

BERNESE MOUNTAIN DOG G2

Installation Instructions



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Required Tools & Accessories

The following tools (not provided) are required in for the installation of the Bloodhound case antenna:

- Philips Screwdriver
- 3/32" Allen Wrench
- 11/32" Wrench

The tables below list the required accessories for the Bernese Mountain Dog case antenna.

	Bernese Mountain Dog G2
Provided with Antenna	<ul style="list-style-type: none"> • PTA0351 Black Oval Head Screws with Washers, 21 pcs • PTA0399-TL Pan Head Screws, 15 pcs • PTA0885 Hex Head Screws, 4 pcs • PTA0140 Washers, 4 pcs • PTA0844 Lock Washers, 4 pcs • PTA0408 Nuts, 4 pcs • Ethernet Cords, 4 pcs * • USB-C to Barrel Cord • PTA0479 Barrel to 4-Pin Cord • Battery Tray for OmniCharge 20K Battery Pack • Router Plate for Cradlepoint R1900 Router • LED Display Cover, 2 pcs • Cable Ties
To be Purchased By Customer	Bernese Mountain Dog G2
	<ul style="list-style-type: none"> • 20k Battery Pack (OmniCharge 20C+) • 12V 2x2 Power Supply (Cradlepoint #170716-001) if being used with the OmniCharge 20+ 120V • 65W GaN Charger for OmniCharge Battery • Ethernet Cords, 4 pcs ** • Router Options for Bernese Mountain Dog G2: <ul style="list-style-type: none"> ○ Cradlepoint R1900

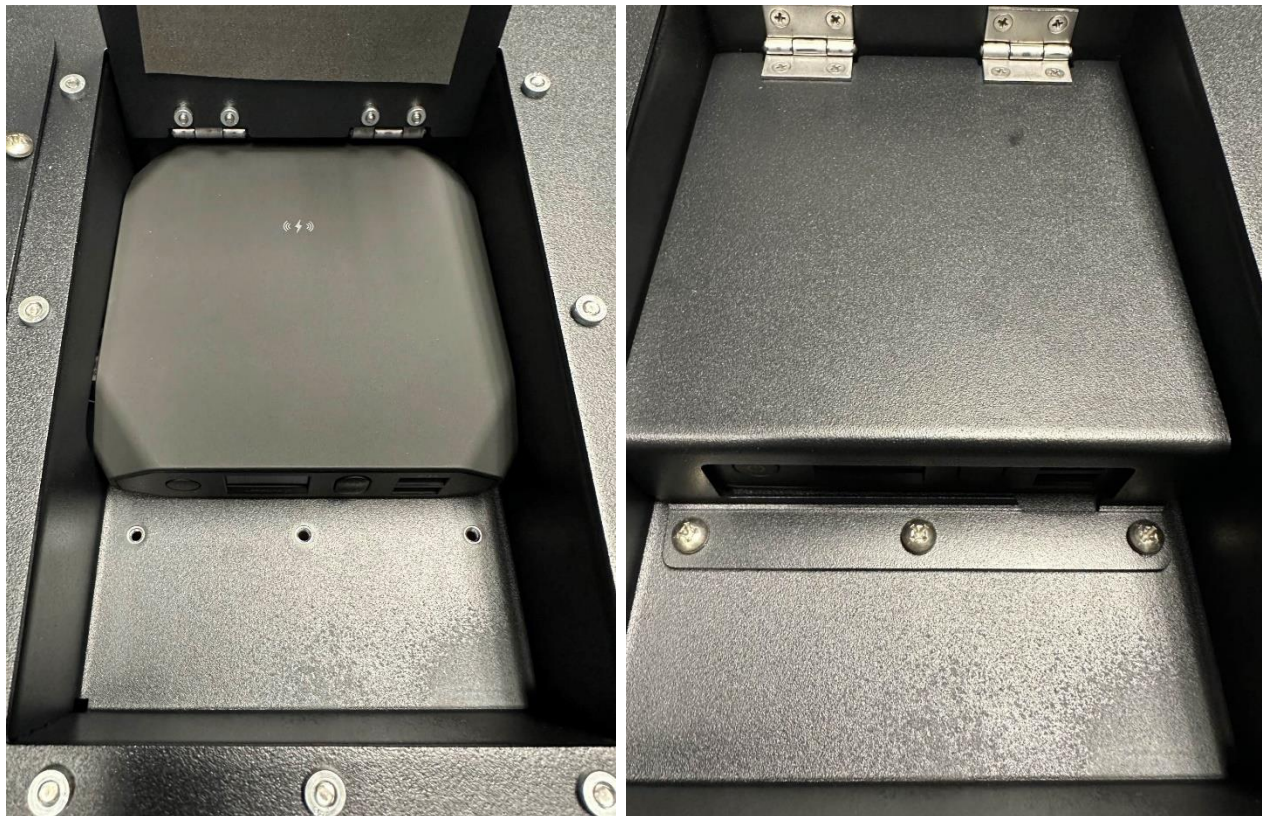
* For connecting the router to the ports on the case

