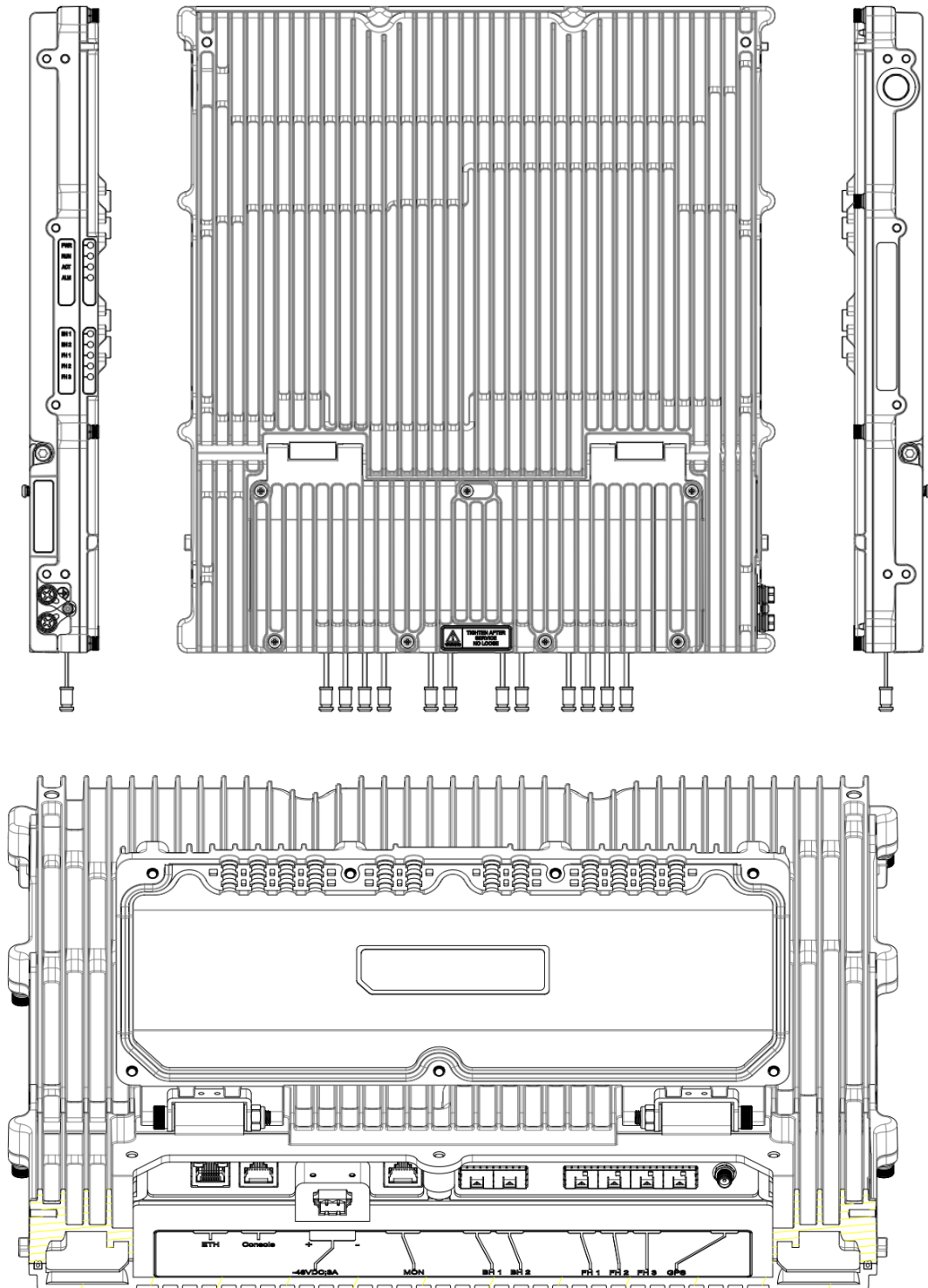
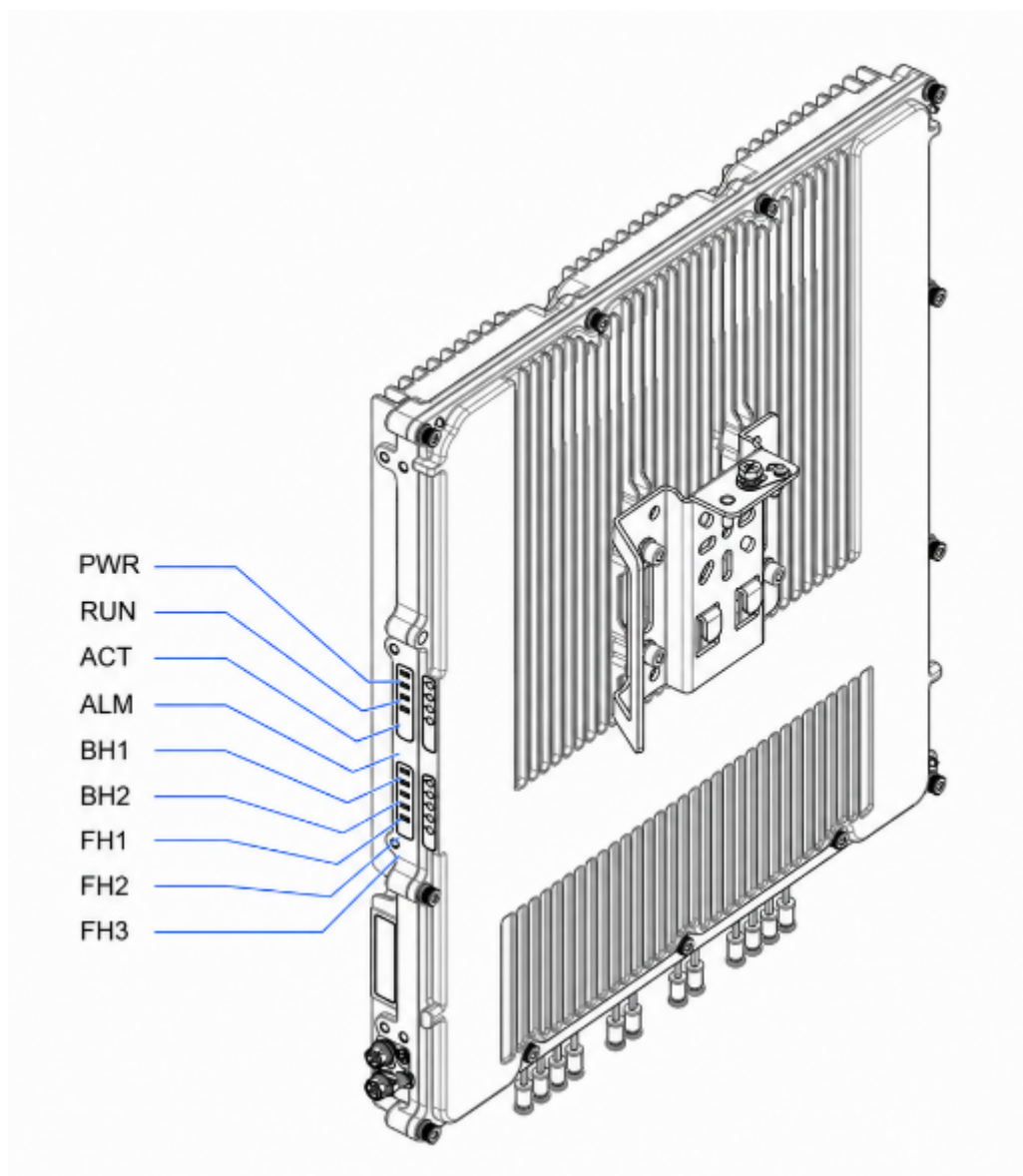
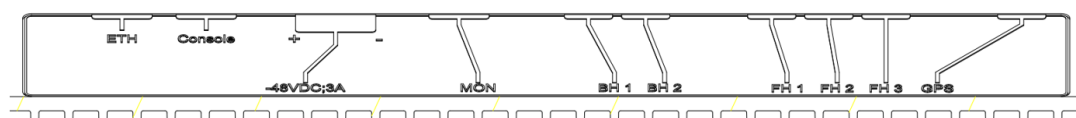


