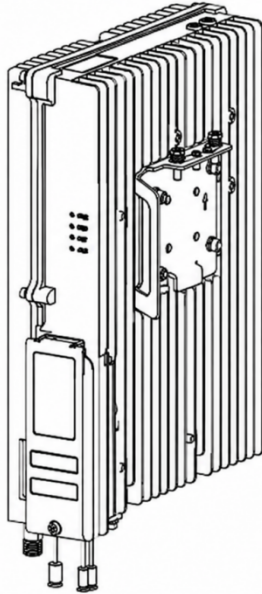
Check to ensure that the pole diameter is in the range of 1.6 inches to 2.8 inches (40 mm to 70 mm). The position of the gNB on the pole should be at least 47 inches (120 cm) in height.

The bracket assembly is preassembled at the factory before shipment and consists of two parts. One part is preassembled on the back of the device, and the other is used for pole

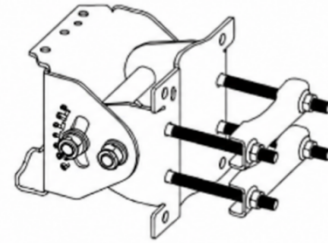
or wall mounting, as shown in Figure 2-1.

Figure 2-1 Pre-assembled Device

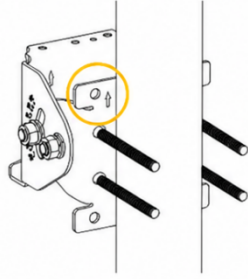
Mounting Bracket on the Back of the gNB



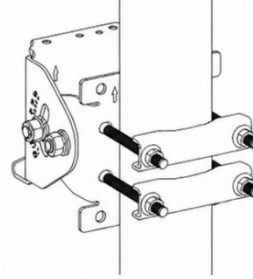
Pole Mounting Bracket



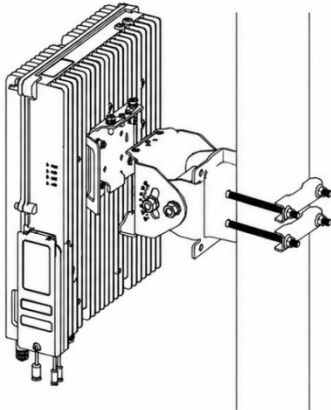
The following steps describe how to mount the preassembled gNB on a pole.



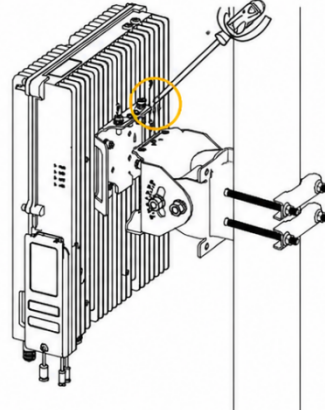
- 1** Put the pole bracket against the pole.
NOTE: The arrow must point upward.



- 2** Install the two omega clamps on the back and fasten the four nuts on the back of the bracket.



- 3** Hang the gNB (with the bracket) on the pole bracket. Ensure that the hook on the gNB bracket is fully engaged in the slot.



- 4** Fasten the screw at the top of the bracket using a Phillips screwdriver.

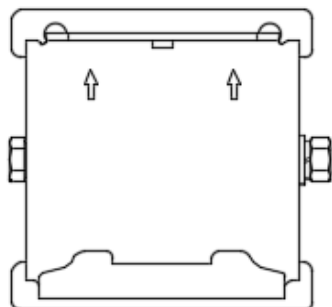
After mounting, set the gNB to the required angle using the adjustable bracket.