** Optional, for connecting external devices to the case, length as required by customer

Battery and Router Installation

Step 1: Mount the OmniCharge 20K Battery Pack to the Cover Plate.

- A. This step only applies to the Bernese Mountain Dog G2.
- B. Insert the battery pack into the battery tray, as shown in Figure 1.
- C. Secure the Battery Tray with the Qty. 3 PTA0399-TL screws, as shown in Figure 2.



Figures 1-2: Insert the battery pack into the battery tray and secure the Battery Tray.

Step 2: Mount the router to the cover plate.

- A. Remove the Router Plate from the Cover Plate Assembly as shown in Figure 3 to be able to easily install the router to the Router Plate.
- A. Remove the film from the display covers as shown in Figure 4.
- B. Mount the router using the four PTA0885 Screws, four PTA0140 Washers, four PTA0844 Lock Washers, and four PTA0408 Nuts provided in the kit, as shown in Figure 5.
- C. **Ensure the router orientation is correct as shown in the images below. The router display should be visible through the slot(s) in the cover plate.**



Figure 3: Remove the Router Plate from the Cover Plate.

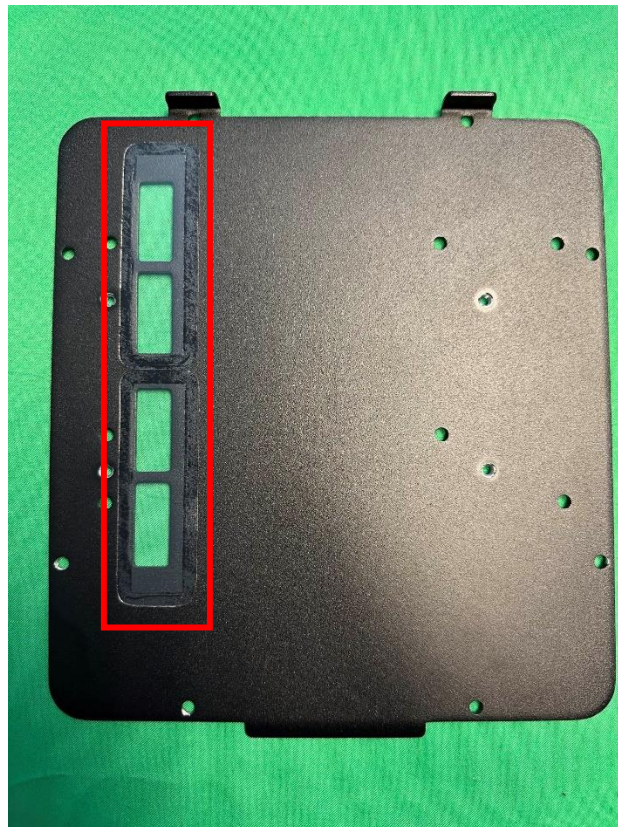
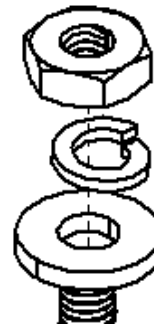


Figure 4: Remove the film from the Display Covers on the Router Plate.



PTA0408 Nut

PTA0844 Lock Washer

PTA0140 Washer

Figure 5: Mount the R1900 Router to the Router Plate.

