

Dalmatian

Installation Instructions



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Required Tools & Accessories

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

- Philips Screwdriver
- 11/32" Wrench

The tables below list the required accessories for the Dalmatian enclosure antenna.

	Dalmatian-L	
Provided with Antenna	<ul style="list-style-type: none"> • PTA0972 Keys for the Dalmatian, 2 pcs • PTA0399-TL Pan Head Screws, 10 pcs • PTA0164 Pan Head Screws, 10 pcs • PTA0963 Screws, 6 pcs • PTA0964 Washers, 6 pcs • PTA0059-TL Screws, 4 pcs • PTA0173 Washers, 4 pcs • PTA1008 Split Cable Glands, 2 pcs • PTA1009 Rubber Inserts, 2 pcs – 0.36" to 0.39" OD Cord • Pole Mounting Kit: <ul style="list-style-type: none"> • PTA0423 Pan Head Screws, 8 pcs • PTA0960 Star Washers, 8 pcs • PTA0966 Washers, 8 pcs • PTA0829B Brackets, 4 pcs • PTA0411 Worm-drive Clamps, 4 pcs • Grounding Kit • Power Strip • Router Plate • Cable Ties 	
To be Purchased By Customer	Dalmatian-L	
	<ul style="list-style-type: none"> • Router Options (for other routers, contact customer service at support@parsec-t.com) <ul style="list-style-type: none"> ○ Cradlepoint R1900 Router ○ Cradlepoint W1855 Adapter ○ Nextivity SHIELD MegaFi ○ Peplink MAX BR1 Pro 5G • Router Power Adapter * • Ethernet Cords ** 	

* For powering the router, length as required by customer, type determined by Router option selected

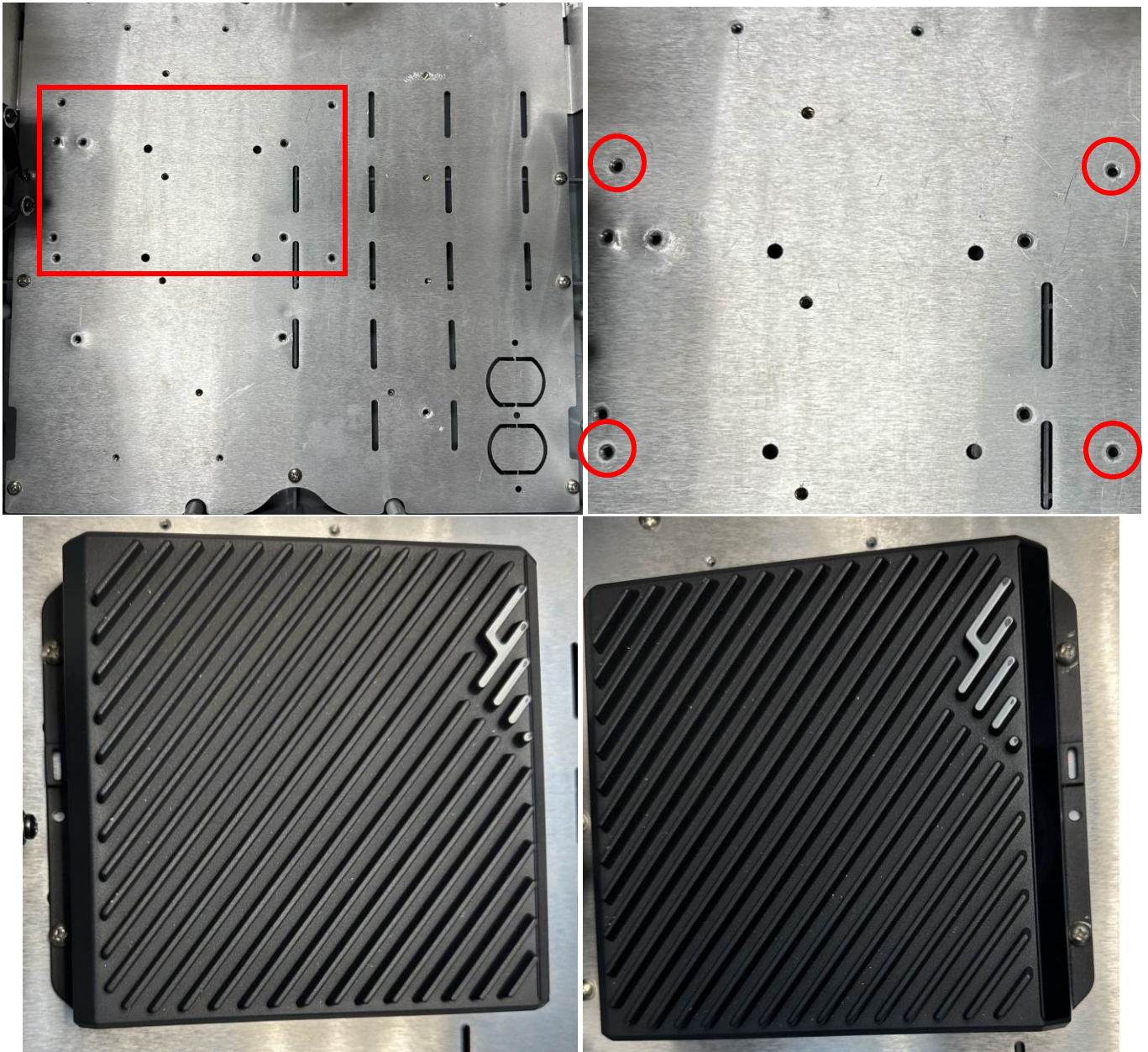
**Optional for connecting external devices to the router, length as required by customer

Router Installation

Step 1: Mount the router to the router plate.

A. For the **Cradlepoint R1900 Router**:

I. Mount the router using the four PTA0164 Screws, as shown in Figures 1-4.

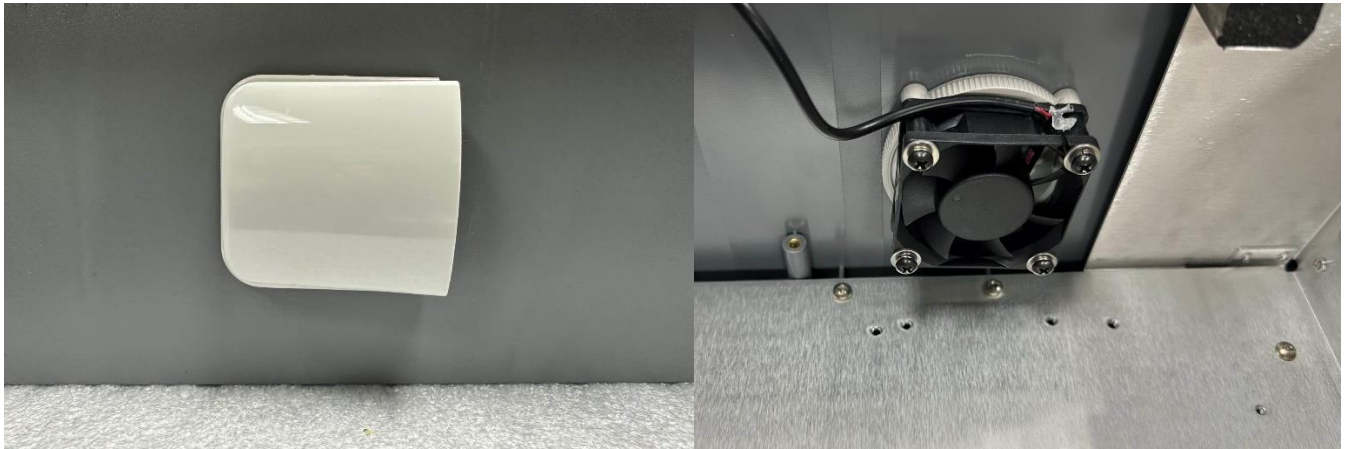


Figures 1-4: Cradlepoint R1900 Router installation

B. For the Cradlepoint W1855 Router:

I. Remove the router plate by:

- 1) Unscrewing the Fan on the left side of the case by twisting the fan and holding the vent from the outside, as shown in Figures 5-6.



Figures 5-6: Removing the fan from the Dalmatian

- 2) Unscrewing the 11 PTA0399-TL screws, as shown in Figure 7.

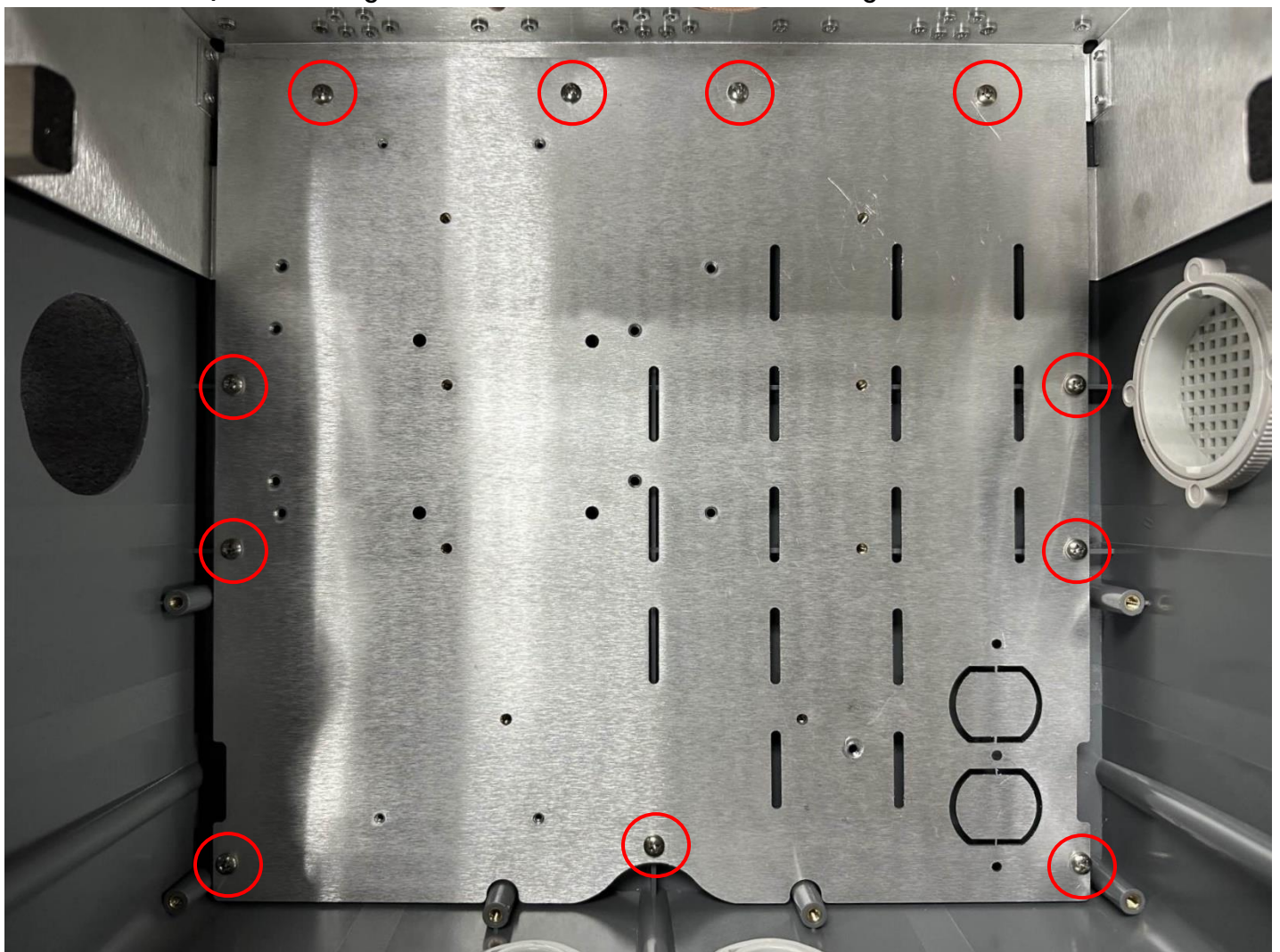
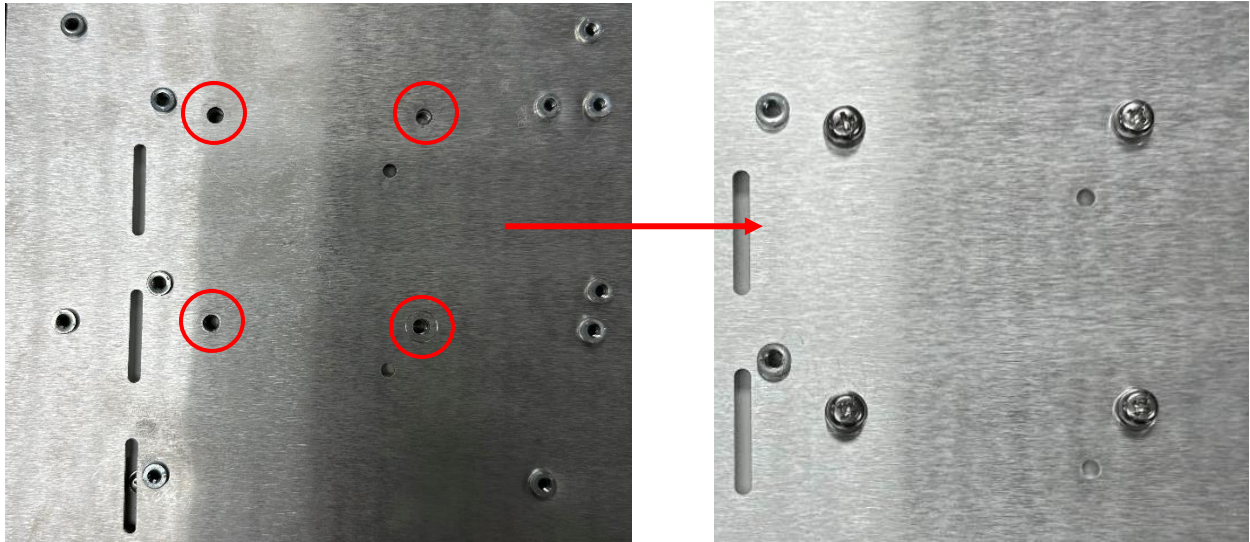


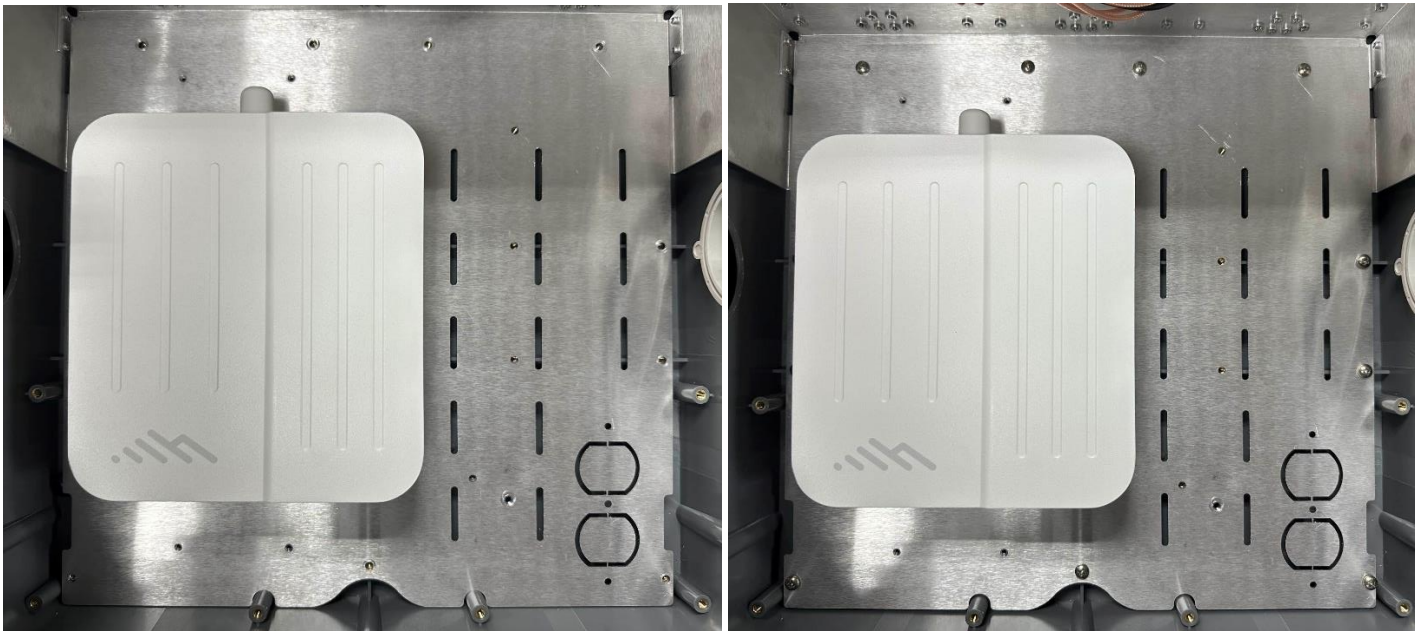
Figure 7: Removing the router plate from the Dalmatian

- II. Mount the router using the four screws provided with the W1855 router by installing the screws through the holes provided in the router plate, as shown in Figures 8-9.



