

Nova 10W Base Station Quick Start Guide



November 2017
Version 1.3

Introduction

This quick start guide is intended for experienced installers. It provides high-level milestones for installing the BaiCells Nova 10W Base Station. For more details, please refer to the *BaiCells Nova 10W Base Station Installation Guide* on the website.

Prepare

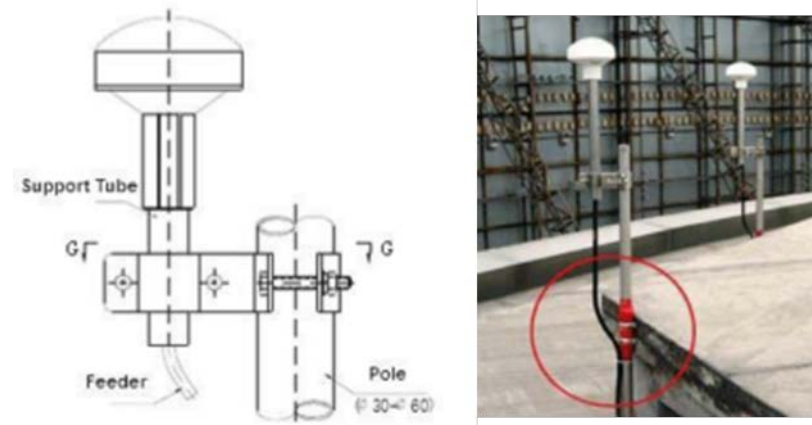


| | | | | |
|----------------------------------|-------------------|---------------------|----------------------|--------------|
| | | | | |
| Level bar | Marking pen | Knife | Pliers | Wrench |
| | | | | |
| Percussion drill and drill heads | Hammer | Cross screw driver | Cable vice (crimper) | Tape measure |
| | | | | |
| 5mm L-shape Allen wrench | Torx screw driver | T7 screwdriver head | Cable Stripper | |

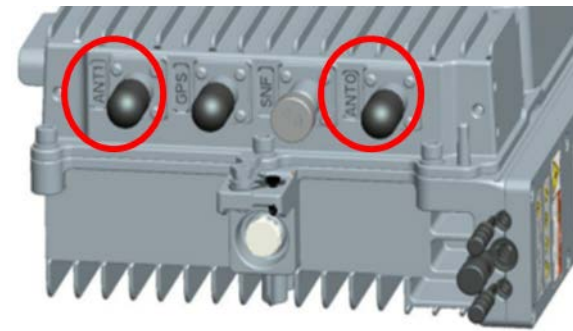
Overview

| | Action |
|---|---|
| 1 | Attach mounting brackets |
| 2 | Optional: Attach GPS antenna |
| 3 | Connect cables: <ul style="list-style-type: none"> RF Ethernet Power |
| 4 | Power on the base station to check LEDs |
| 5 | Install base station at final location |
| 6 | Check base station status in software |
| 7 | Verify lightning and grounding protection |
| 8 | Weatherproof all connections |

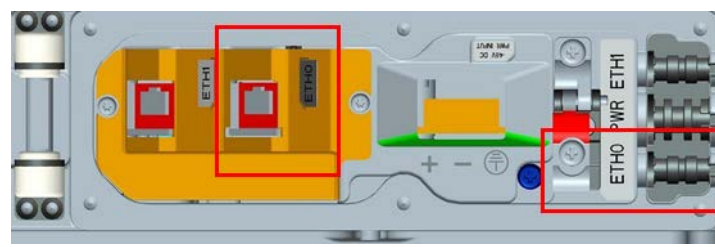
GPS Antenna (Optional)



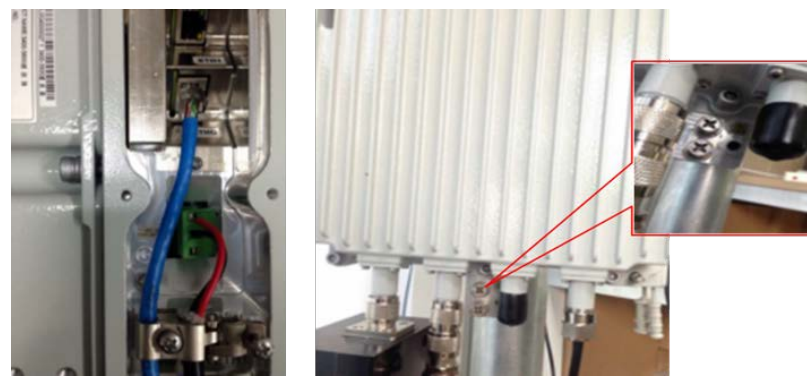
RF Cables



Ethernet Cable

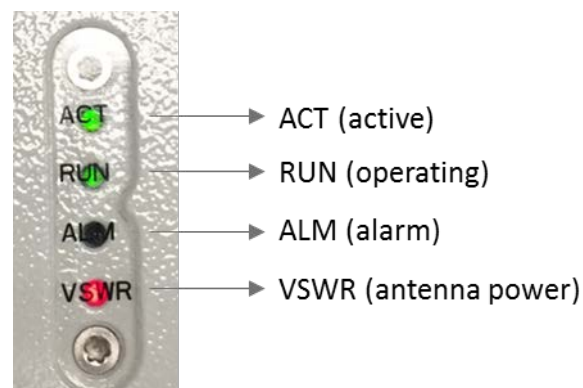


Power Cable & Grounding



Check LEDs

Power on the base station and check LED status:



| LED | Color | Status | Description |
|------|-------|-----------------------------------|--|
| ACT | Green | Steady on | Active cell site. The transmitting channel is working. |
| | | Off | Inactive cell site. The transmitting channel is not working. |
| RUN | Green | Fast blink: 0.125s on, 0.125s off | Base station is booting up |
| | | Slow blink: 1s on, 1s off | Base station is booted and operational |
| | | Off | No power input, or board failure * |
| ALM | Red | Steady on | Hardware alarm * (e.g., cable connection failure) |
| | | Off | No alarms |
| VSWR | Red | Off | The standing wave is normal |
| | | Steady on | The standing wave is larger than normal |

Install

- Wall – drill three 12mm holes, fix with M10*80 expansion screws
- Pole - between 1.2 to 3.9 inches (30 to 100 millimeters), use M6*16 screws



GPS Antenna Considerations

- Space atop within 45° to 90° is not blocked by any buildings
- At least 3 feet (.9 meters) from other transmitting devices
- No metal objects within a range of 3.3 feet (1 meter) of the lightning arrester
- Installed within 45° to the lightning rod
- Separate multiple GPS antennas by 6.6 ft (2 meters)
- Mounting bracket and pole must be grounded

RF Antenna (Omni)

- Top of pole with clamp beneath antenna should be at same level on pole
- Precisely vertical
- No metal objects within 3.3 feet (1 meter) of the omni
- Top of antenna should fall within 45° safety angle towards lightning rod
- High enough to meet coverage requirements
- Verify grounding and lightning protection

RF Antenna (Directional)



Check Base Station Status in Software

Web GUI login - <http://192.168.150.1> (admin/admin), **BTS Info > Status Info > Cell Status = Active**

OMC login - <https://cloudcore.cloudapp.net/cloudcore/> (your email address/your password), **eNB > Monitor > Active Status**

Weatherproof Connections

At least 3 layers of tape, last one bottoms up and tight