Connection:

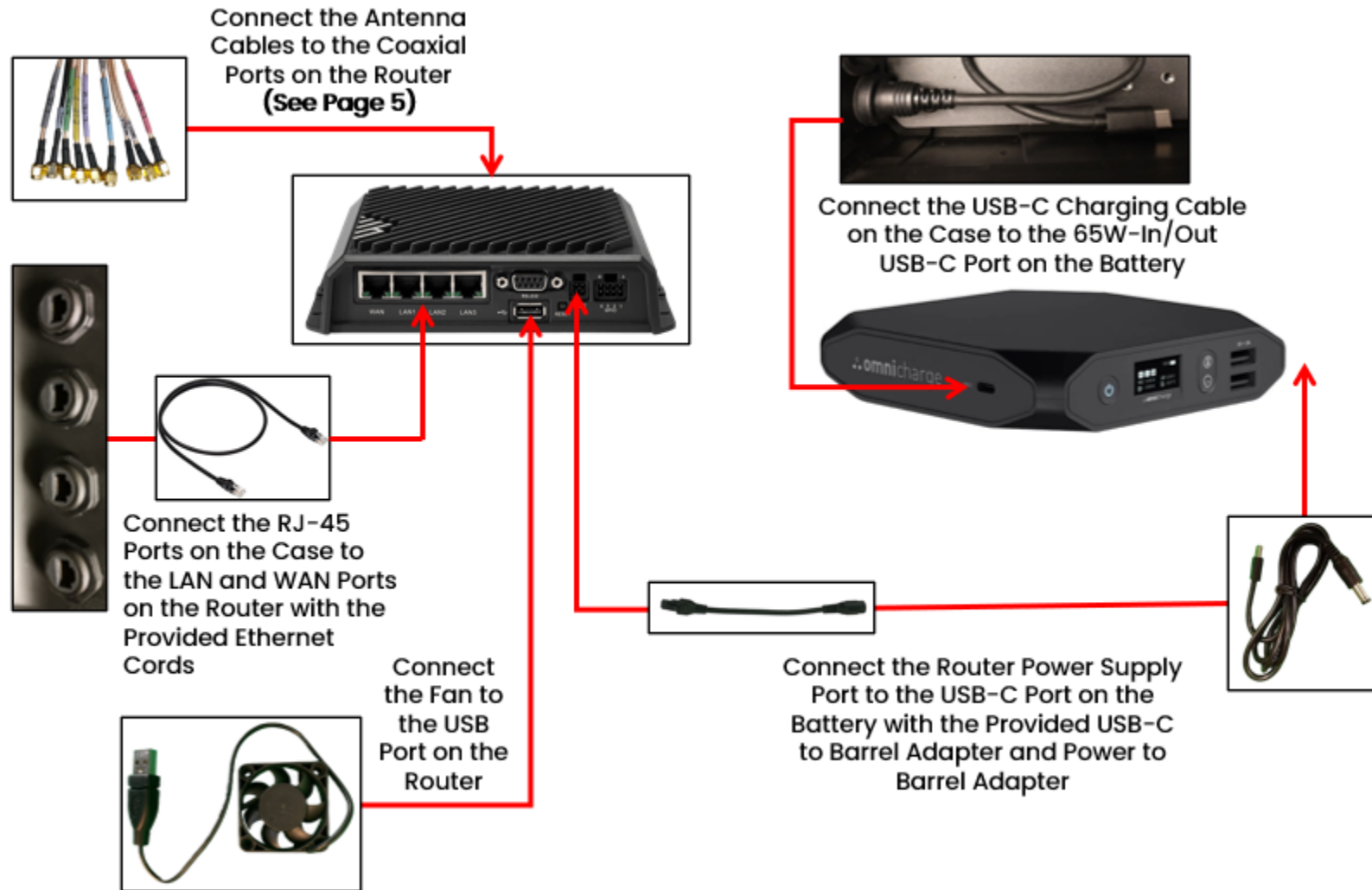


Figure 6: Connection Diagram for Bernese Mountain Dog G2

Step 1: Connect the antenna cables to the router.

- A. Use canned air or isopropyl alcohol to clean all the connectors to ensure that there is no dust in the terminals.
- B. Connect the antenna cables to the designated terminals on the router, as shown in the tables and images below.