Figures 8-9: Cradlepoint W1855 Router Installation

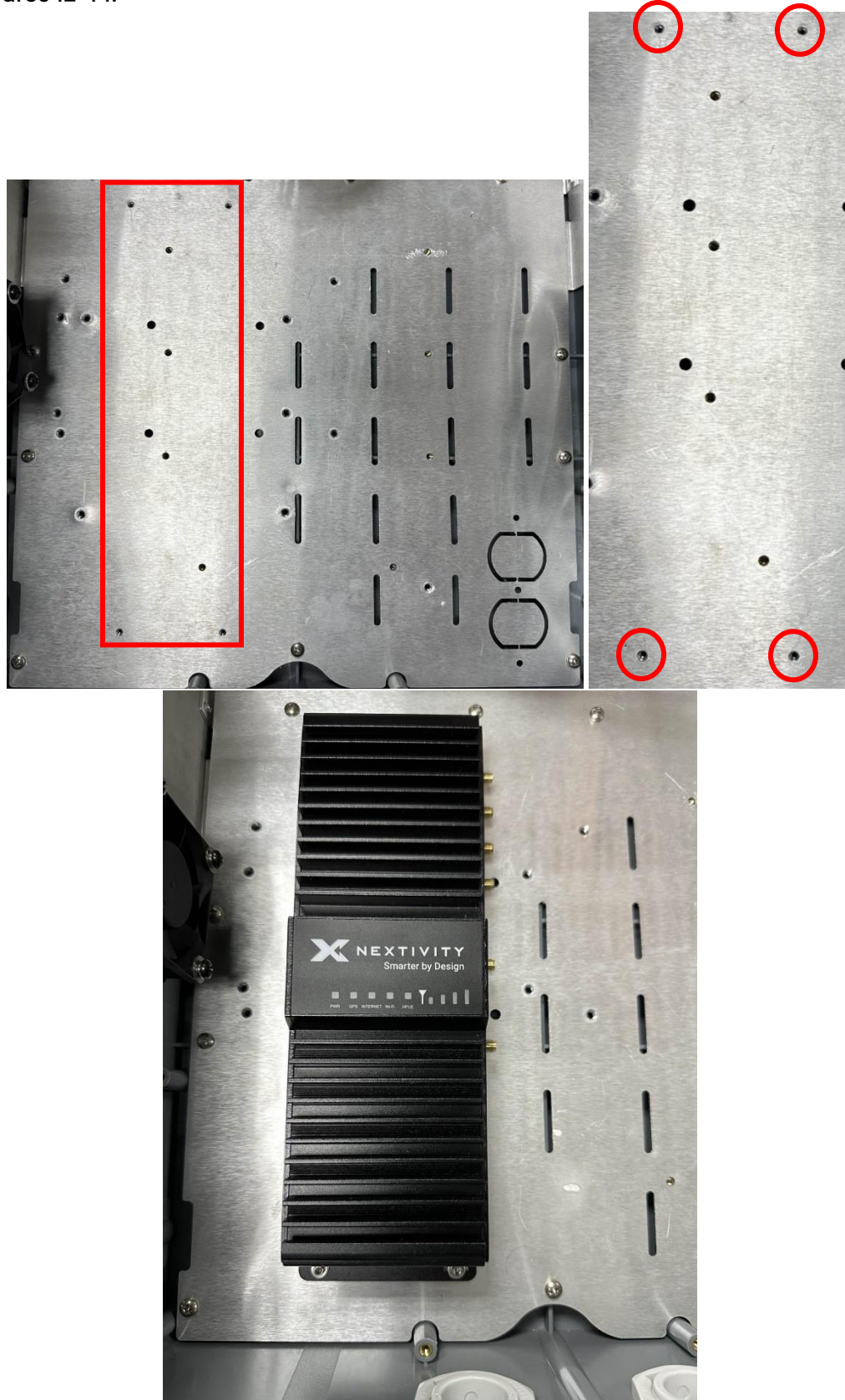
- III. Reinstall the router plate, as shown in Figures 10-11:



Figures 10-11: Reinstalling the router plate in the Dalmatian

C. For the **Nextivity SHIELD MegaFi Router**:

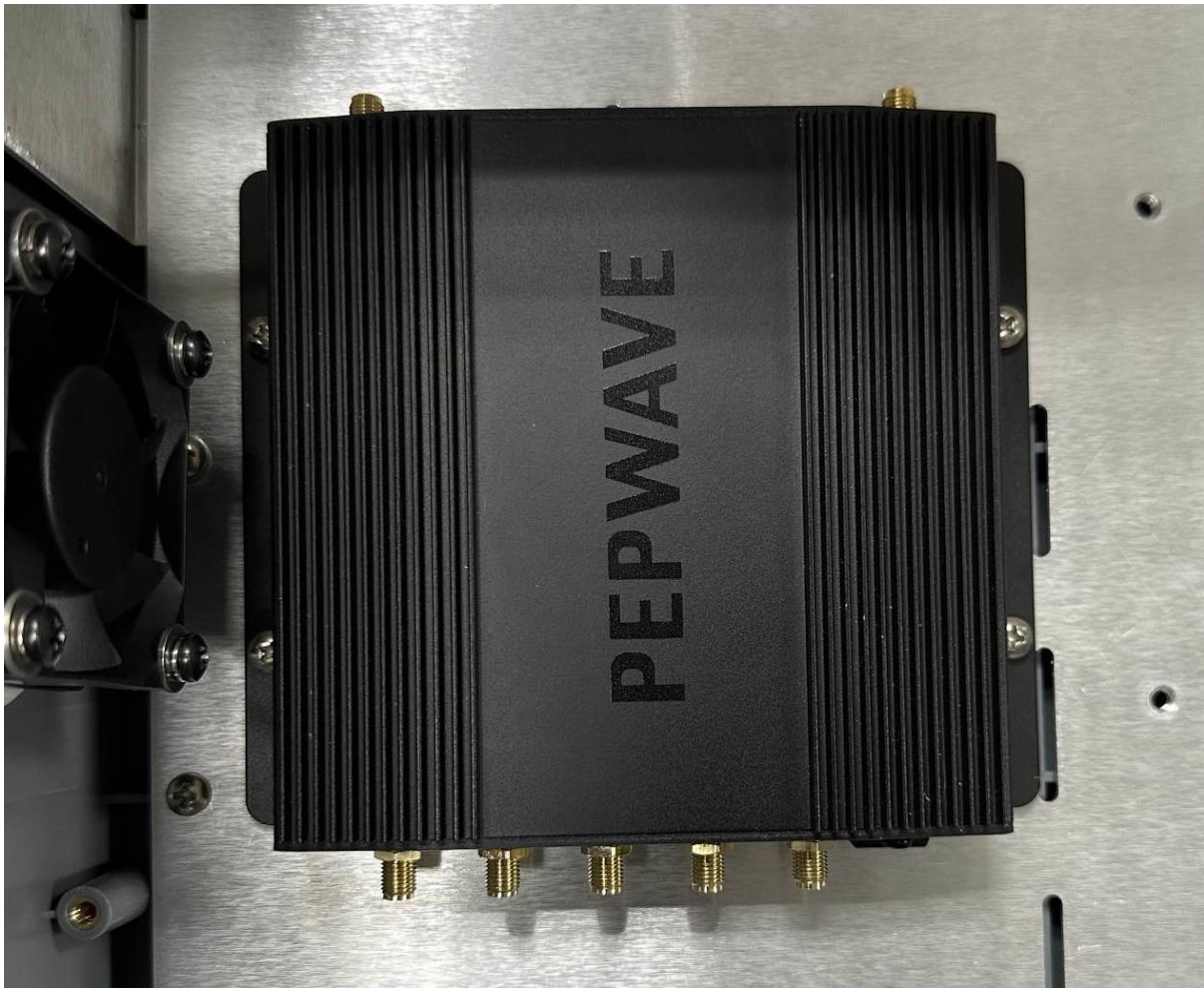
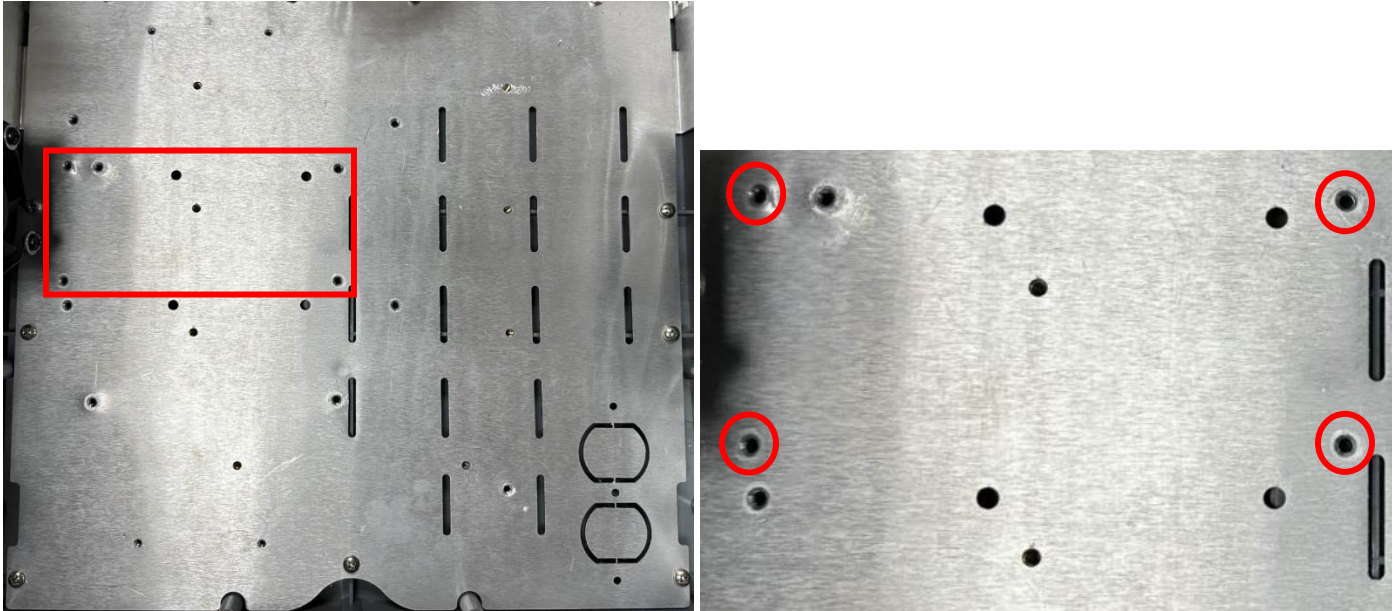
- I. Mount the router using the four PTA0059-TL Screws and PTA0164 Washers, as shown in Figures 12-14:



Figures 12-14: Nextivity SHIELD MegaFi Router Installation

D. For the **Peplink MAX BR1 Pro 5G Router**:

- I. Mount the router using the four PTA0399-TL Screws, as shown in Figures 15-17:

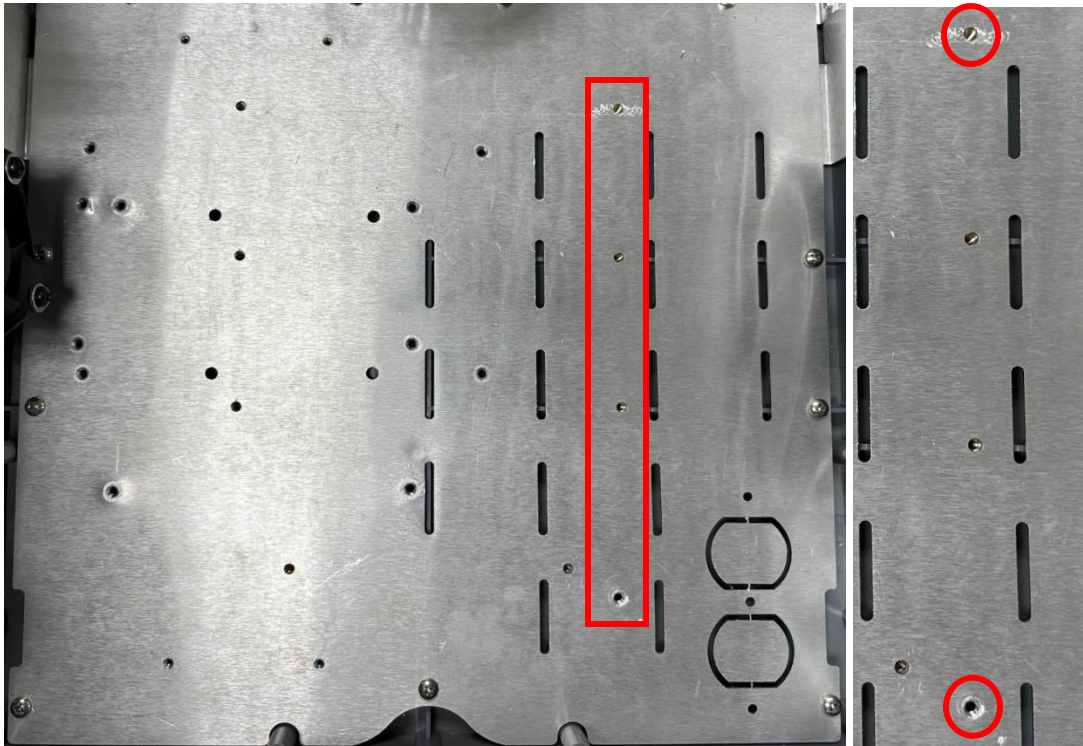


Figures 15-17: Peplink MAX BR1 Pro Router Installation

Power Strip Installation (Dalmatian-L only)

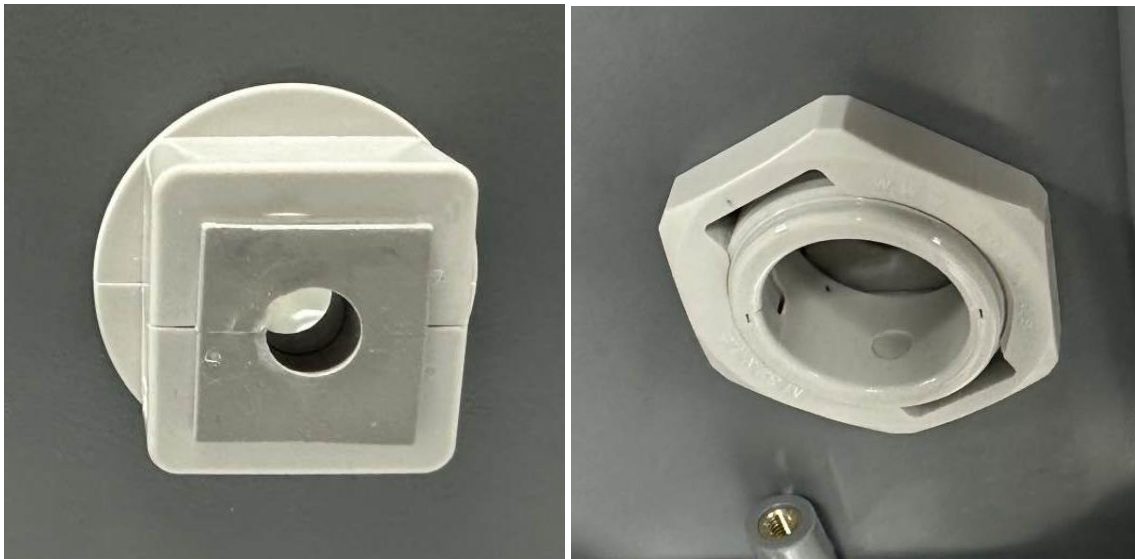
Step 1: Mount the Power Strip to the router plate.