2.6 Wall Mounting

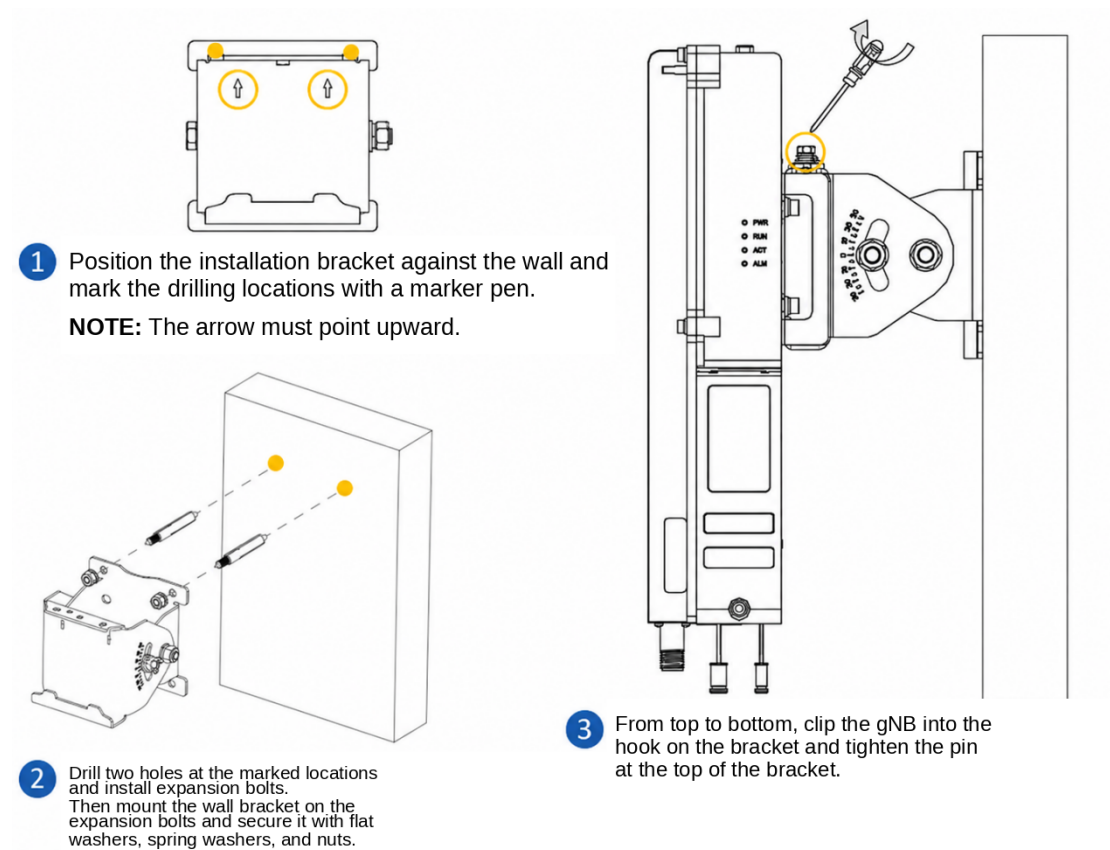
NOTE: The wall must bear at least 4 times the weight of the gNB.

First, disassemble the mounting bracket, leaving only the wall bracket, as shown in Figure 2-2.

Figure 2-2 Wall Bracket



The following steps describe how to mount the preassembled gNB on a wall.



2.7 Connect Cables

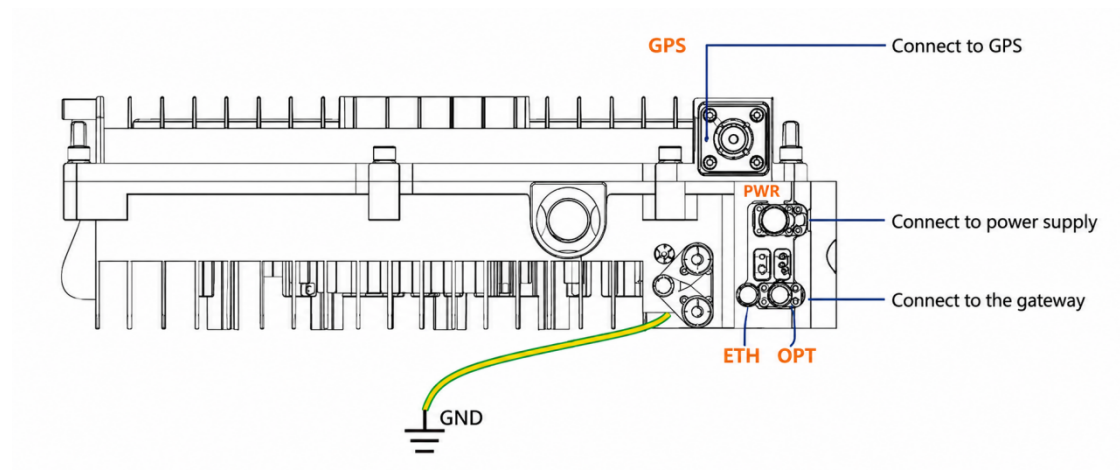
AC Model

Observe the wire identification and color coding of the AC power cord. In general, **L** (Live) is either red or brown; **N** (Neutral) is either blue or white; **PE** denotes the protective earth conductor, which is yellow and green.

DC Model

Observe the polarity markings on the DC power cable. Connect the -48 VDC and RTN conductors to the corresponding terminals, and ensure that the grounding cable is securely connected before powering on

the gNB.



2.8 Power On

Power on the gNB and wait a few minutes while it boots up. According to the indicator descriptions in Section 1, “Appearance,” check that the LED indicators are lit and operating as expected.