Cradlepoint R1900	
Antenna Cable	Router Terminal
CELL 1	MAIN
CELL 2	DIV
CELL 3	MIMO1
CELL 4	MIMO2
GPS	GNSS
Wi-Fi 1	2.4/5GHz WIFI 1
Wi-Fi 2	2.4/5GHz WIFI 2
Bluetooth	BT

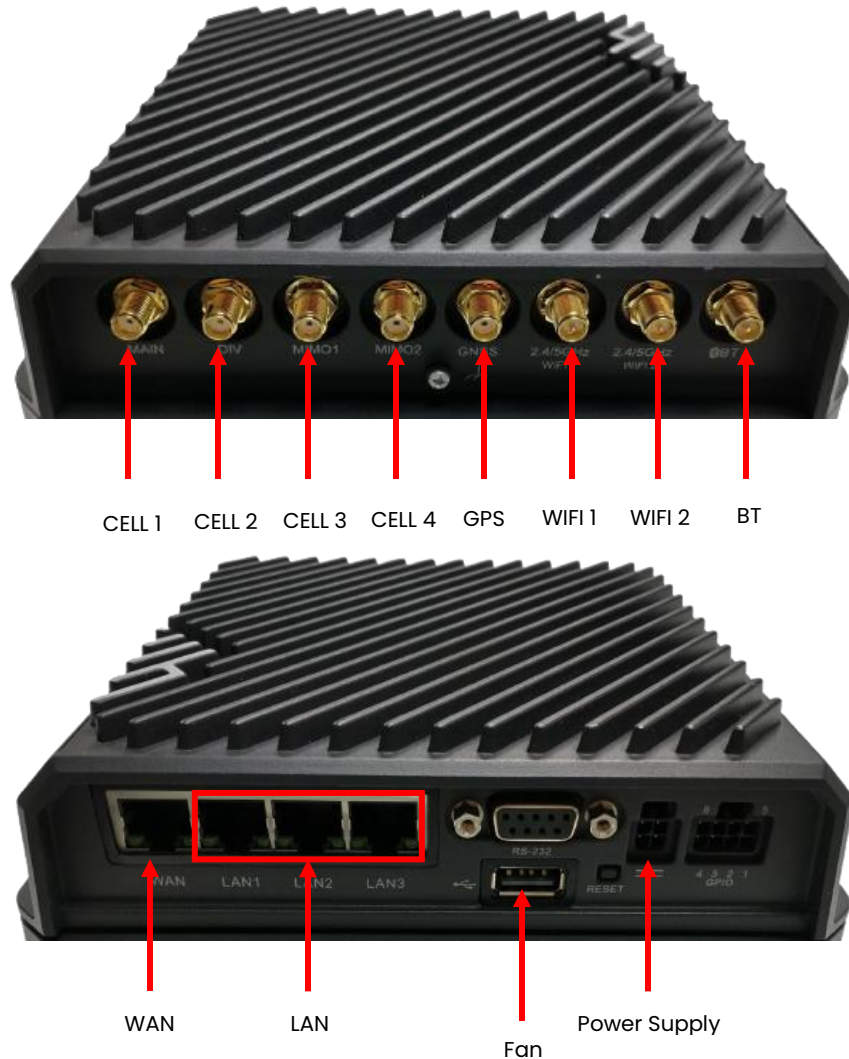


Figure 7: Cradlepoint R1900 Connections

Step 2: Connect the power supply to the router.

- A. Connect the power to barrel adapter to the router power supply port and to the USB-C to barrel adapter. Connect the USB-C to barrel adapter to the Power Adapter and plug in the Power Adapter to the Battery, as shown in Figure 8.



Figure 8: Omnicharge 20k Battery Pack Connections (Right Side).

Step 3: Connect the fan to the router.

- A. Plug the fan power cord into the USB-A port on the router, shown in Figure 7.

Step 4: Connect the battery pack to the USB-C charging port on the case.

- A. Connect the USB-C charging port cable from the case to the USB-C port on the battery, shown in Figure 9.



Figure 9: Omnicharge 20k Battery Pack Connections (Left Side).

Step 5: Connect the router to the RJ-45 ports on the case using ethernet cords.

- A. Connect the provided ethernet cords to the LAN ports on the router, shown in Figure 7.
- B. Connect the other ends of the ethernet cords from the router to the RJ-45 ports on the case.
- C. Connect the provided ethernet cord to the WAN port on the router, shown in Figure 7.
- D. Connect the other end of the ethernet cord from the router to the RJ-45 port on the cover plate.