- A. Install the Power Strip to the Router Plate using the two PTA0399-TL screws, as shown in Figures 18-20:



Figures 18-20: Power Strip Installation

- B. Disassemble the Cable Gland for the Power Strip and pass the Power Strip cable through the Cable Gland.
- I. Hold the Cable Gland from the outside, as shown in Figure 21, and unscrew the nut from the inside, as shown in Figure 22: **(For Dalmatians purchased after 07/01/24, please skip this Step and continue to B-II)**



Figures 21-22: Removing the Cable Gland from the Dalmatian

- II. Pass the Power Strip cable through the Nut, as shown in Figure 23, then feed the cable through the hole for the cable gland in the Dalmatian, as shown in Figure 24:



Figures 23-24: Feeding cable through the Cable Gland nut and Dalmatian

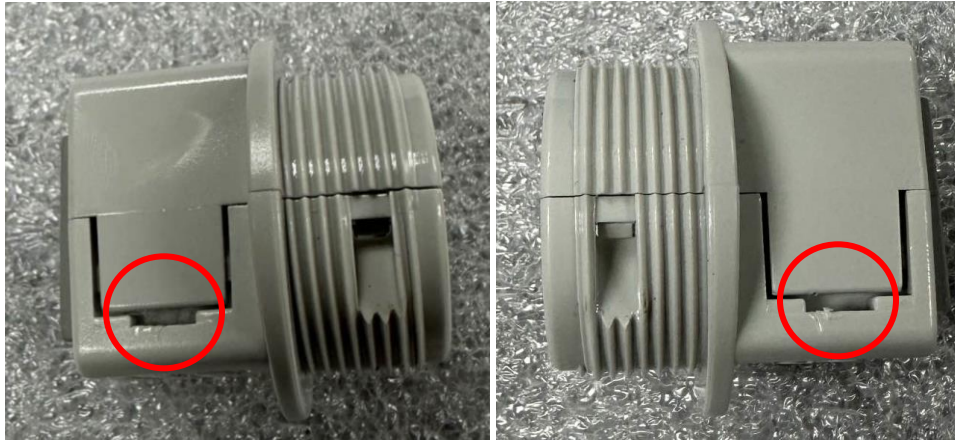
III. Disassemble the cable gland.

- 1) Remove the gasket from the Cable Gland and feed it through the cable, as shown in Figure 25:



Figure 25: Feeding the gasket through the cable

- 2) Use a small flathead screwdriver to open the cable gland at the points shown in Figures 26-27: **(For Dalmatians purchased after 07/01/24, please skip this Step and continue to B-III-3)**



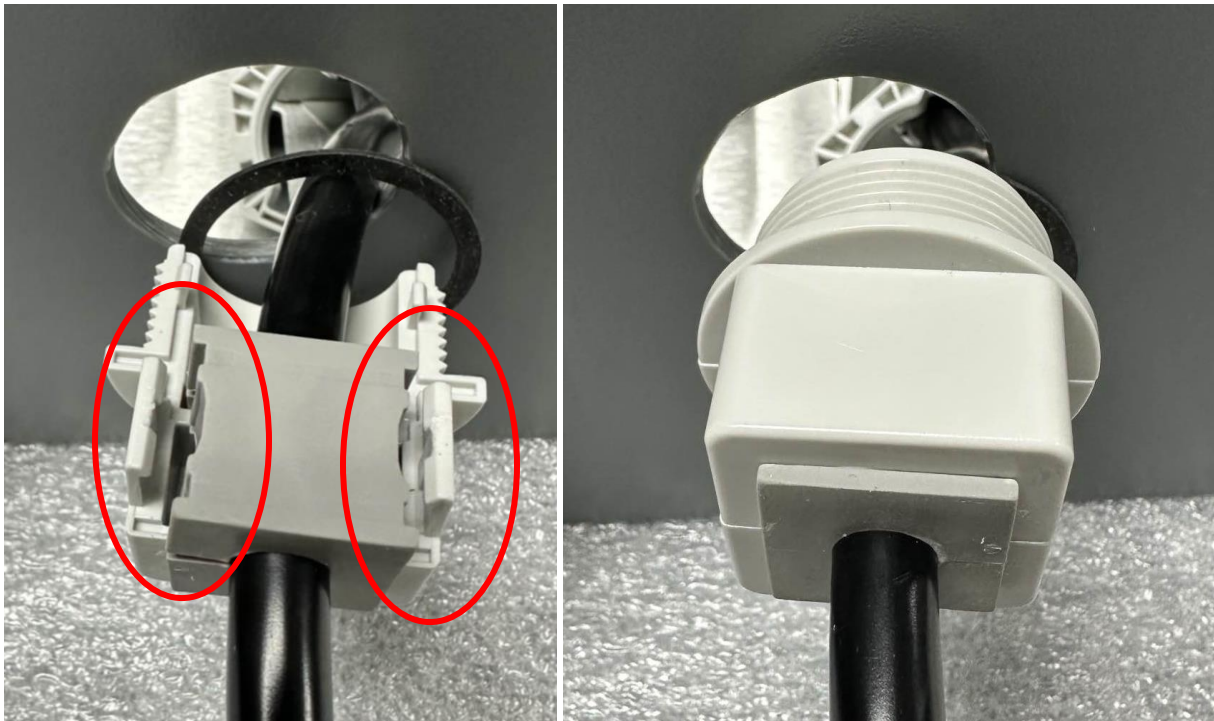
Figures 26-27: Opening the cable gland

- 3) Install the cable grommet onto the cable, as shown in Figure 28:



Figure 28: Installing the cable grommet on the cable

- 4) Install the two sections of the cable gland on the grommet and cable, ensuring that the slots on the cable gland line up with the grommet, as shown in Figures 29-30:



Figures 29-30: Installing the cable gland on the grommet and cable

- 5) Feed the gasket onto the cable gland, as shown in Figure 31:



Figure 31: Installing the gasket on the cable gland

- 6) Secure the cable gland with the nut, as shown in Figures 32-33:



Figures 32-33: Securing the cable gland with the nut

Connection:

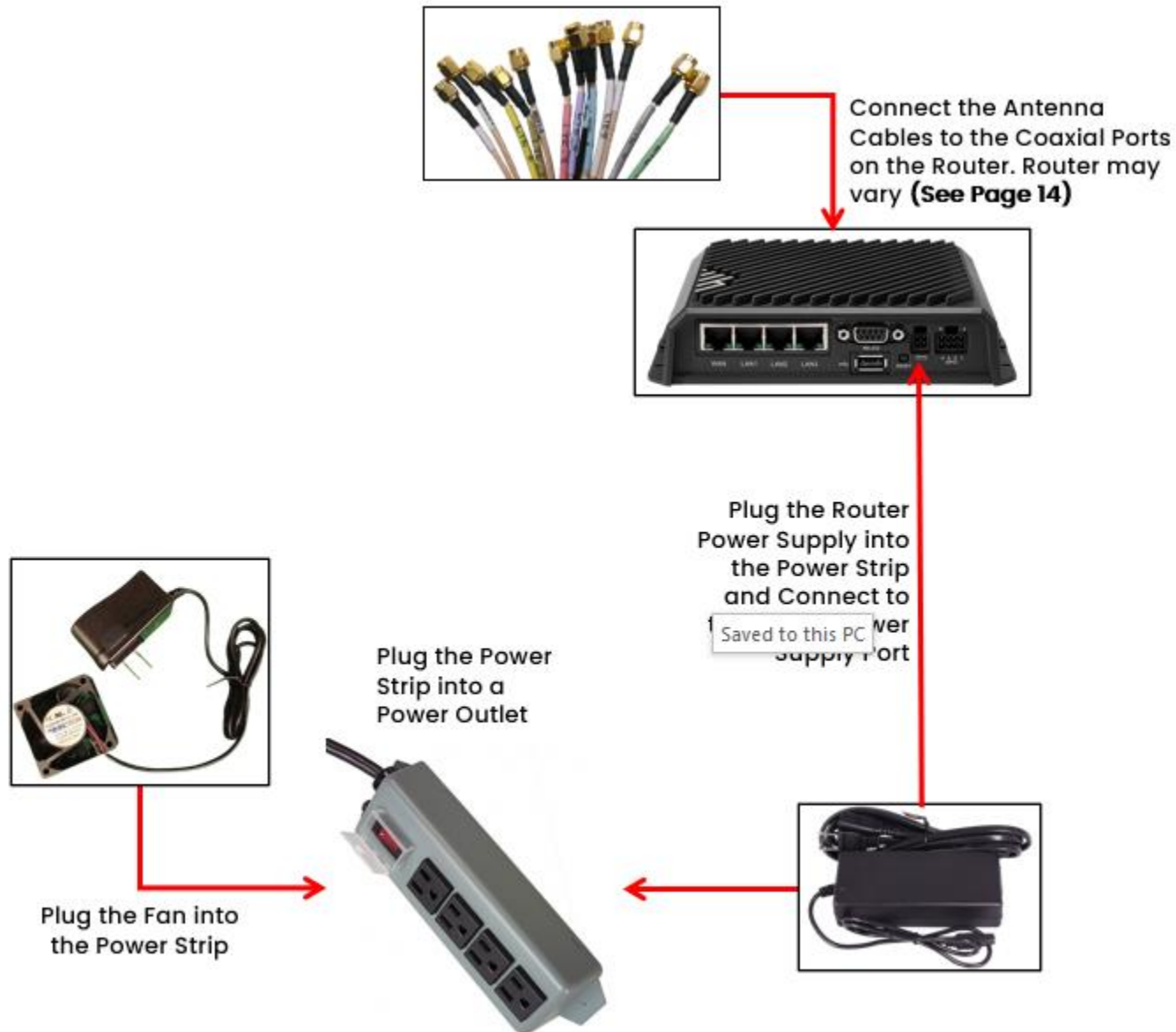


Figure 34: Connection Diagram for the Dalmatian

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

Cradlepoint W1855	
Antenna Cable	Router Terminal
CELL 1	1
CELL 2	2
CELL 3	3
CELL 4	4

Nextivity SHIELD MegaFi	
Antenna Cable	Router Terminal
CELL 1	PRI
CELL 2	DIV
Band 14	B14
GPS	GPS
Wi-Fi 1	Wi-Fi 1
Wi-Fi 2	Wi-Fi 2

Peplink MAX BR1 Pro 5G	
Antenna Cable	Router Terminal
CELL 1	CELL 1
CELL 2	CELL 2
CELL 3	CELL 3
CELL 4	CELL 4
GPS	GPS
Wi-Fi 1	Wi-Fi 1
Wi-Fi 2	Wi-Fi 2

