

NEWFOUNDLAND

Installation Instructions

The Newfoundland is a large IP67 case with built in ruggedized, high performance Parsec antennas. Configured with up to 13 antenna elements, the Newfoundland is capable of running 8x8 MIMO LTE with simultaneous dual SIMs, 4x4 MIMO WiFi, and GPS. These high performance Parsec antennas were designed for maximum performance even in remote areas where cellular infrastructure may have been compromised. This 5G NR ready, 600 MHz - 6GHz case antenna is ready to go at a moments notice.



REQUIRED TOOLS

5/32 Hex Allen Screwdriver

Phillips Screwdriver

9" Zip Ties

Scissors

REQUIRED ACCESSORIES

Router (select one of the following routers.)

- CRADLEPOINT AER2200
- CRADLEPOINT IBR1700-1200M
- CRADLEPOINT E3000
- CRADLEPOINT IBR900-1200M (2)
- SIERRA WIRELESS AIRLINK MG90
- SIERRA WIRELESS AIRLINK MP70
- INSEEGO SKYUS 500
- INSEEGO SKYUS 300

Battery: Chargatech 54k AC Battery Pack (OPTIONAL)

Ethernet Cords: 4pc (Length as required by the customer)

USB Cords - 1 pc (length as required by the customer)

Power Supply (required for router)

Battery Straps (OPTIONAL)

Extension Cord (NEMA 5-15 Plug to NEMA 5-15 Socket)

Router Installation:

Step 1.

Take off the top cover plate by unscrewing the 6 cap nuts using the 5/32 Hex Allen screwdriver. (Figure 1)



FIGURE 1

Step 2.

Check if the router needs brackets to mount it to the router mount plate. The Cradlepoint AER2200 and E3000 will need brackets to mount. Use the brackets provided in the kit and assemble them onto the router. (Figure 2)



FIGURE 2

Step 3.

Zip Tie the surge protector to the router mount base plate. (Figure 3) Connect the AC plug of the surge protector to the AC adapter on the case. (Figure 4)



FIGURE 3

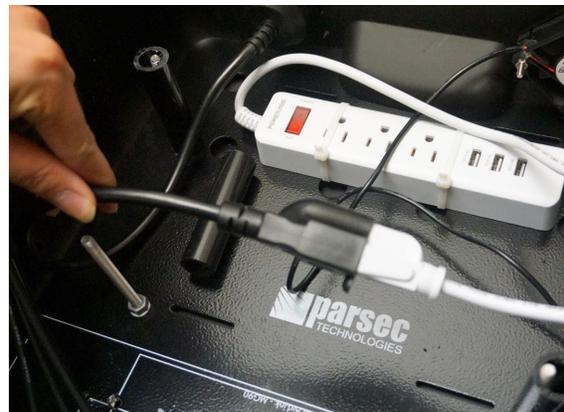


FIGURE 4

Step 4.

Connect the Antenna cables to the router. Clean all connectors so there is no dust in the terminals. Follow the chart to connect the cables. (Figures 5-7)

Wire label on antenna	Connector on router
LTE-1	MAIN 0
LTE-2	AUX 0
LTE-3	MAIN 1
LTE-4	AUX 1
LTE-5	MAIN 0, 2 nd modem
LTE-6	AUX 0, 2 nd modem
LTE-7	MAIN 1, 2 nd modem
LTE-8	AUX 1, 2 nd modem
GPS	GPS
WiFi-1	2.4/5GHz, left gold
WiFi-2	2.4/5GHz, right gold
WiFi-3	5GHz, left gold
WiFi-4	5GHz, right gold