Pulsar M Outdoor BBU Quick Installation Guide

1.Appearance





Interface Description

-48VDC; 3A	DC power interface, connect to -48VDC power
ETH	Debug Ethernet port (RJ-45)
Console	Debug serial port (RS232)
MON	RS485 interface, used for expanding dry contacts
BH1	10 Gigabit optical interface (SFP+), upwardly connected to

	the core network, used for backhaul
BH2	10 Gigabit optical interface (SFP+), used for cascading
FH1 ~ FH3	10 Gigabit optical interface 1~3 (SFP+), downwardly connected to the rHUB (EU) or RU
GPS	Connect to GPS antenna, SMA female connector

Indicator Description

PWR	Green	Steady ON	The device is powered on.
		OFF	The device is powered off.
RUN	Green	Steady ON	The device is operating normally.
		Fast flash: 0.125s on, 0.125s off	The device is starting up.
		Slow flash: 1s on, 1s off	The cell has been activated.
ACT	Green	Steady ON	Device loading successful.
		OFF	Device loading failed.
ALM	Red	Steady ON	The device exists serious alarms.
		OFF	No alarm or alarms have been cleared.
BH1~BH2	Green	Steady ON	Backhaul SFP+ link is normal.
		OFF	Backhaul SFP+ link is failed.
FH1~FH3	Green	Steady ON	CPRI SFP+ link is normal.
		OFF	CPRI SFP+ link is failed.

2. Installation Preparation

2.1 Installation Material

• DC cord: two-core cable, AWG 4 or larger	• Optical fiber: Single-mode or multimode
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• Power plug: compliant with local standards	• Optical module: SFP+ optical module
• Antenna RF cable: 50-ohm feeder, 1/2-inch jumper	• Ground cable: greater than 10mm ²
• GPS antenna	

NOTE: Other accessories have been packed in the packing box.

2.2 Installation Tools

• knife	• vise	• wrench	• tape measure
• hammer	• multi-meter	• cross screwdriver	• square crimping pliers
• marker	• percussion drill and some drill heads		

2.3 Weatherproof

To protect the connectors from weather and climate, the connectors are waterproofed using the cold shrink tube. Before installing the cold shrink tube, ensure that the connectors are clean.

1. Insert the cable into the cold shrink tube.
2. Tighten the connector.
3. Push the cold shrink tube to the top joint, and then pull out the strip.



4. Ensure the cold shrink tube is tightly fitted with the connection.

NOTE: The optical and power connectors are equipped with waterproof protection and do not require additional waterproofing steps.

CAUTION: Ensure the cold shrink tube remains intact and is not cut for use

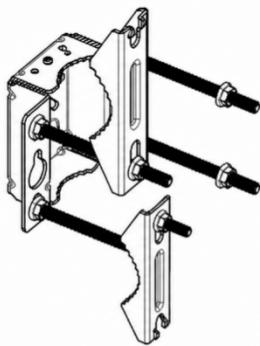
3. Installation Procedure

3.1 Pole Mounting

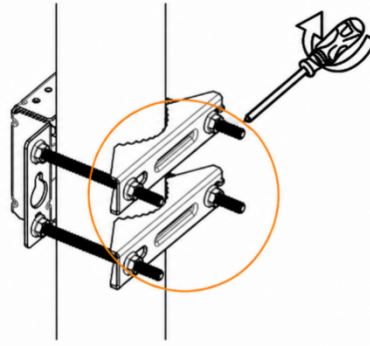
The BBU should be installed on the pole at a height of at least 47 inches (120 cm).

The brackets have been pre-assembled before packing. It includes two parts. One is pre-assembled on the back of device, and the other is for pole mounting or wall mounting.

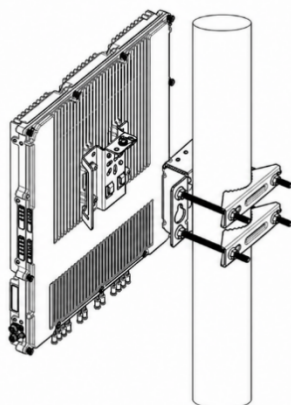
The following steps describe how to mount the pre-assembled BBU on a pole.