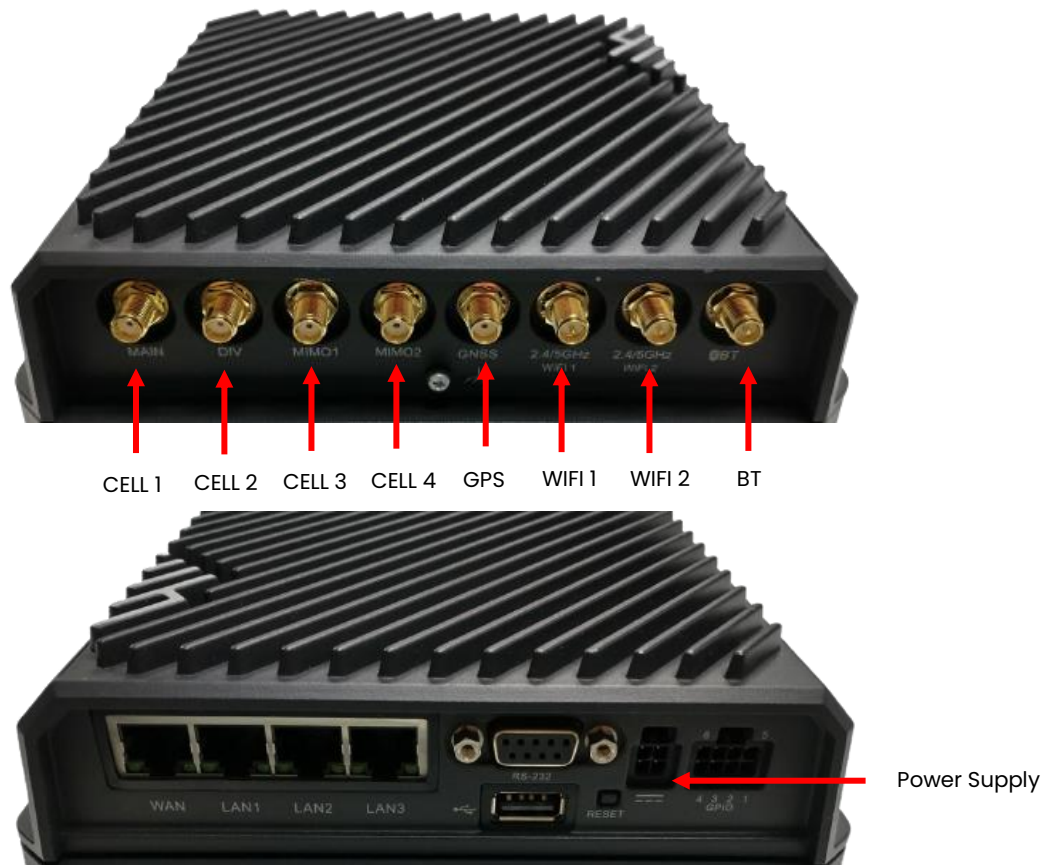


Figure 35: Cradlepoint R1900 Connections

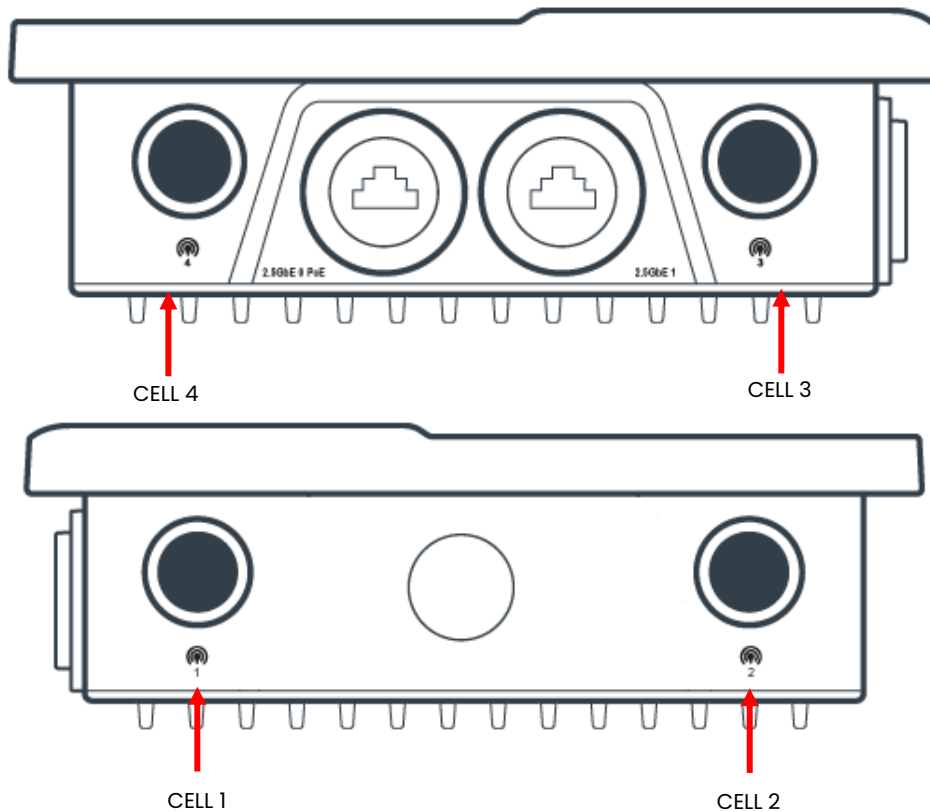


Figure 36: Cradlepoint W1855 Connections

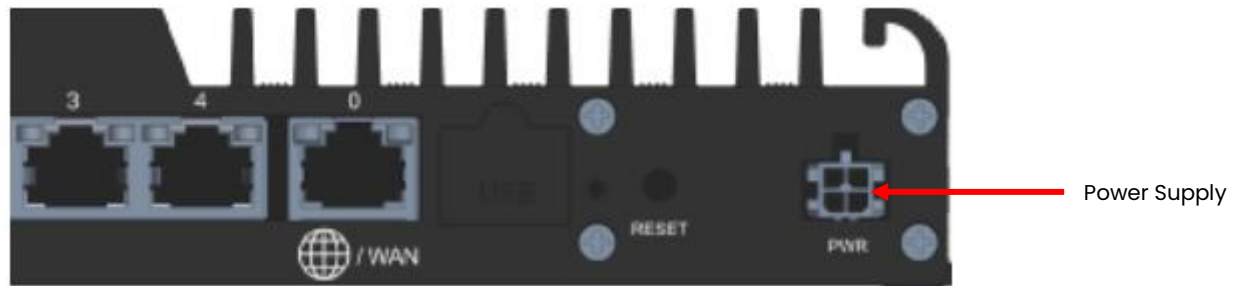
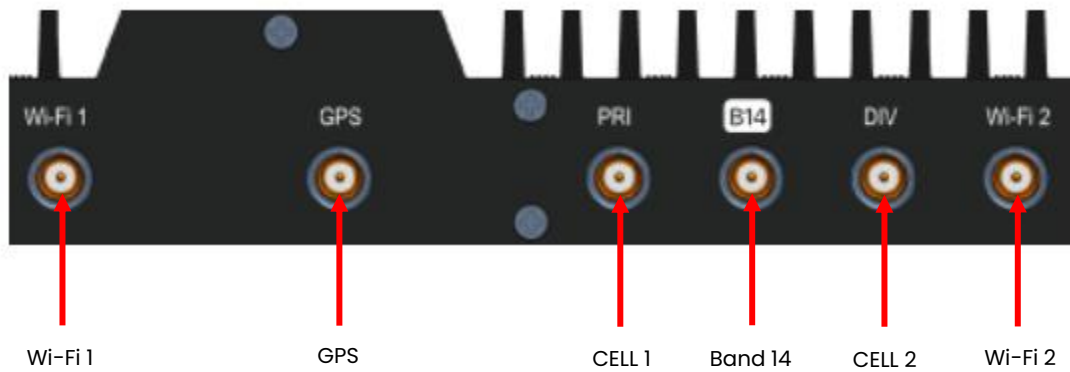


Figure 37: Nextivity SHIELD MegaFi Connections

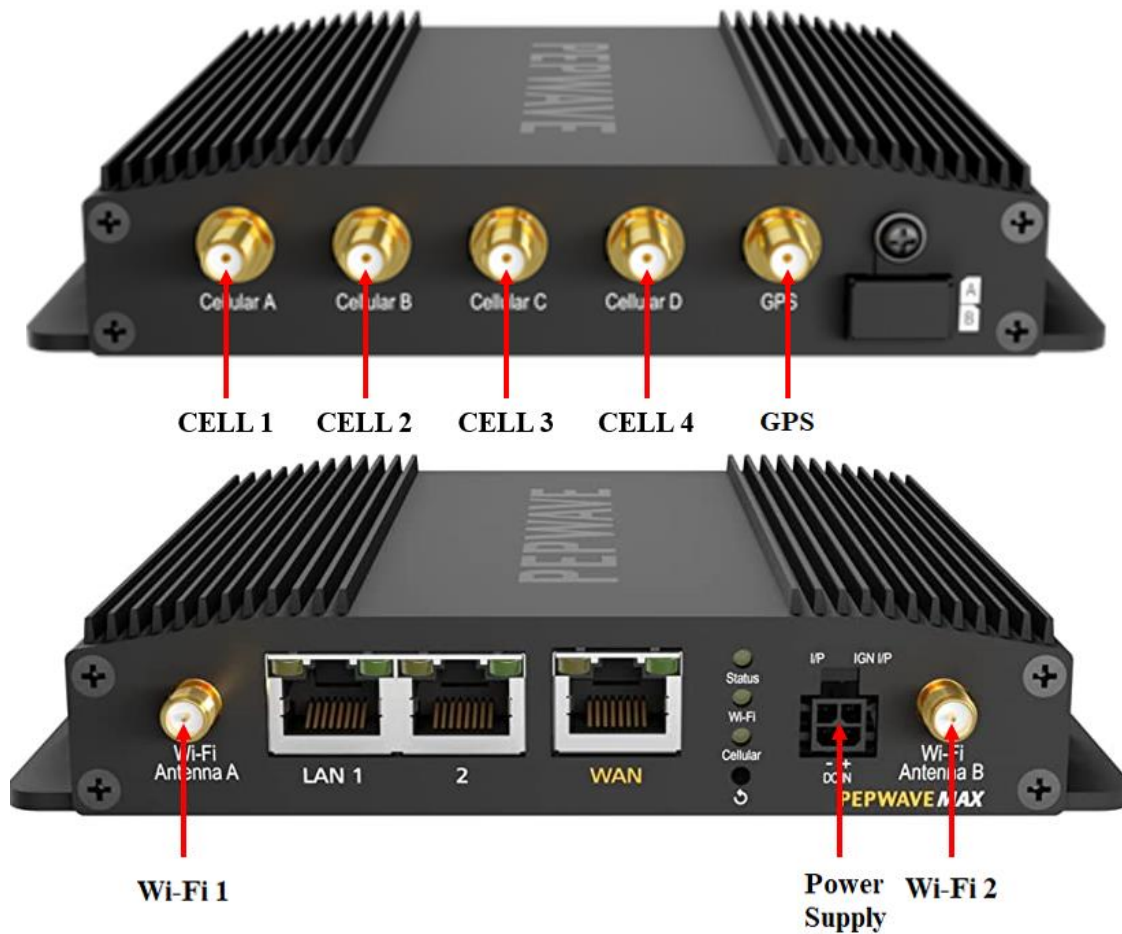


Figure 38: Peplink MAX BR1 Pro 5G Connections

Step 2: Connect the power supply to the router.

- A. Connect the router power supply to the power supply port on the router.
- B. Plug the power supply into the Power Strip.

Step 3: Connect the fan to the Power Strip (Dalmatian L only).

- A. Plug the fan into the Power Strip.

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**.
- C. Use zip ties to secure the power adapters to the power strip.

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

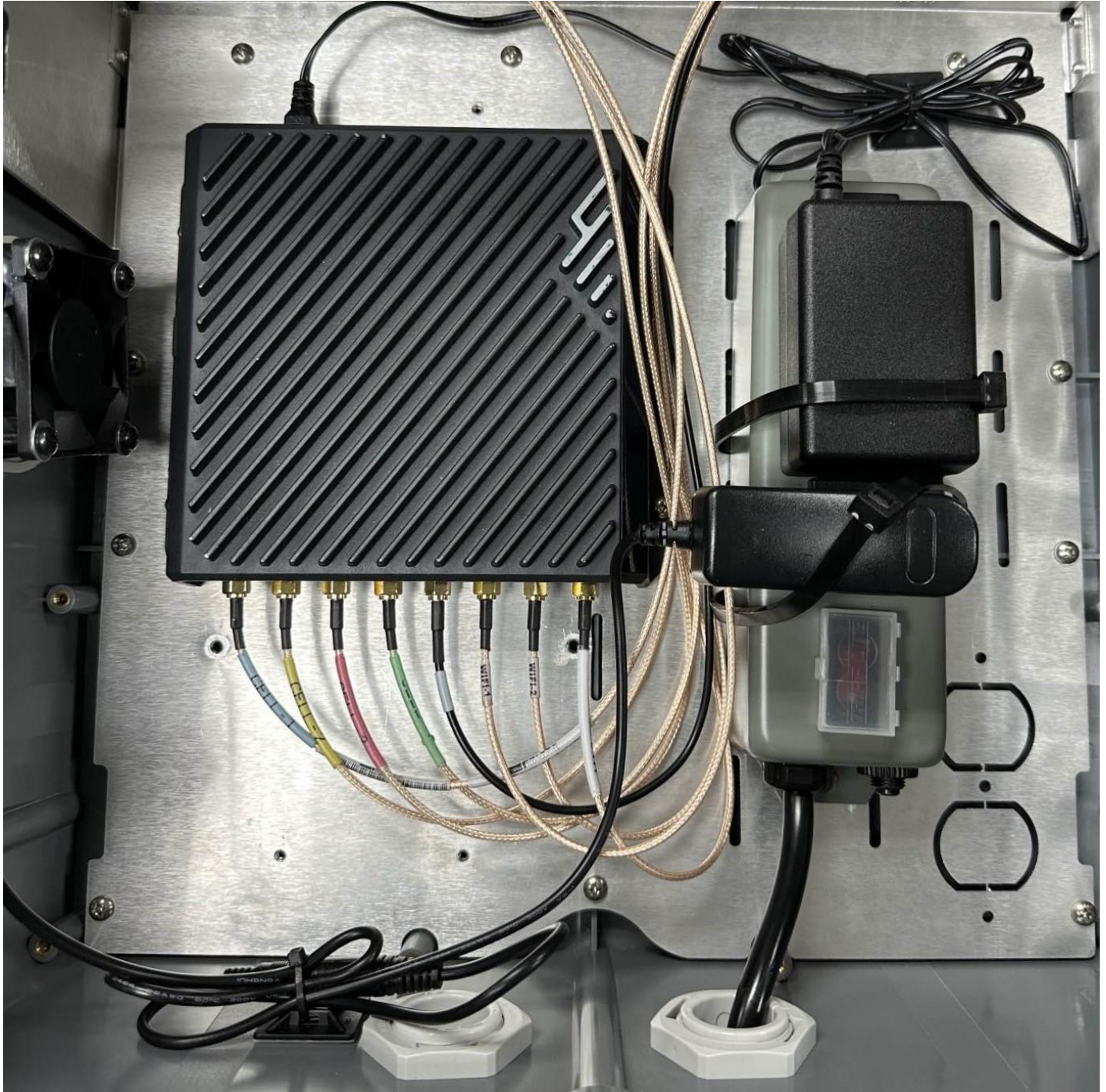


Figure 39: Fully Connected 8:1 Dalmatian L with Cradlepoint R1900 Router



Figure 40: Fully Connected 4:1 Dalmatian L with Cradlepoint W1855 Adapter

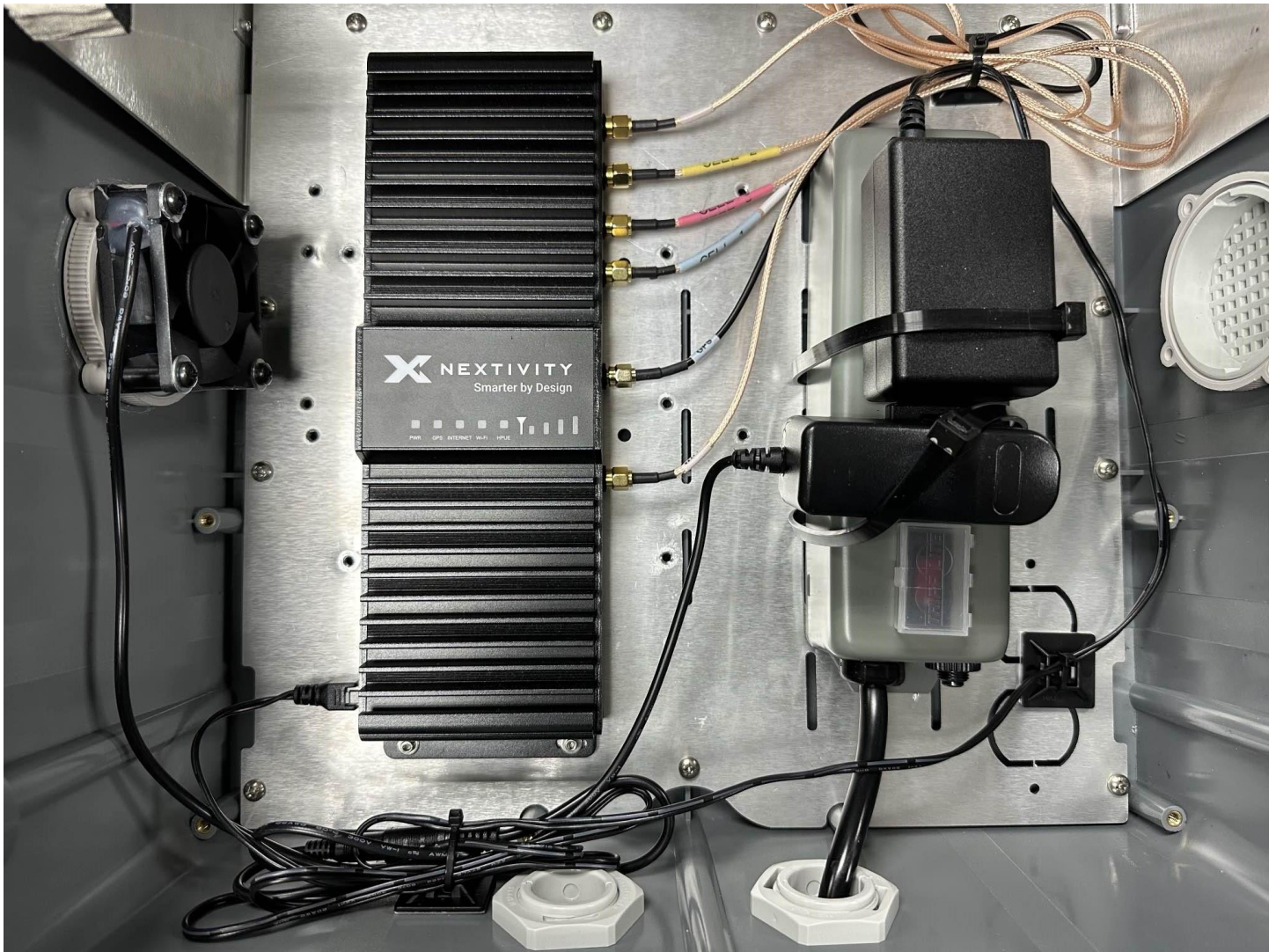


Figure 41: Fully Connected 6 :1 Dalmatian L with Nextivity SHIELD MegaFi Router



Figure 42: Fully Connected 7:1 Dalmatian L with Peplink MAX BR1 PRO 5G Router

Step 2: Fasten the lid to the enclosure.

- A. Close the lid for the enclosure.
- B. Fasten the lid to the enclosure using the six PTA0963 screws + PTA0964 washers provided in the kit, as shown in Figure 43.