FIGURE 5

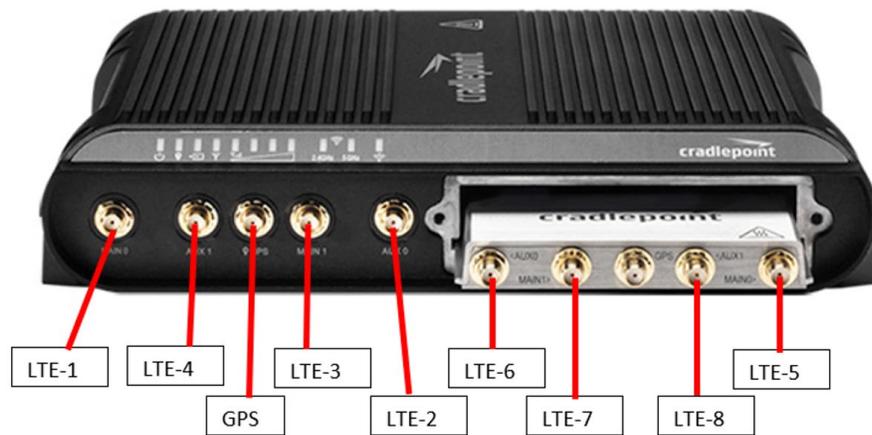


FIGURE 6

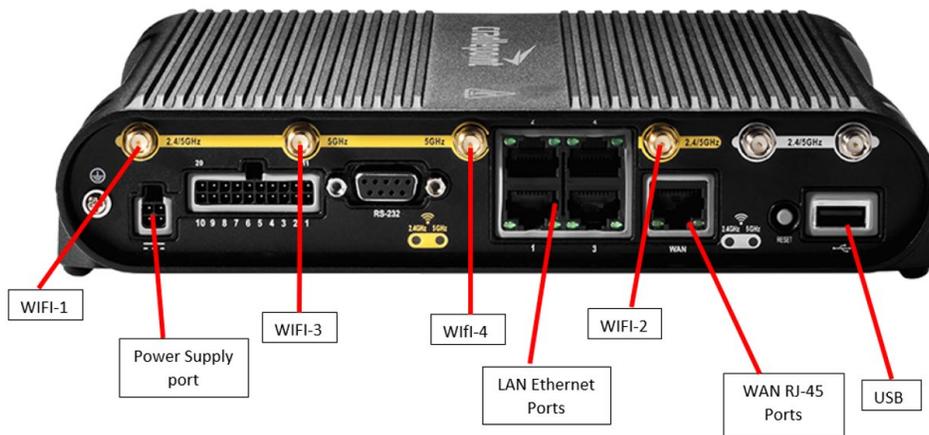


FIGURE 7

Step 3.

Connect the AC adapter of the fan and the router power supply unit to the surge protector. Zip tie the adapters to secure them. Make sure the surge protector is switched on. (Figure 10)



FIGURE 10

Battery Connection Instructions (OPTIONAL):

Step 1.

Select a battery with an AC port for powering the router. We recommend the “Chargetech 54k AC Battery Pack”.

Step 2.

Strap the battery to the router mount base using velcro or zip ties. (Figure 11)



FIGURE 11

Step 3.

Turn off the AC switch and Battery power switch. Plug in the AC plug of the surge protector to the AC port of the battery. (Figure 11)

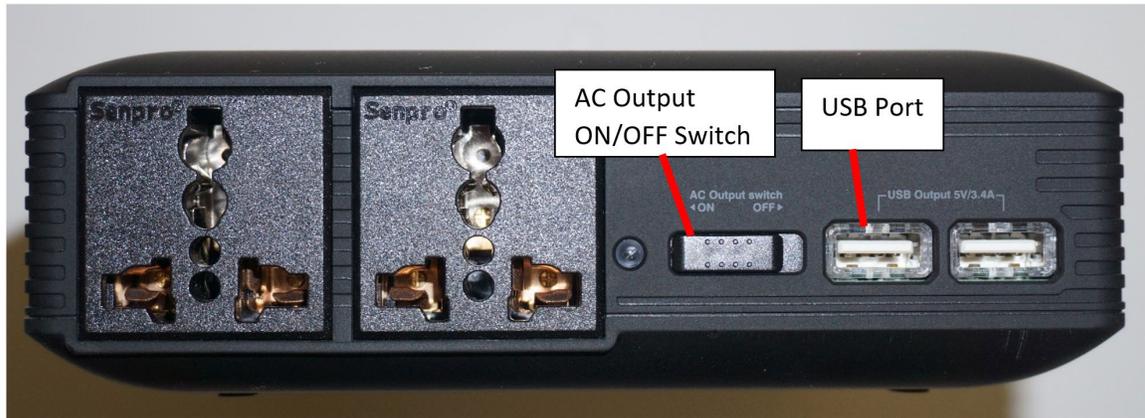


FIGURE 11

Step 4.