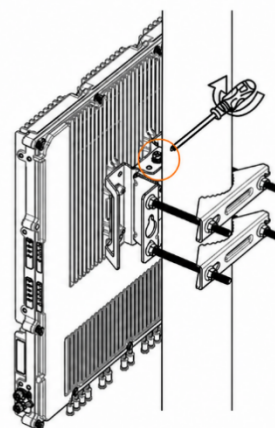
- 1 Take apart two clamps from the assembled bracket.



- 2 Put the bracket against the pole and assemble two clamps back. NOTE that the sequence of flat washers, spring washers and nuts keeps the same with original.



- 3 Fasten the pole bracket to ensure it has firmly fixed on the pole.

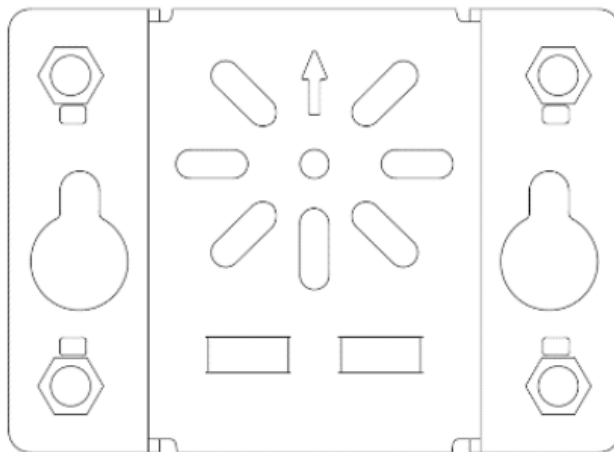


- 4 Align two pins on the BBU bracket with pin holes on the pole mounting bracket and vertically put the BBU from top to bottom, then tighten the screw on the top of the bracket using a cross screwdriver.

3.2 Wall Mounting

Ensure that the wall can bear at least four times the weight of the base station. If the wall mounting is adopted, the wall mounting bracket is shown in Figure 2-1