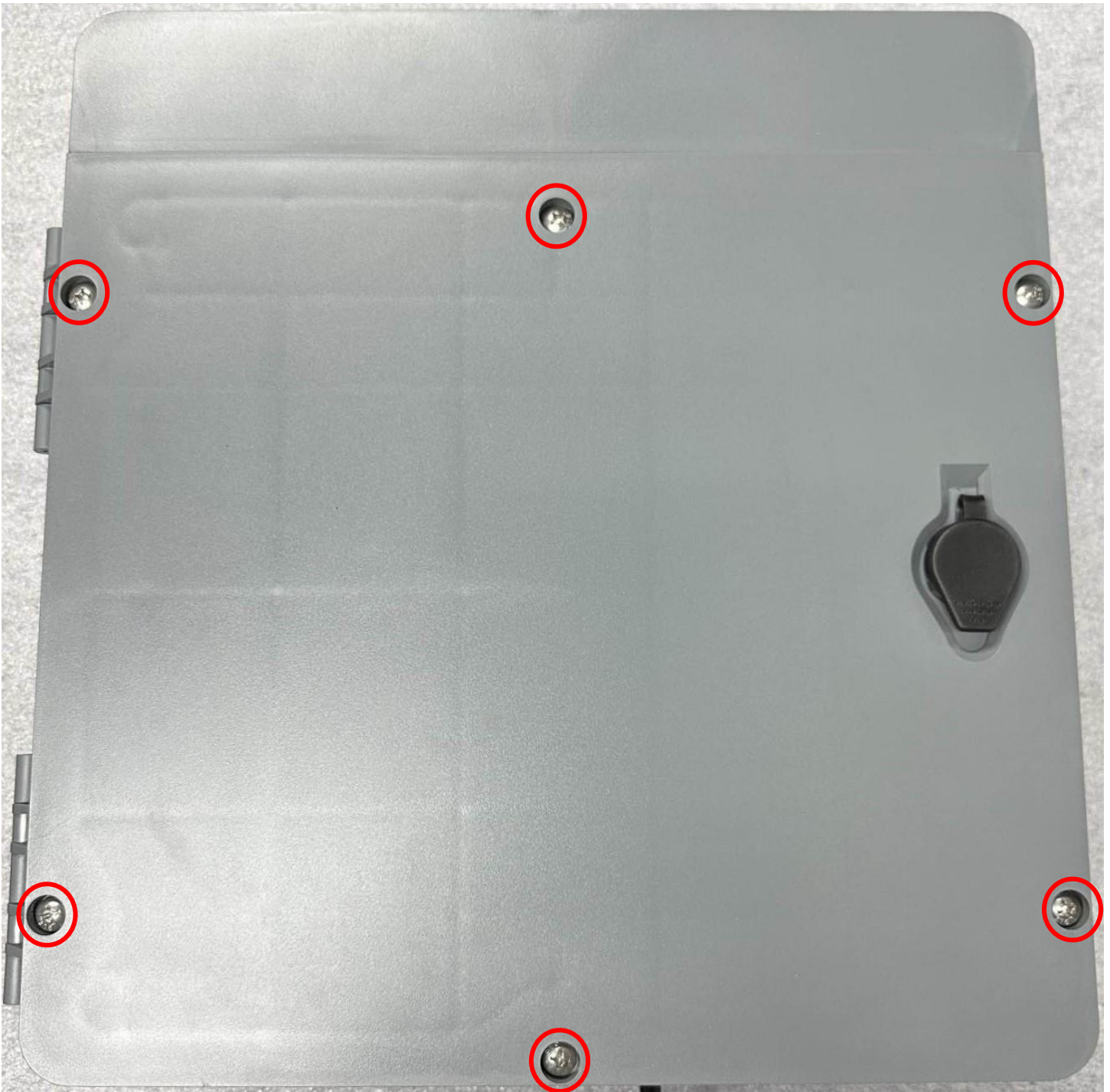


Figure 43: Fasten the lid to the enclosure

Step 3: Lock the lid to the enclosure.

- A. Close the lid for the enclosure.
- B. Lock the lid to the enclosure using the PTA0972 Dalmatian Keys provided in the kit, as shown in Figure 44.



Figure 44: Lock the lid to the enclosure

Operational Setup

Step 1: Power on the router.

- A. Connect the power cable to a power outlet and confirm the router has turned on.

Step 2: Connect the router to a computer.

- A. Use an ethernet cable to connect a computer to one of the LAN ports on the router.

Router	Page
Cradlepoint	Step 3, Page 21
Nextivity	Step 4, Page 22
Peplink	Step 5, Page 23

Step 3: Login to Cradlepoint NetCloud.

- A. This step only applies for Cradlepoint Routers.
- B. 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 45.
- C. Login to Cradlepoint NetCloud. The username is “admin”, and the password is found on the router, shown in Figure 46.

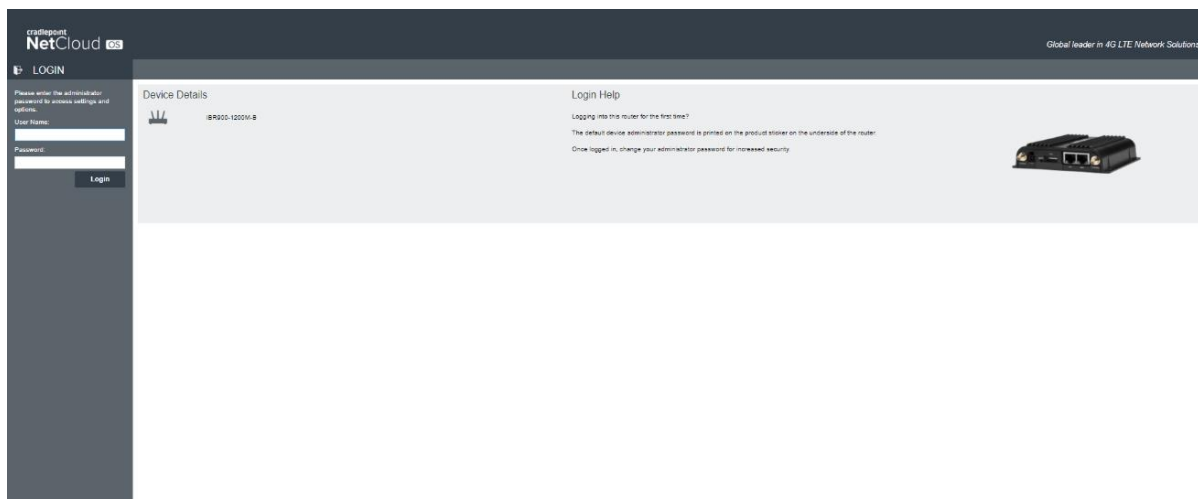


Figure 45: Access Cradlepoint NetCloud.

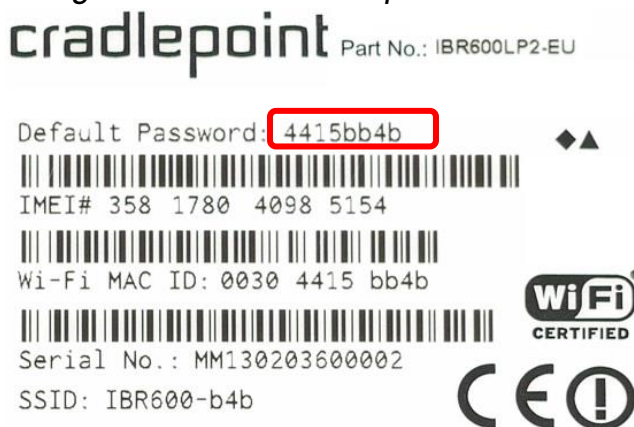


Figure 46: Cradlepoint NetCloud Login Password

Step 4: Login to Mission Control for the SHIELD MegaFi Router.

- A. This step only applies for Nextivity Routers.
- B. Open a web browser on the computer and type 192.168.113.1 into the address bar. This will bring up Mission Control, shown in Figure 47.
- C. Login to Mission Control. The username is "admin", and the password is found on the bottom label of the router, shown in Figure 48.

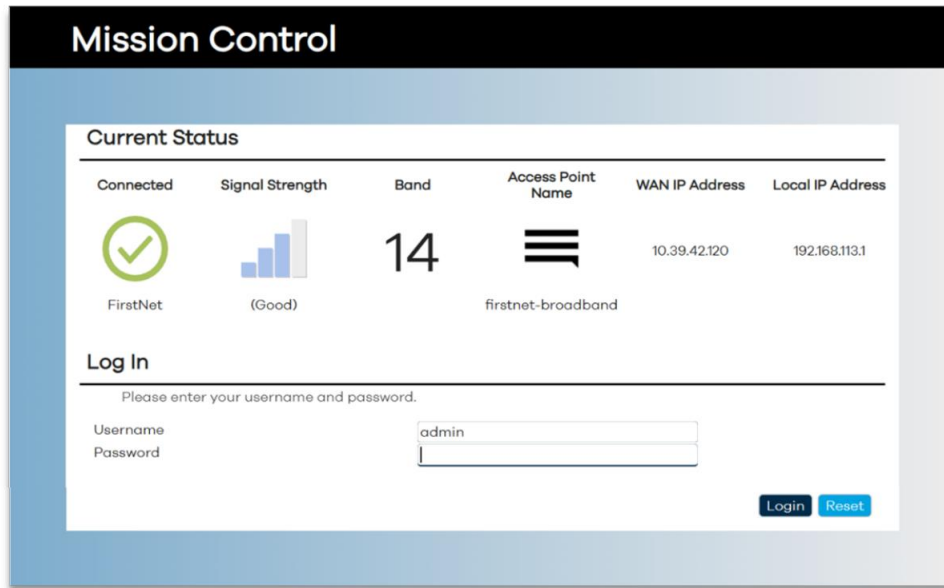


Figure 47: Access Mission Control



Figure 48: SHIELD MegaFi Login Password

Step 5: Login to PEPWAVE.

- A. This step only applies for Peplink Routers.
- B. Open a web browser on the computer and type 192.168.50.1 into the address bar. This will bring up the PEPWAVE, shown in Figure 49.
- C. Login to PEPWAVE. The username is "admin", and the password is "admin".

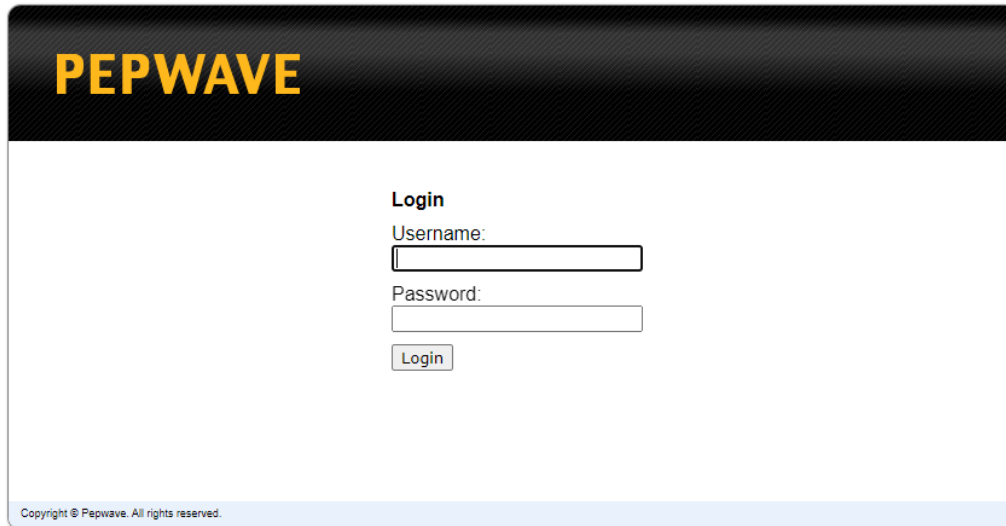
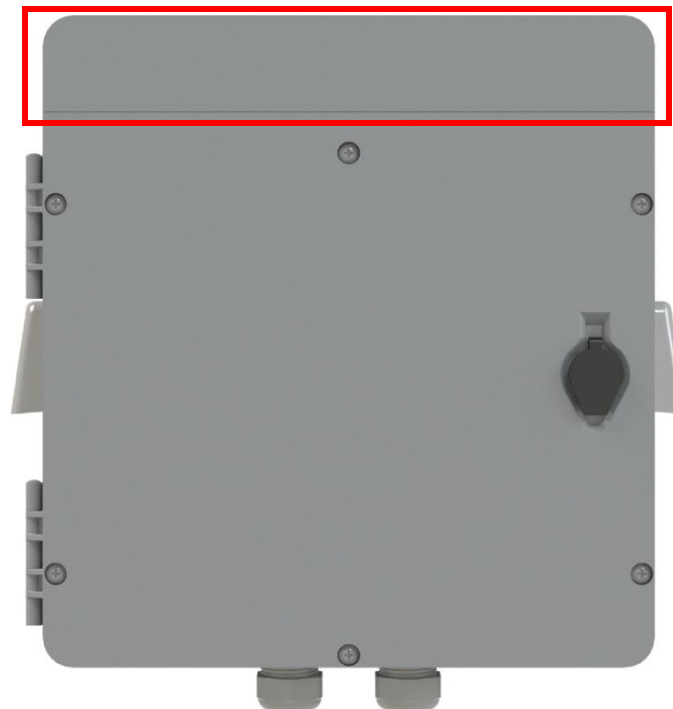


Figure 49: Access PEPWAVE.

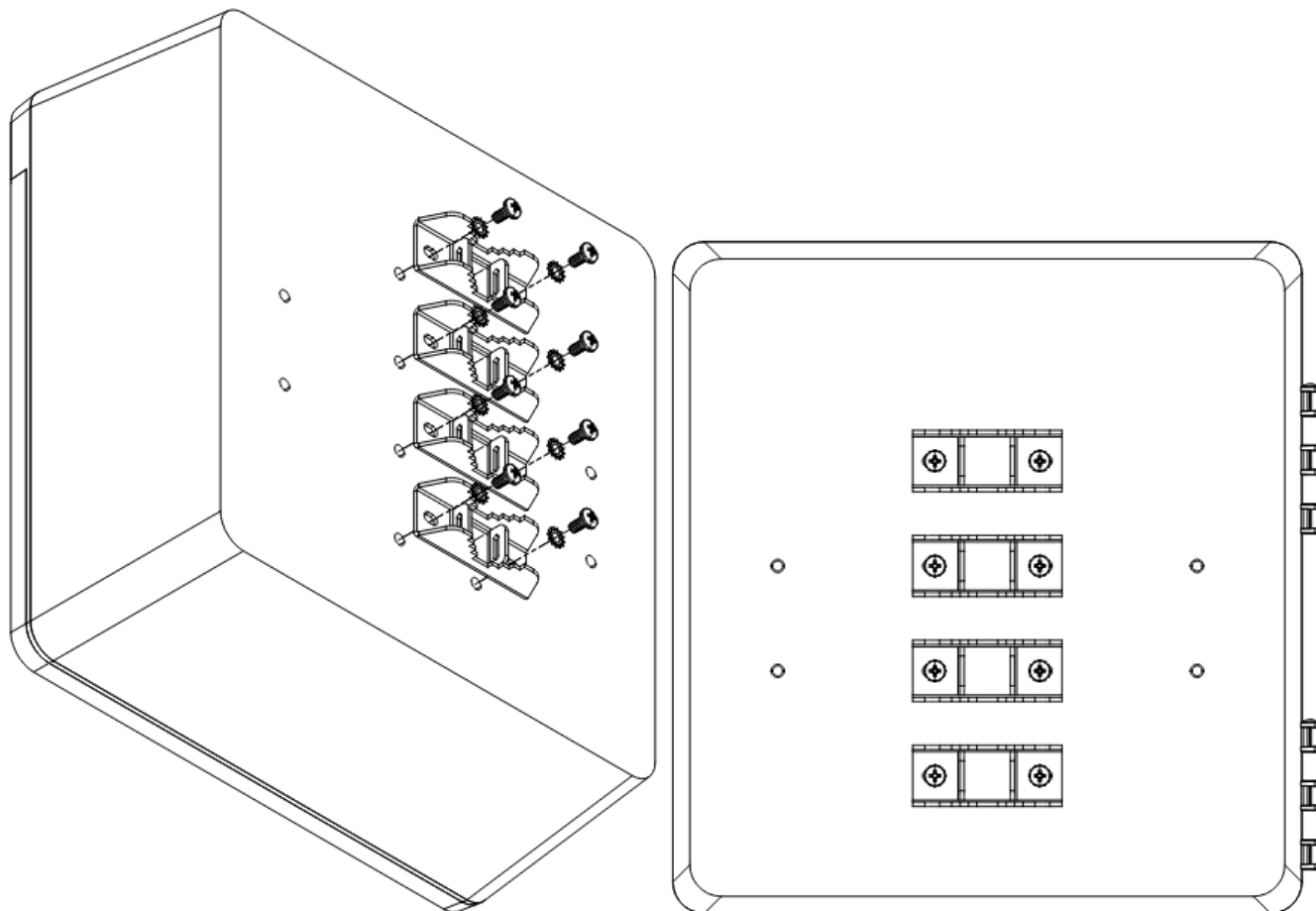
Antenna setup is complete!