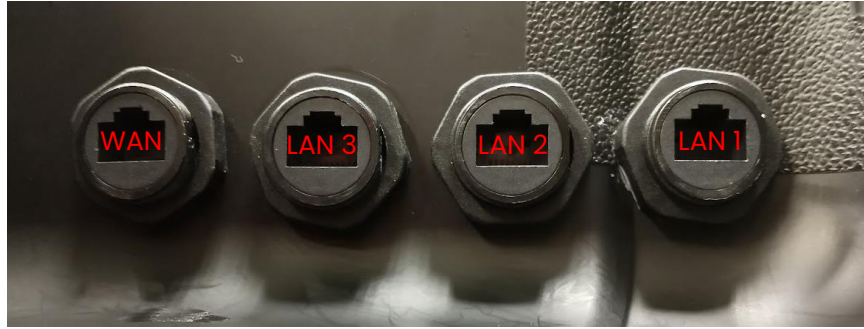


Figure 10: Connect the router to the RJ-45 ports on the case using ethernet cords.

Final Assembly

Step 1: Make sure all the cables and devices are properly connected.

- A. Inspect every cable connection and ensure that no connections are loose.
- B. Use cable ties or other wire management to neatly bundle the cables as shown below.

Note: Ensure that the antenna cables are not excessively bent ($1/2''$ minimum bend radius).



Figure 11: Final Assembly

Step 2: Fasten the cover plate to the case.

- A. Place the cover plate onto the bottom half of the case. **Ensure that no cables are pinched between the cover plate and the case.**
- B. Fasten the cover plate to the case using the twenty-one PTA0351 black oval head screws with washers provided in the kit, as shown in Figure 12.