Connect the charging port of the charger to the battery. Connect the AC plug from the charger to the AC adapter on the case. (Figure 12)



FIGURE 12

Antenna Operation:

Step 1.

Check all connections and make sure they are secure. Make sure all of the cables are connected to the right ports.

Step 2.

Before turning on the antenna, open the fan caps on the case. Be sure they are always open during operation. When operating, keep the antenna away from any liquids or splashing. (Figure 13 & 14)

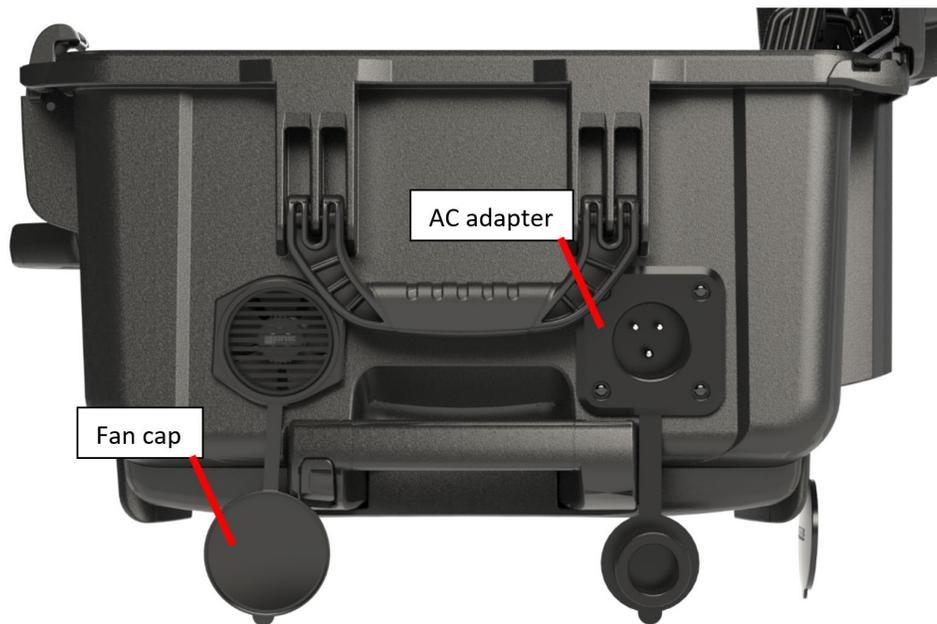


FIGURE 13



FIGURE 14

Step 3.

Plug in one end of the Extension Cord (NEMA 5-15 Plug to NEMA 5-15 Socket) to the case (figure 13) and the other end to the wall.

Step 4.

Turn on the power source. The router will turn on and display lights will start blinking. If you are using a battery, turn on the main power switch and the AC switch of the battery.

Step 5.

Connect a network cable between the ethernet ports on a computer and one of the ethernet ports on the antenna enclosure. Make sure you are connected to a LAN port and not a WAN port.

Step 6.

Bring up a web browser on the computer and type 192.168.0.1 into the address bar. You should see the Cradlepoint login. (Figure 15)

Step 7.

Type the username and password. Username is "admin" by default. The password can be found on the information cutout on the router. (Figure 16)