For best antenna performance, operate the antenna with the lid closed and the case oriented with the cable glands on the bottom. If drilling into the enclosure, do not make any holes at the top (highlighted below).

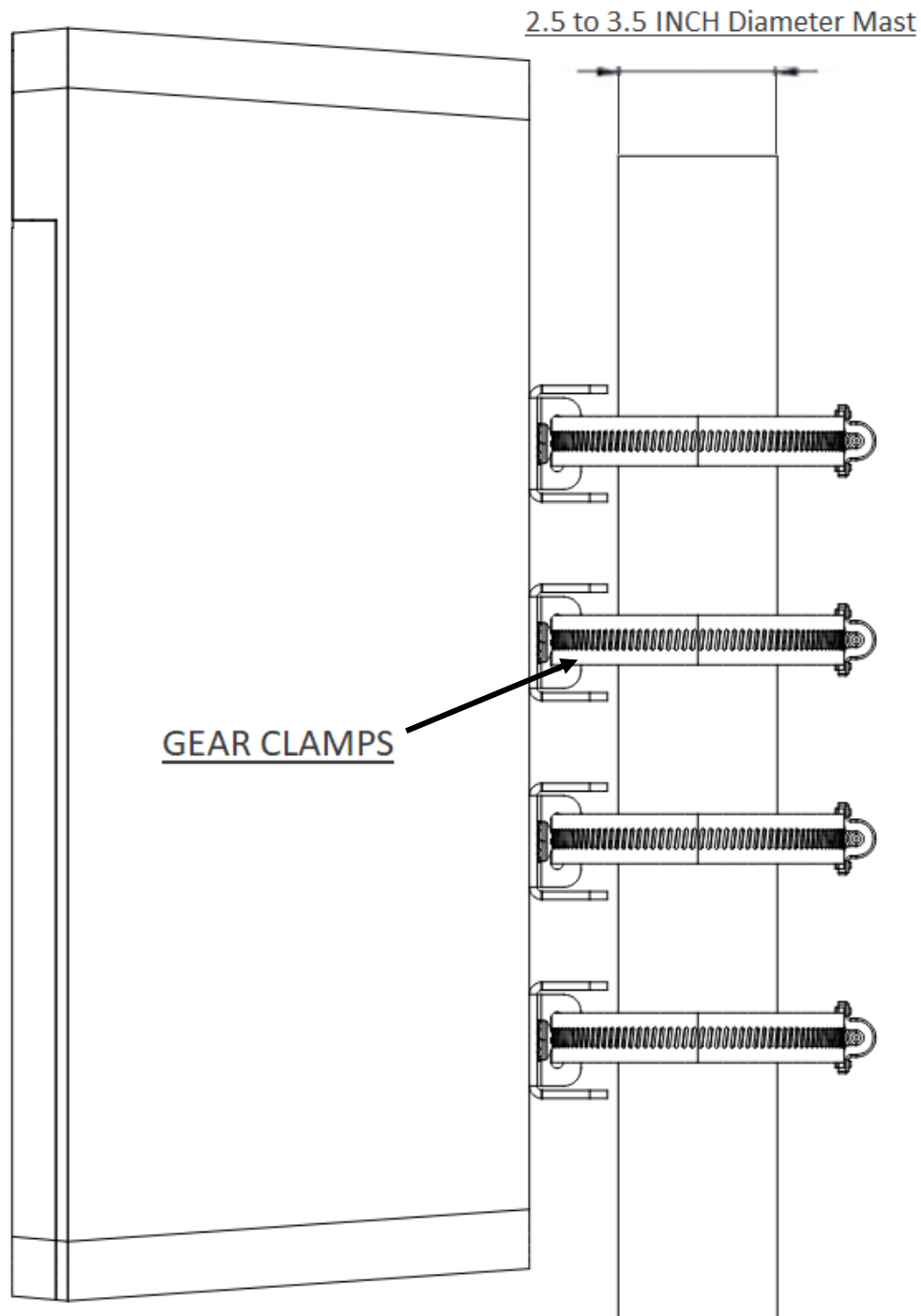


Pole Mount Setup

1. Select the mounting location.
 - A. To avoid de-tuning or interference issues, install the antenna as far away as possible from other devices (minimum 24 inches), including lights, AC units, routers, and other antennas.
 - B. A clear line of sight to the nearest cell tower is recommended for best performance.
 - C. The diameter of the pole must be between 2.5 inches – 3.5 inches and the pole must be vertical.
 - D. Check the SINR for best performance before mounting permanently.
2. Install the four PTA0829B pole mount brackets onto the back of the enclosure using the four PTA0423 screws, the four PTA0966 washers, and the four PTA0960 lock washers provided in the kit. Use Loctite or red thread locker on the screw threads prior to screwing into the back of the enclosure.

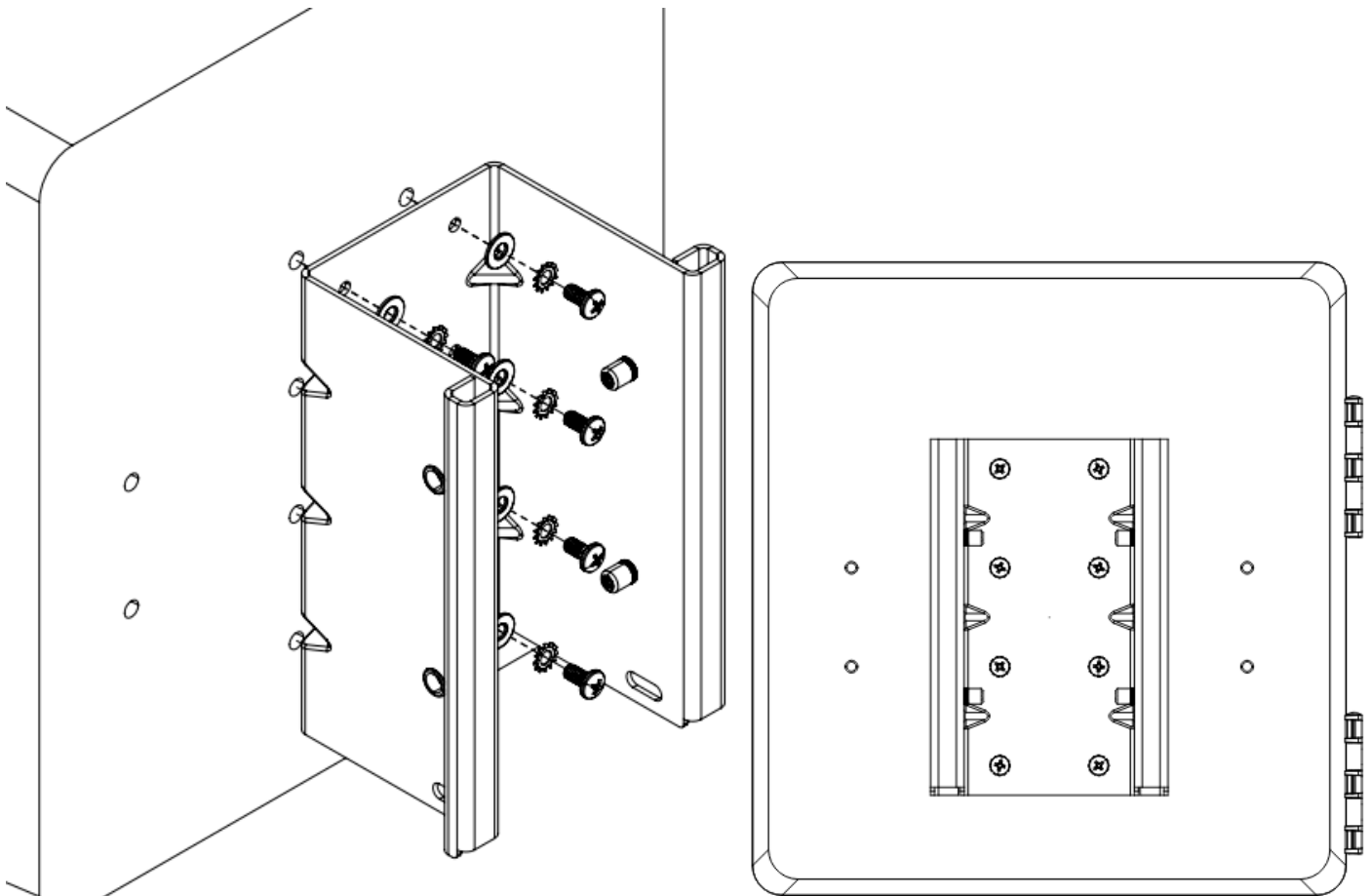


3. Guide the provided hose clamps through the slots in the pole mount brackets and around the pole, as shown below. Tighten one hose clamp first to make the mounting process easier, then tighten the remaining hose clamps around the pole.



Optional: Additional Pole Mount/Wall Mount Setup (PTA1002)

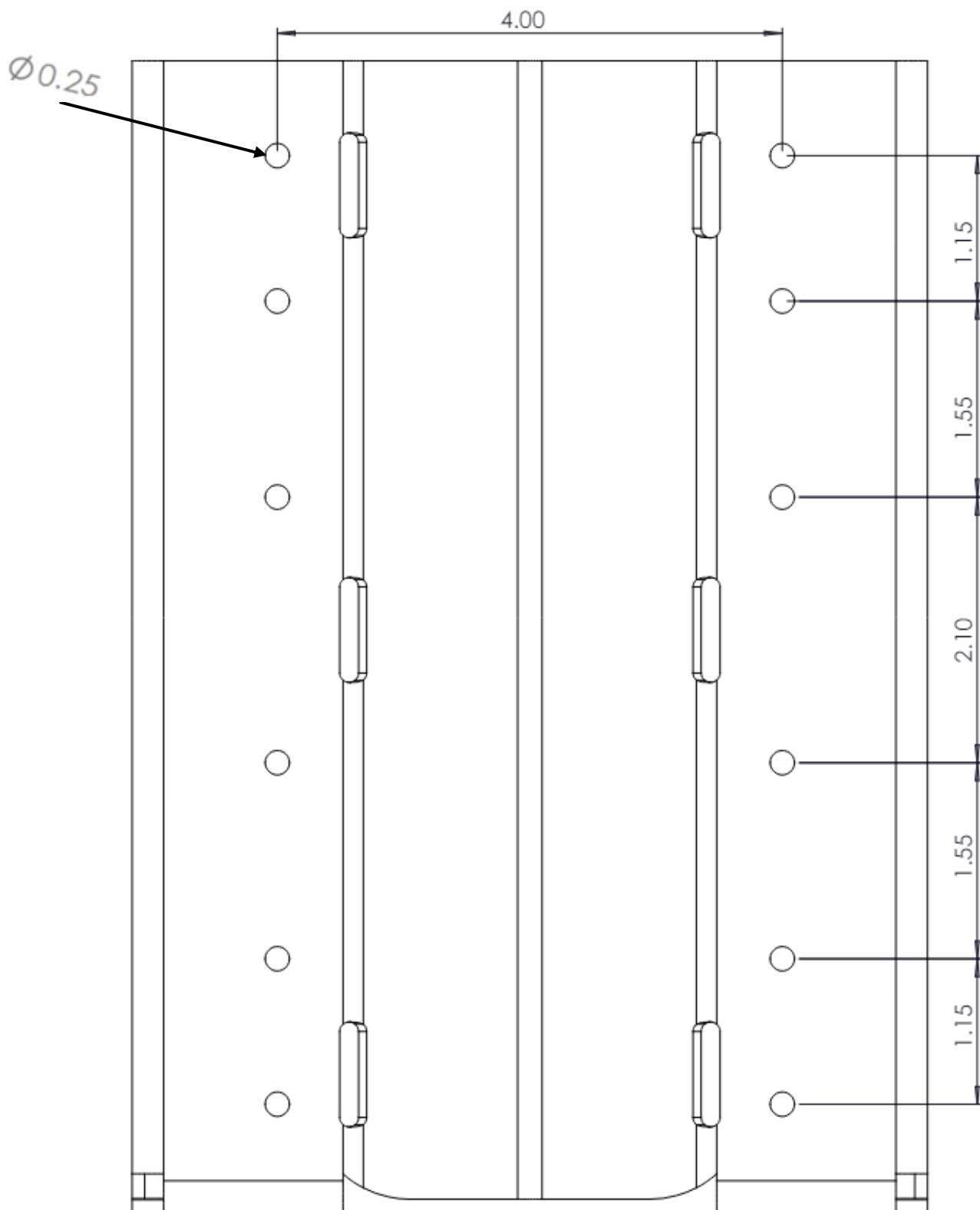
1. The PTA1002 Pole/Wall Mount Bracket Assembly is designed to be used with:
 - A. Poles with a diameter larger than 3.5"
 - I. **The gear clamp is not provided and must be purchased separately.**
 - II. **The gear clamp must be chosen based on the diameter of the pole.**
 - B. Concrete/Brick Walls (Walls that are **not** drywall)
2. Select the mounting location.
 - A. To avoid de-tuning or interference issues, install the antenna as far away as possible from other devices (minimum 24 inches), including lights, AC units, routers, and other antennas.
 - B. A clear line of sight to the nearest cell tower is recommended for best performance.
 - C. Check the SINR for best performance before mounting permanently.
3. Install the PTA0993 Pole Mount Bracket Assembly onto the back of the enclosure using the eight PTA0423 screws, the eight PTA0966 washers, and the eight PTA0960 lock washers provided in the kit. Use Loctite or red thread locker on the screw threads prior to screwing into the back of the enclosure.



4. **For the Wall Mount Concrete/Brick Walls (Walls that are not Drywall):**

A. Drill twelve 0.25" diameter holes into the wall.

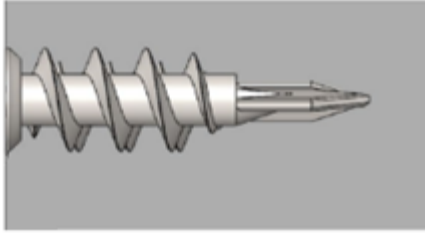
I. Mark the locations of the holes as shown below.



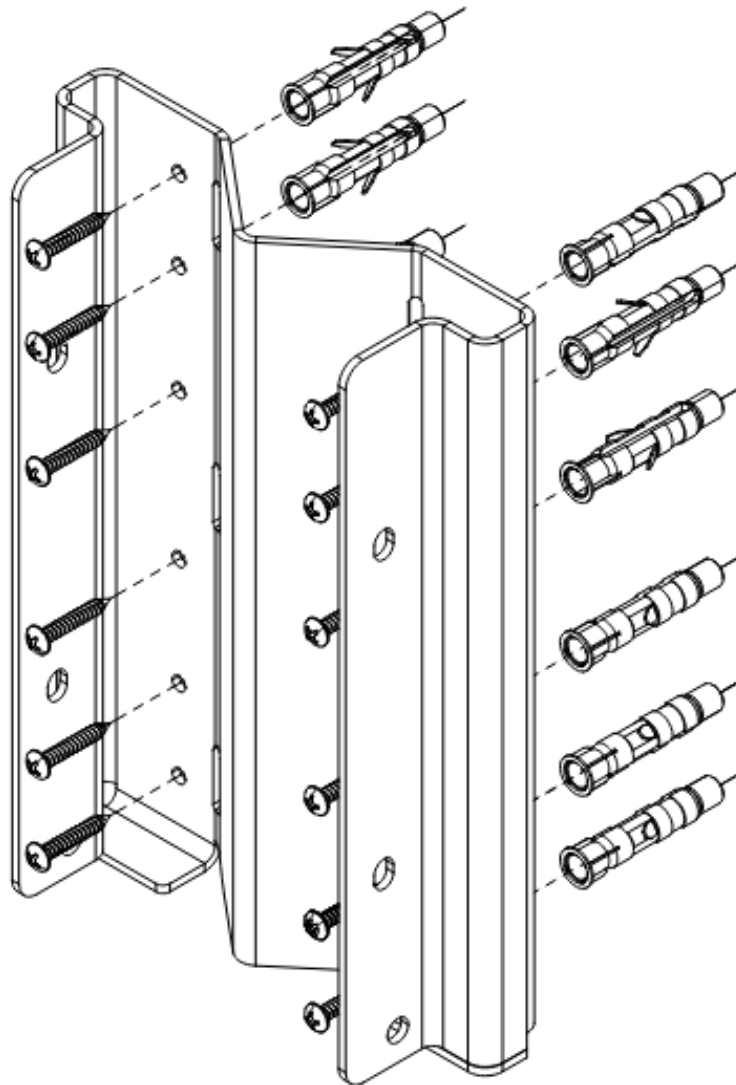
II. Use a 1/4" diameter drill bit to drill holes at the marked locations.