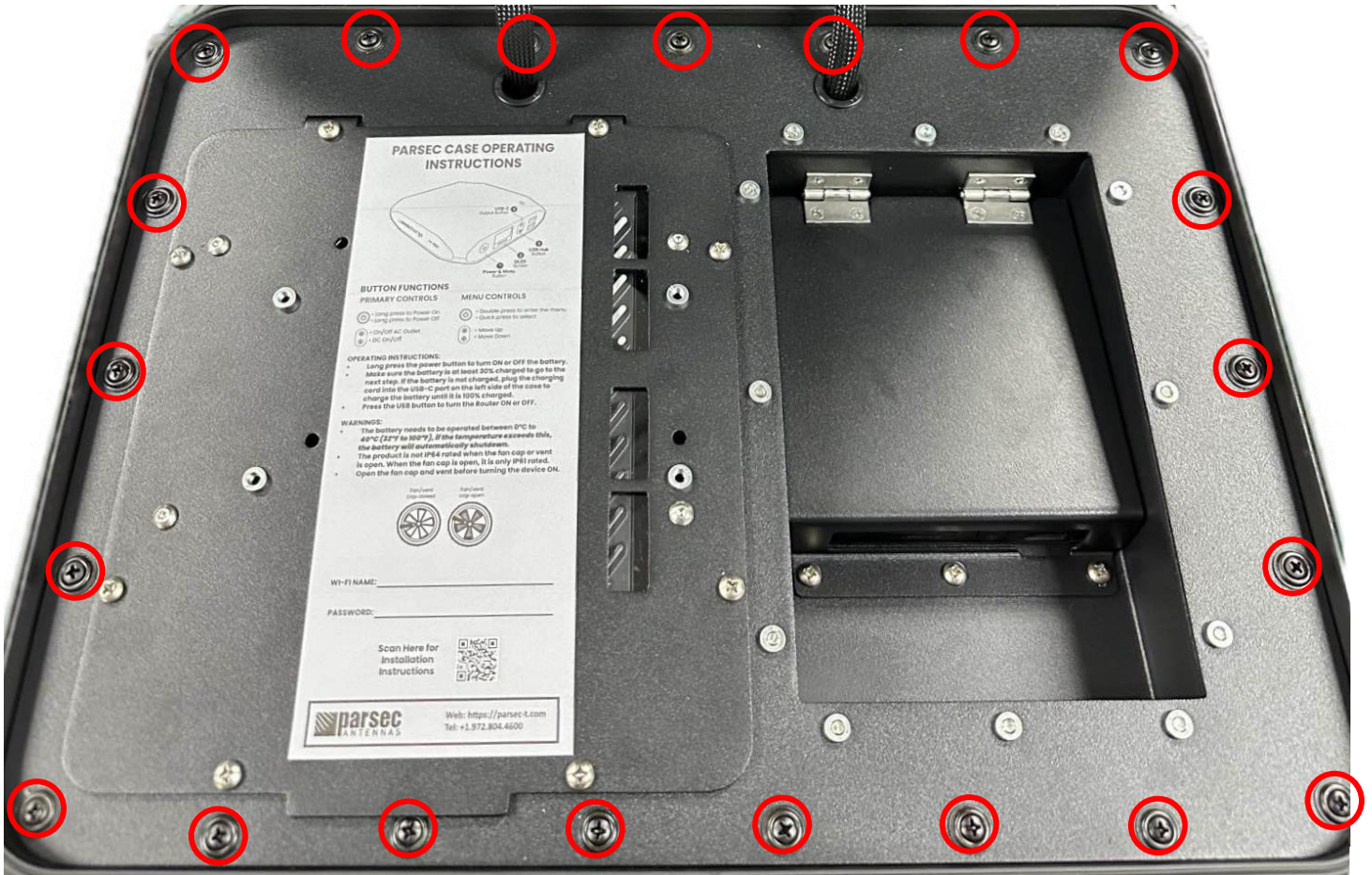


Figure 12: Fasten the cover plate to the case using PTA0351 screws.

Step 3: Secure the router plate and battery cover to the cover plate.

- A. Fasten the router plate and battery cover to the cover plate using the eleven PTA0399-TL screws provided in the kit, as shown in Figure 13.