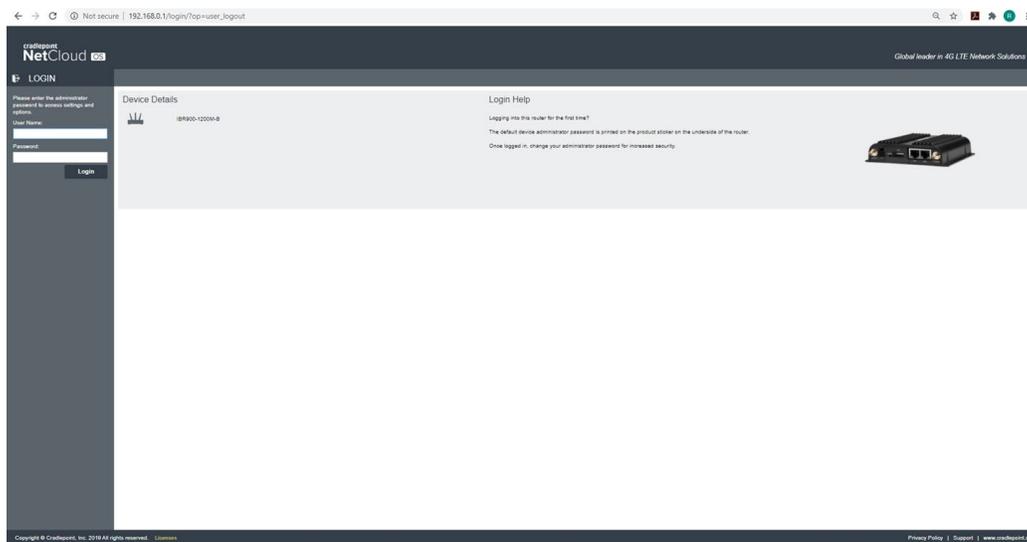


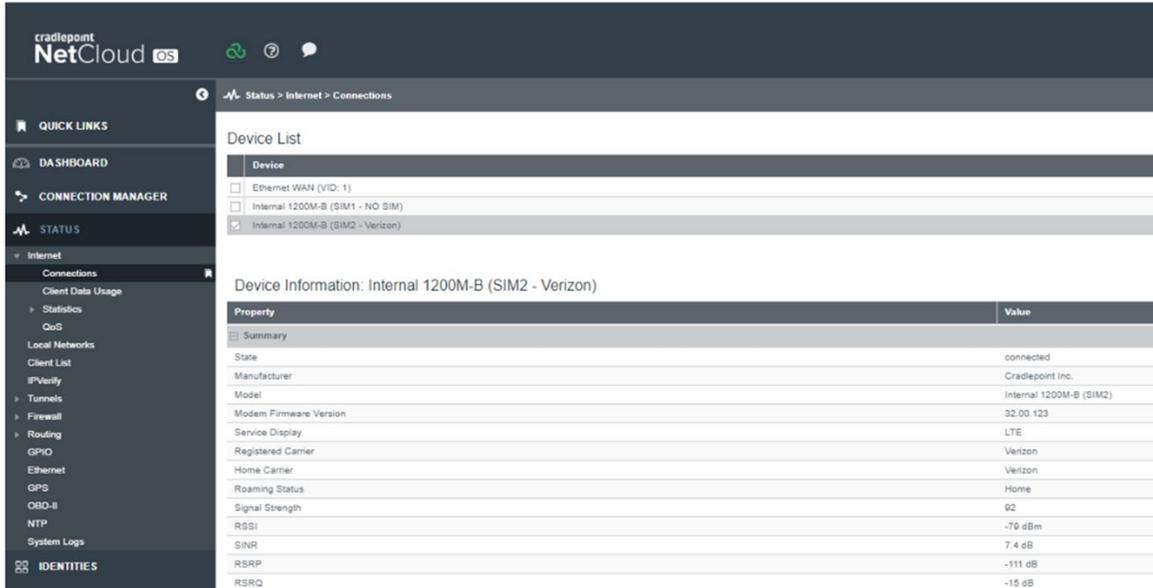
FIGURE 15



FIGURE 16

Step 8.

In the router, click on Status, Internet, and then Connections in the dropdown menu. You should see options related to SIM cards installed. Select the option with a cellular SIM. (Figure 17)



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	92
RSSI	-70 dBm
SINR	7.4 dB
RSRP	-111 dB
RSRQ	-15 dB

FIGURE 17

Step 9.

If all of the steps are completed, the antenna should be on and operating. Close the top cover plate using the thread forming screws provided in the kit. (Figure 18)



FIGURE 18

Warnings:

Make sure the fan cap covers are open while using the antenna.
Install the sim in router before mounting on to the router mount plate.



CAUTION
To comply with FCC 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 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 the 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.