B. Install the provided wall anchors into the wall.

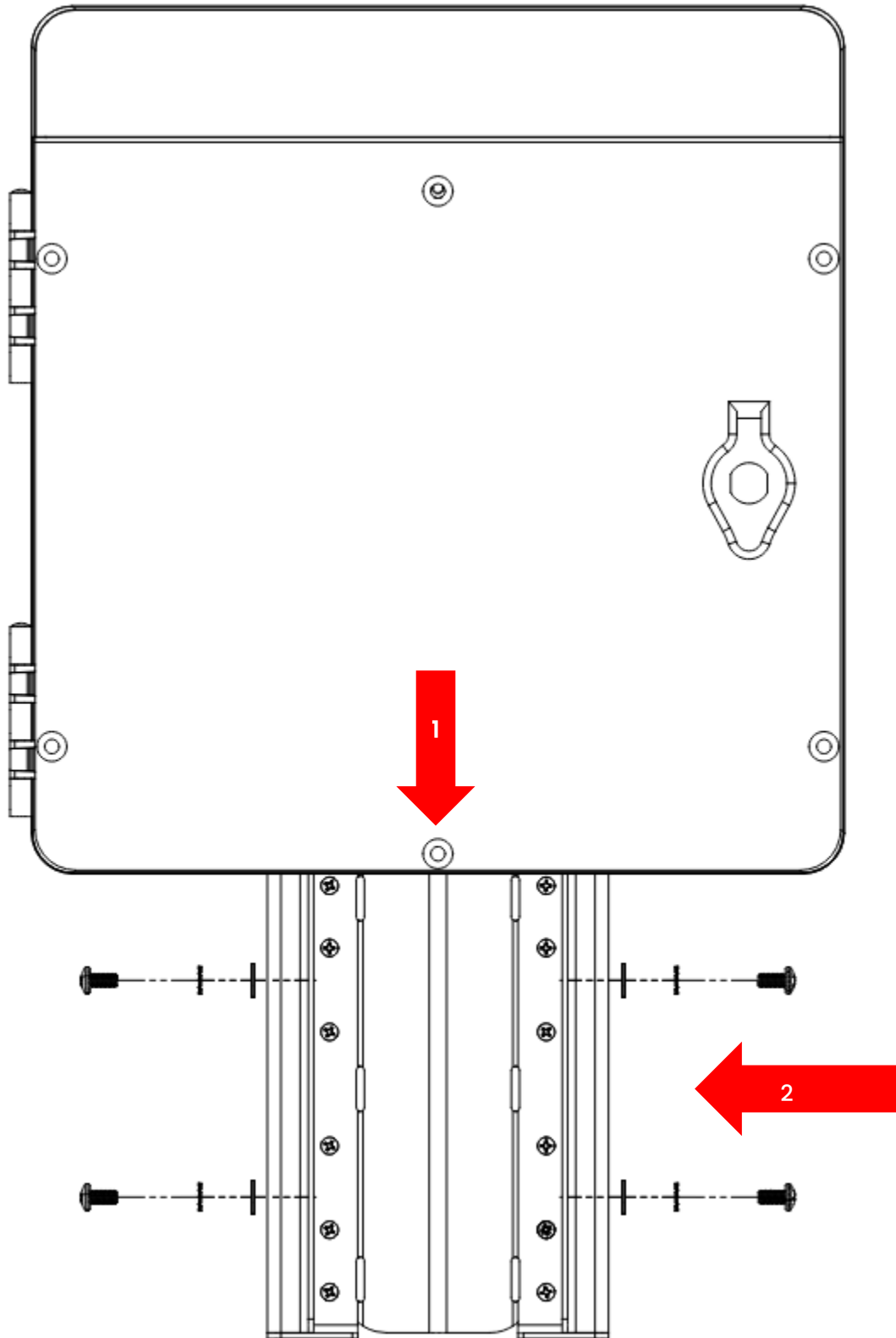
I. Insert the wall anchors into the holes. Ensure that the anchors are fully inserted.

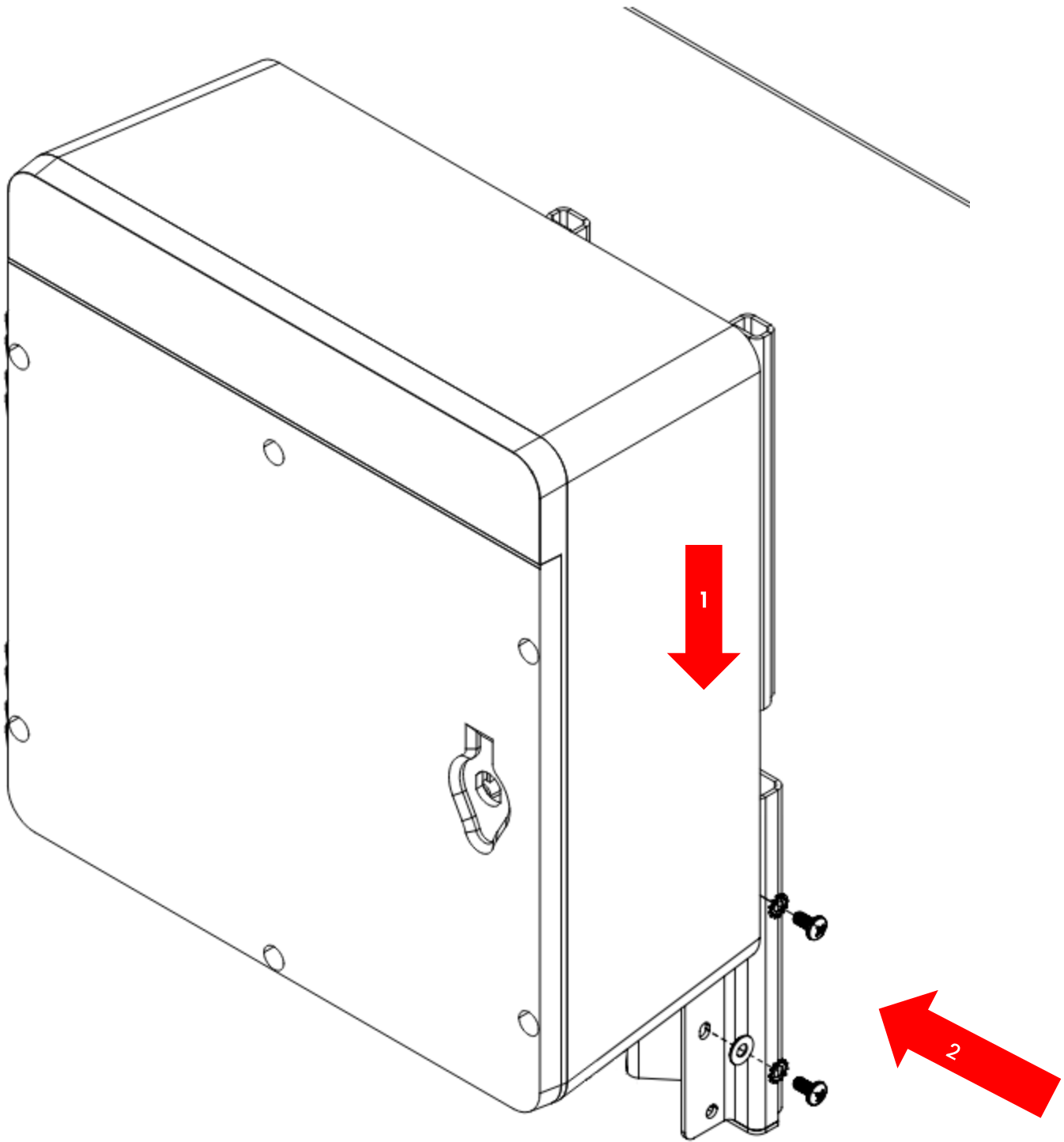


C. Install the PTA0994 Pole/Wall Mount Bracket Assembly into the wall using the twelve screws as shown.



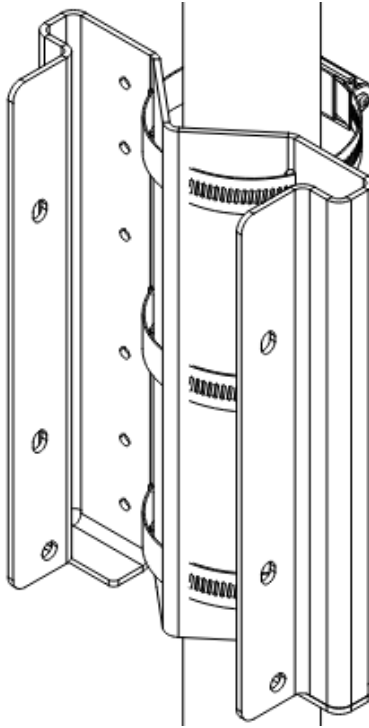
- D. Slide the Dalmatian into the bracket by aligning the Brackets and then use the four PTA0423 Screws and four PTA0960 lock washers to secure the brackets together, as shown below:



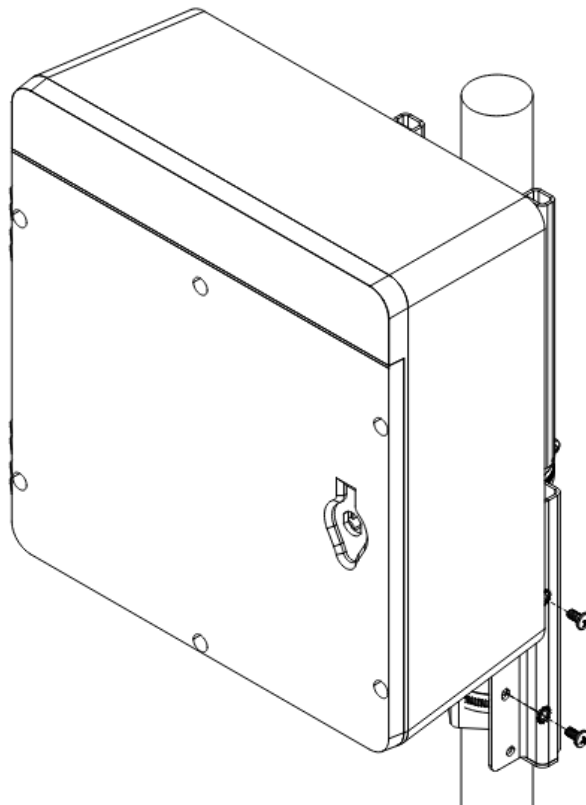


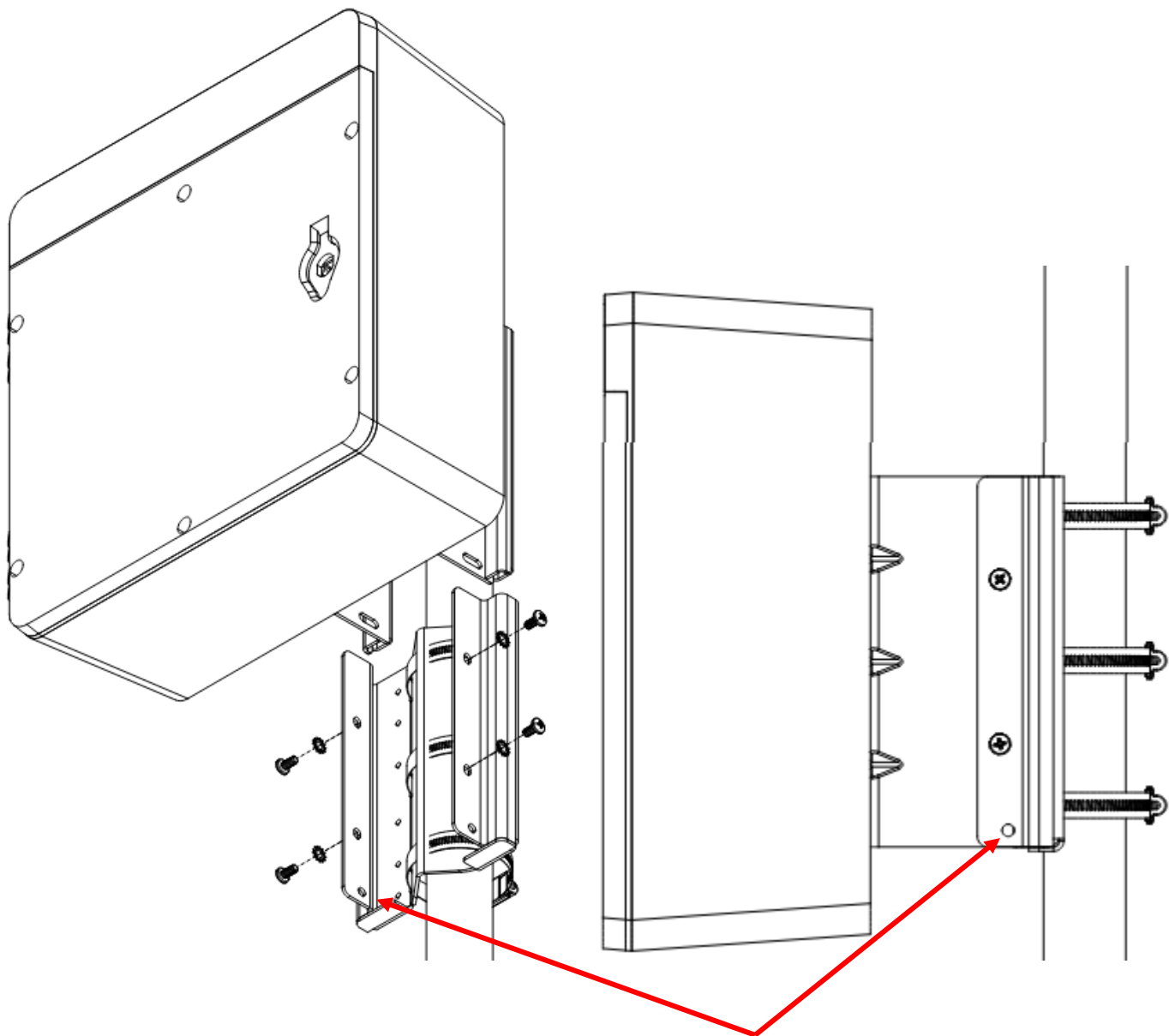
5. For the Pole Mount:

- A. Guide the provided hose clamps through the slots in the pole mount brackets and around the pole, as shown below. Tighten the hose clamps around the pole.