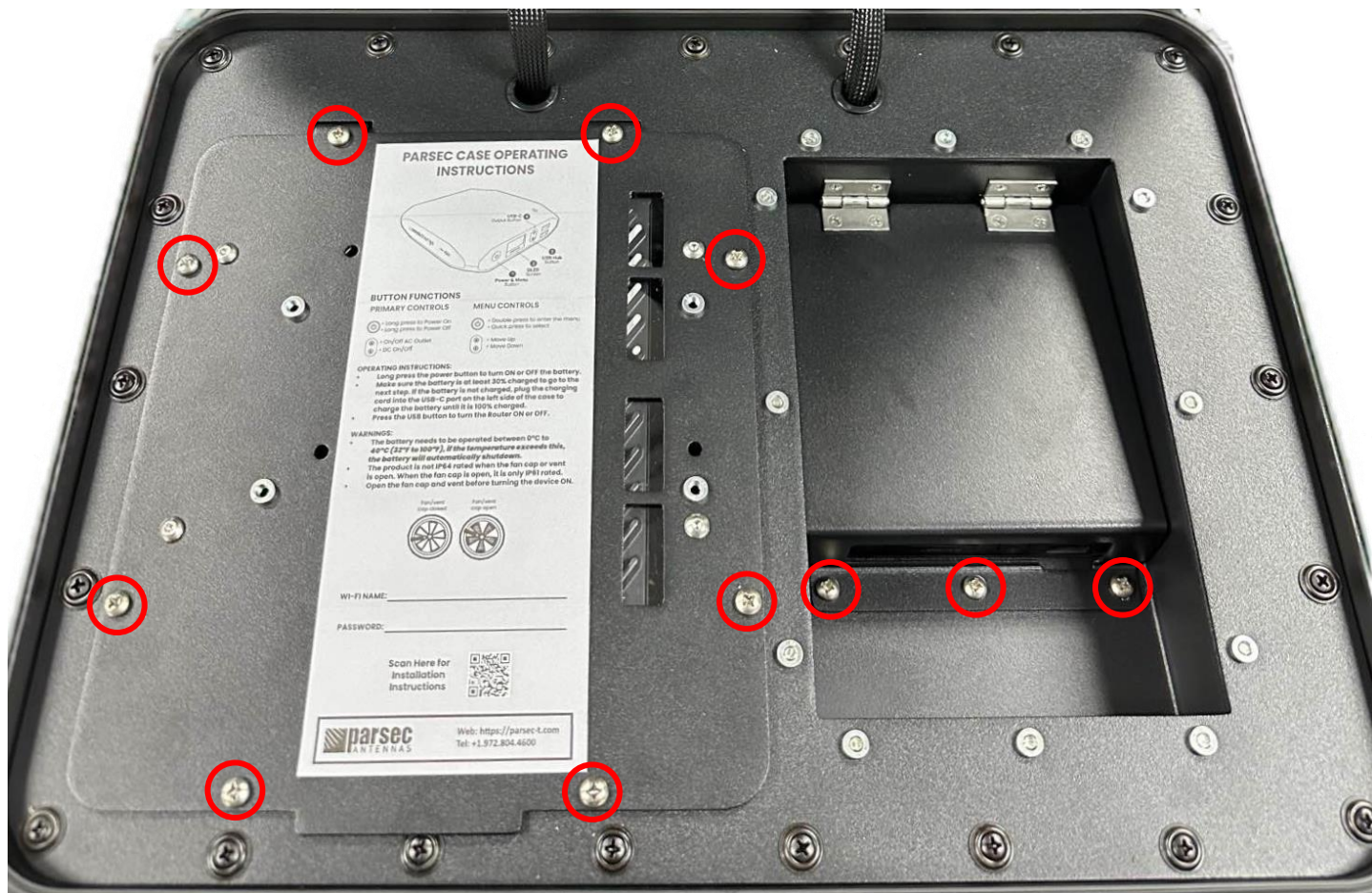


Figure 13: Fasten the router plate and battery cover to the case using PTA0399-TL screws.

Operational Setup

Step 1: Open the fan and vent caps.

- A. Before turning the antenna ON, always open the fan and vent caps. The type of cap may vary.
- B. **Ensure that the antenna is away from any liquids when the caps are open.**



Figure 14: Open the fan and vent caps.

Step 2: Power on the antenna.

- A. Turn the battery pack ON by pressing and holding the power button for 3 seconds. The display on the battery pack will indicate the battery pack's current battery life (%).
- B. Shortly after turning on the battery pack, the fan will start.
- C. To charge the battery pack, connect the battery pack charger to the USB-C charging port on the back of the case.
- D. See Page 16 for Battery Operation and Safety Guidelines.

Step 3: Connect the antenna to a computer.

- A. Use an ethernet cable to connect a computer to one of the RJ-45 ports on the case that are connected to the LAN ports on the router.

Step 4: Login to Cradlepoint NetCloud.

- A. Open a web browser on the computer and type 192.168.0.1 into the address bar. This will bring up the Cradlepoint NetCloud login, shown in Figure 15.
- B. Login to Cradlepoint NetCloud. The username is "admin", and the password is found on the router, shown in Figure 16.

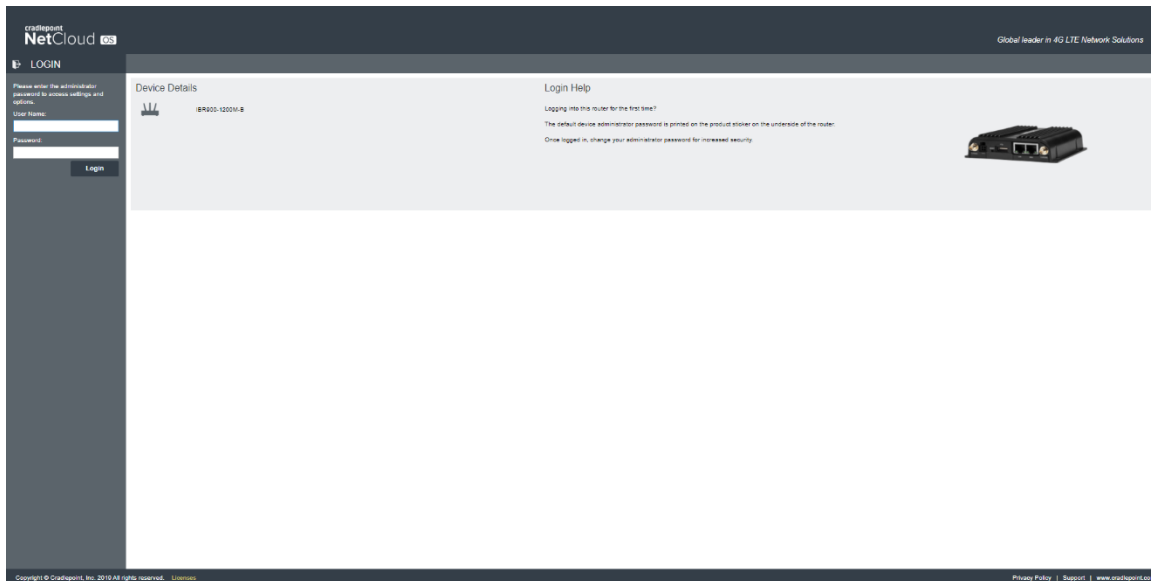


Figure 15: Access Cradlepoint NetCloud.