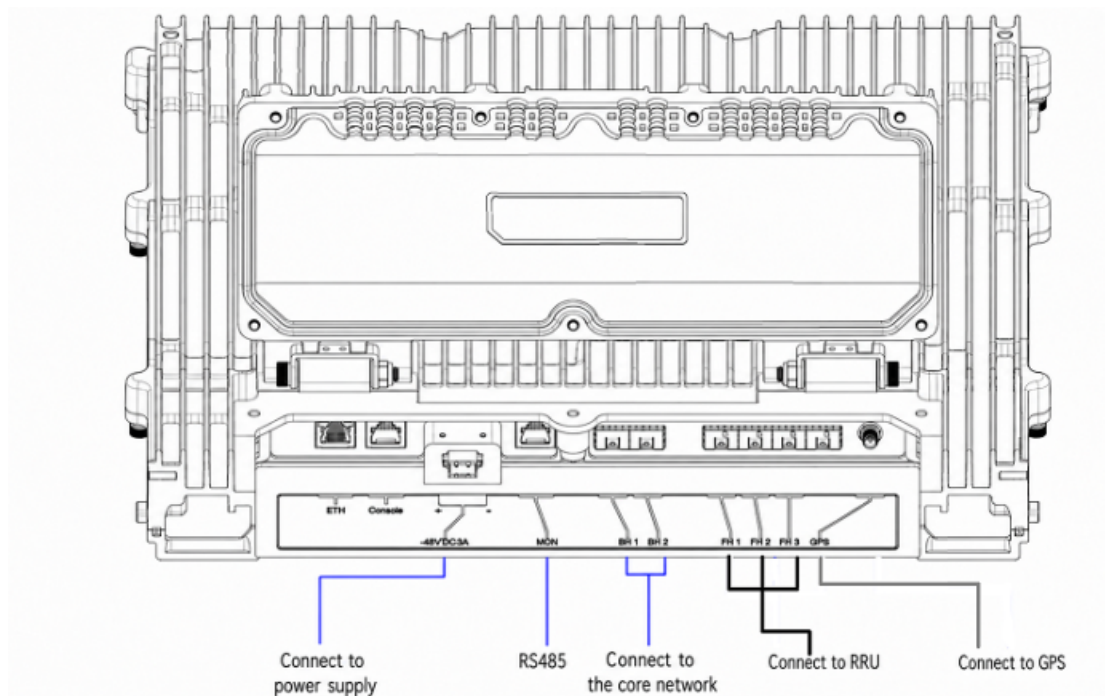
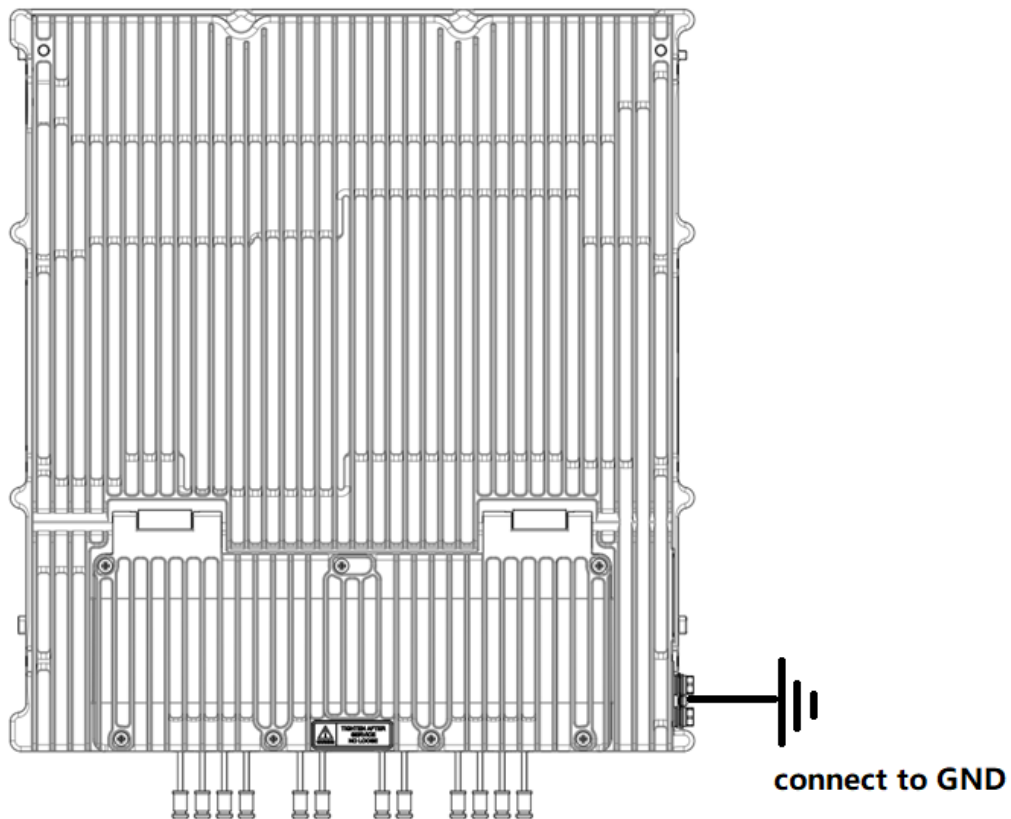
Figure 2-1 Wall Mounting Bracket



Following steps introduce how to fix the pre-assembled base station on a wall.

- 1 Put the wall mounting bracket against wall and mark the drilling locations with a marker pen. Drill two holes at the marked locations.
- 2 Insert expansion bolts, and then hang the wall mounting bracket on the expansion bolts, fasten with flat washers, spring washers and nuts.
- 3 Align the two pins on the BBU bracket with the pin holes on the wall mounting bracket and vertically put the BBU from top to bottom until the hook on the BBU is stuck firmly into the corresponding slot on the wall mounting bracket. Finally tighten the screws on the top of the bracket using a cross screwdriver.

3.3 Connect Cables



NOTE:

1. The BBU must be grounded.

3.4 Power ON

Power on the BBU, then wait a few minutes for it to boot up. As shown in the previous figures, check that the LED indicators light as expected.