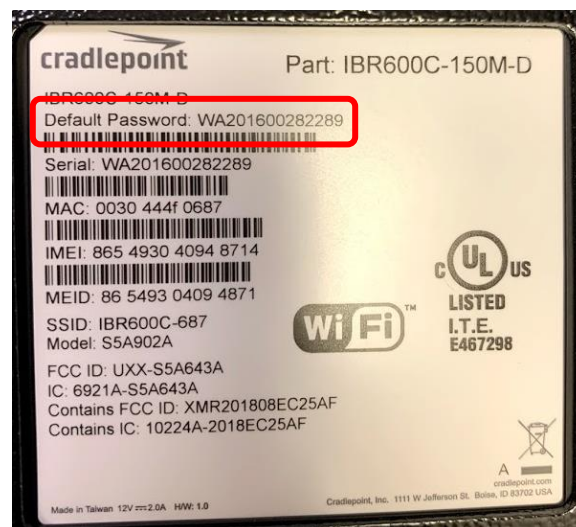


Figure 16: Cradlepoint NetCloud Login Password

Step 5: Select the antenna in the device list on Cradlepoint NetCloud.

- A. On the left side of the page, select STATUS. From the dropdown menu, select INTERNET and then CONNECTIONS.
- B. In the Device List table, select the option with a cellular SIM, as shown in Figure 17.

The screenshot shows the Cradlepoint NetCloud OS interface. On the left is a navigation menu with sections: QUICK LINKS, DASHBOARD, CONNECTION MANAGER, STATUS (selected), and IDENTITIES. Under STATUS, the path is Internet > Connections. The main area displays the 'Device List' with a table containing three rows: Ethernet WAN (VID: 1), Internal 1200M-B (SIM1 - NO SIM), and Internal 1200M-B (SIM2 - Verizon) (selected). Below the list, the 'Device Information: Internal 1200M-B (SIM2 - Verizon)' is shown in a table format.

Property	Value
Summary	
State	connected
Manufacturer	Cradlepoint Inc.
Model	Internal 1200M-B (SIM2)
Modem Firmware Version	32.00.123
Service Display	LTE
Registered Carrier	Verizon
Home Carrier	Verizon
Roaming Status	Home
Signal Strength	02
RSSI	-79 dBm
SINR	7.4 dB
RSRP	-111 dB
RSRQ	-15 dB

Figure 17: Select the device with a cellular SIM in Cradlepoint NetCloud.

Antenna setup is complete!

For best antenna performance, operate the antenna with the lid closed and the case oriented with the lip on top.

Make sure the fan and vent caps are open while using the antenna.

Battery Operation and Safety Guidelines

- A. To manually power ON/OFF, press and hold the power button (located on the top of the unit) for 3 seconds. All LED lights/display should turn ON/OFF.
- B. Recharging the battery pack can be done with the a Type-C PD Charger with at least 45W of power and up to 65W maximum.
- C. While plugged in and charging, the battery pack will allow pass-through charging to continue powering any devices that are plugged in to the battery pack.
- D. Warning: if the battery pack exceeds a safe operating temperature due to insufficient ventilation or a high-temperature environment, the unit will automatically shut OFF.
- E. Keep out of reach of children.
- F. The product may become uncomfortable warm, reaching 100°F (40°C) under extended, high-power usage. While using the product, make sure to keep it away from materials that may be affected by high temperatures.
- G. Hold on carefully when inserting or removing a cable. Make sure not to force or bend cables when inserting them into the charging ports.
- H. Avoid inserting any foreign objects into the ports.
- I. Do not attempt to open, alter, or modify the unit.
- J. Do not in temperatures over 100°F (40°C).
- K. Do not expose the product to wet conditions such as water, rain, or snow.
- L. Failure to follow these safety guidelines may cause personal injury and/or property damage to the product. It may also void the product warranty.



CAUTION

To comply with FOC RF Exposure requirements in section 1.1310 of the FCC Rules, antennas used with this device must be installed to provide a separation distance of at least 20 cm from all persons to satisfy RF exposure compliance.



DO NOT

- Operate the transmitter when someone is within 24 inches of the antenna
- Install the antenna or mast assembly on a windy day
- Install the mast close to power lines as it can cause serious injuries or death



WARNING

This document gives detailed instructions to install an antenna to the best of our knowledge. This document is for general information only. It cannot be used as a warranty. Parsec Technologies Inc. will not accept any liability for any damage caused by an antenna due to unknown variables.



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