- B. Slide the Dalmatian into the bracket by aligning the Brackets and then use the four PTA0423 Screws and four PTA0960 lock washers to secure the brackets together, as shown below:

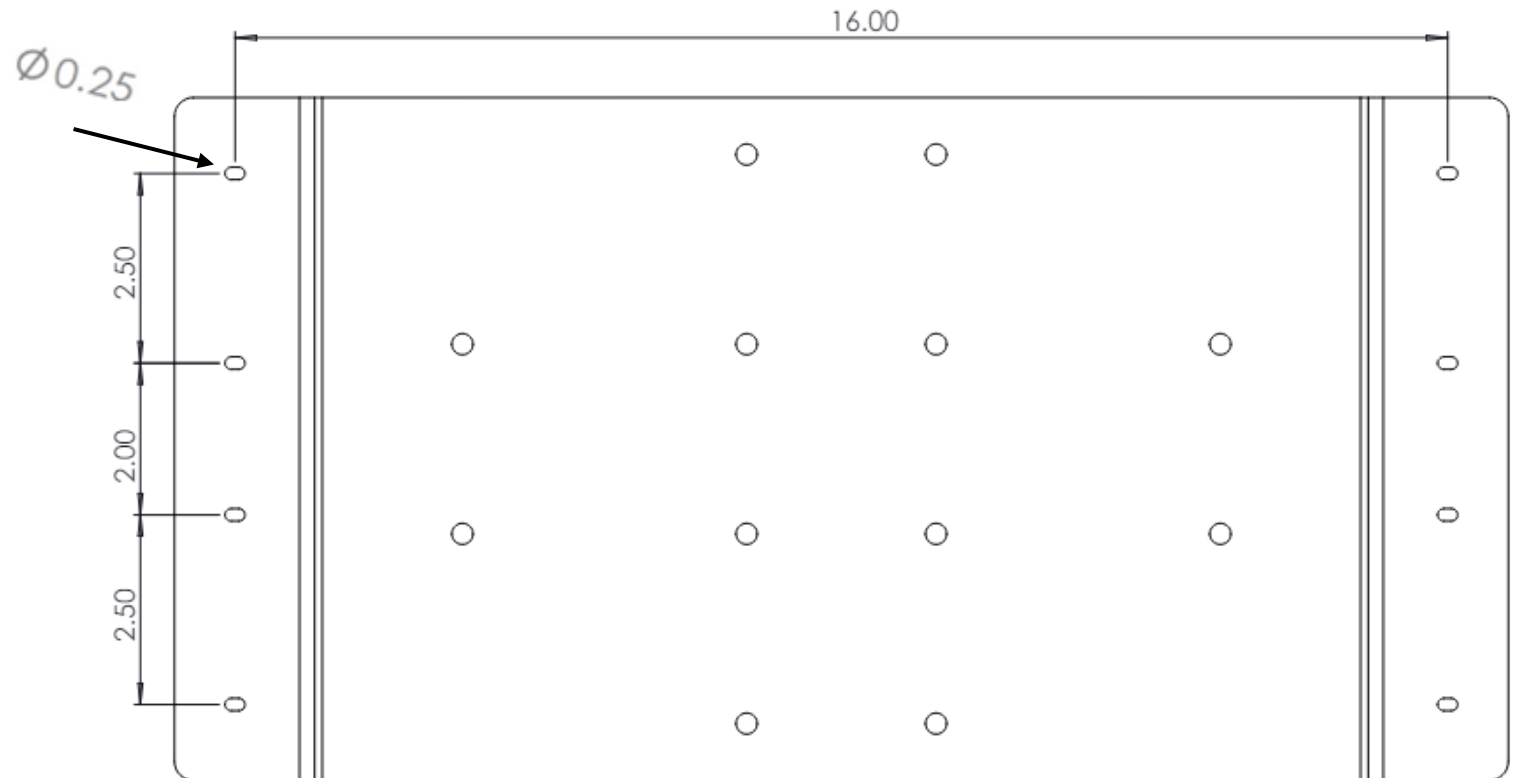




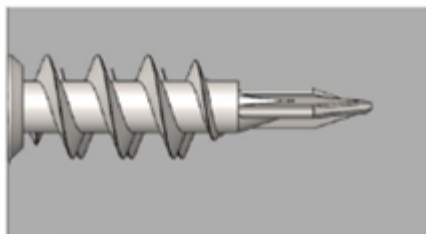
Note: The bottom-most holes allow for the bracket to be padlocked.

Optional: Additional Wall Mount Setup (PTA1001)

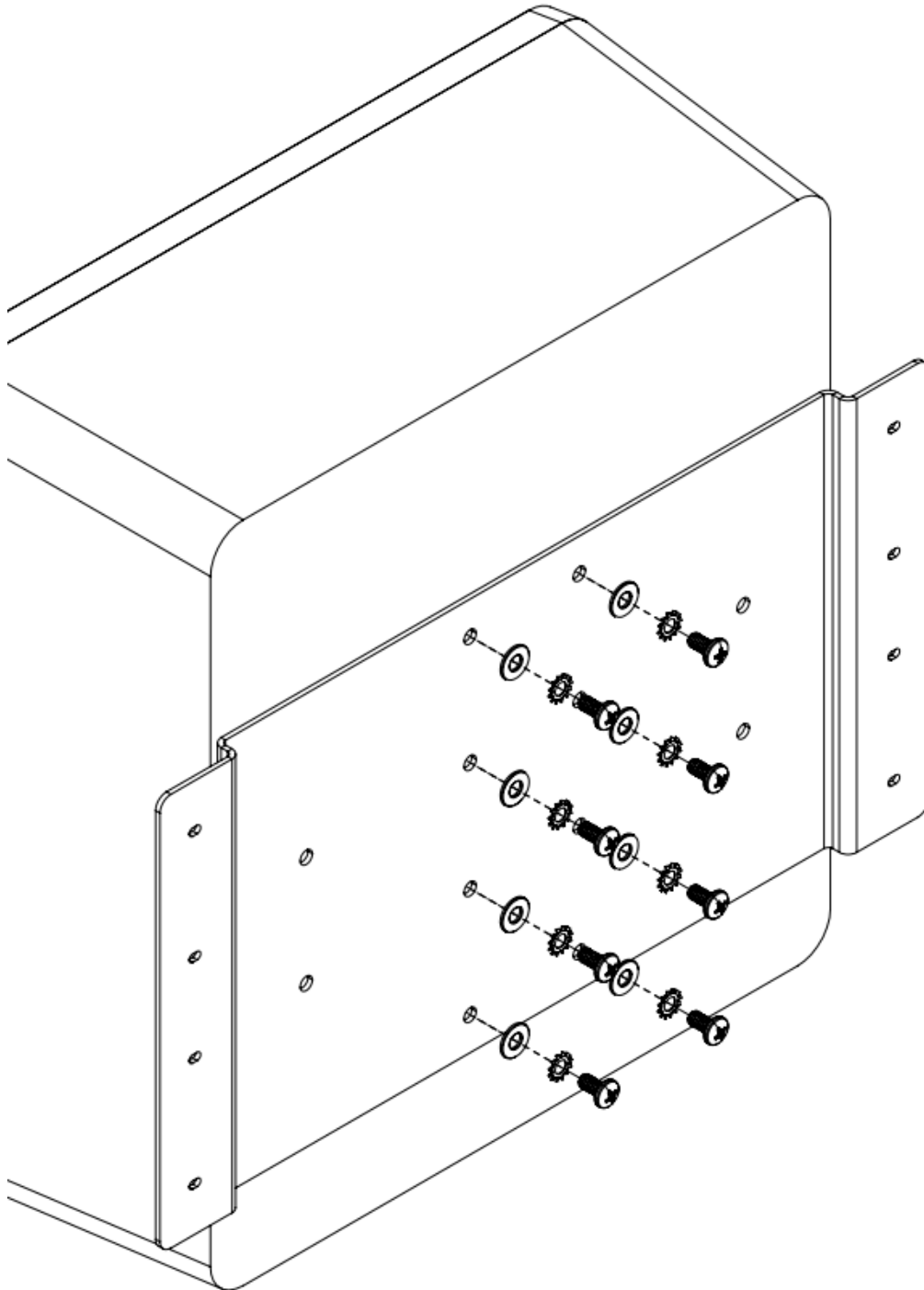
1. The PTA1001 Wall Mount Bracket Assembly is designed to be used with walls that have drywall and studs.
 - A. Drill eight 0.25" diameter holes into the wall.
 - I. Mark the locations of the holes as shown below.

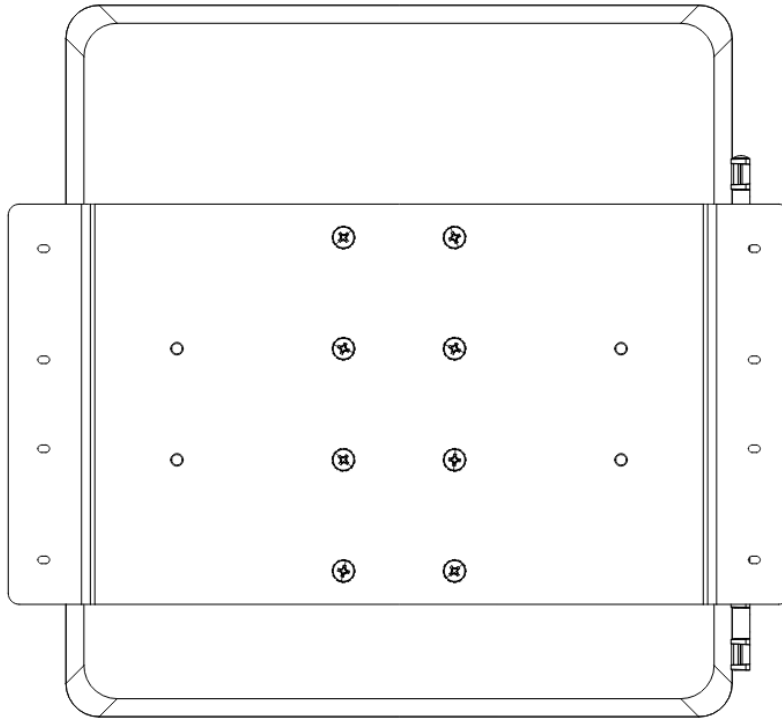


- II. Use a 1/4" diameter drill bit to drill holes at the marked locations.
 - B. Install the provided wall anchors into the wall.
 - I. Insert the wall anchors into the holes. Ensure that the anchors are fully inserted.

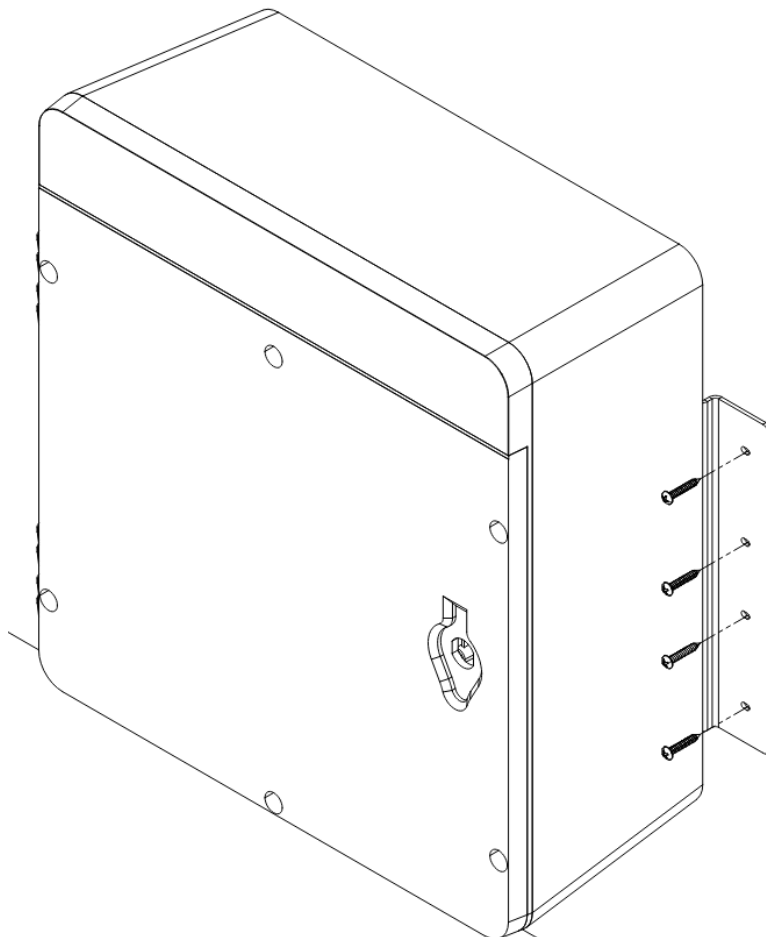


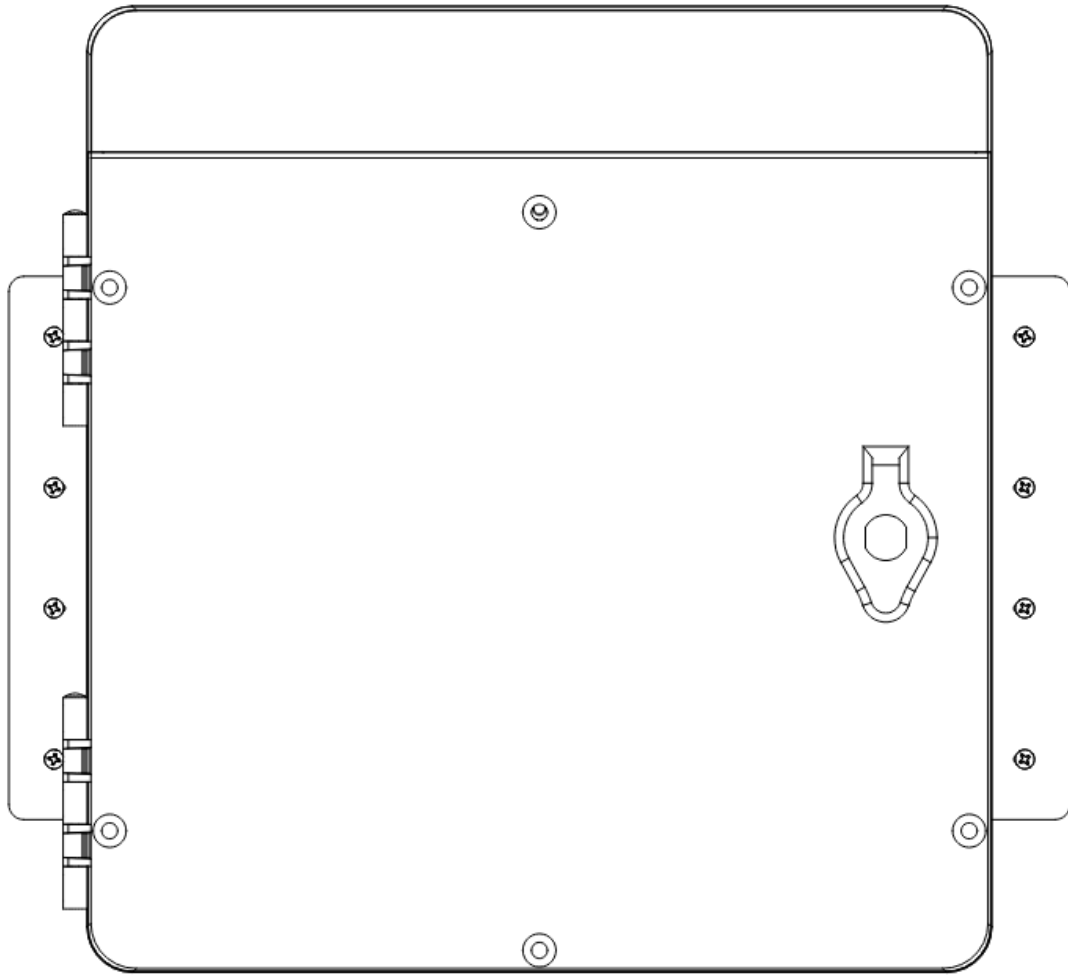
- C. Install the PTA0992 Wall Mount Bracket onto the back of the enclosure using the eight PTA0423 screws, the eight PTA0966 washers, and the eight PTA0960 lock washers provided in the kit. Use Loctite or red thread locker on the screw threads prior to screwing into the back of the enclosure.



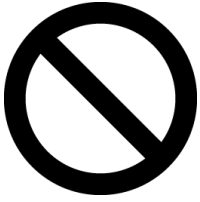


- D. Install the enclosure with the PTA0922 Wall Mount Bracket into the wall using the eight screws as shown:





Disclaimer



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:

- Do not operate the transmitter when someone is within 24 inches of the antenna
- Do not install the antenna or mast assembly on a windy day
- Do not install the mast close to power lines as it can cause serious injuries or death



WARNING

This document is for general information only. It cannot be used for a warranty. Performance and other data contained were obtained in internal lab tests under ideal conditions, and performance may vary due to network variables, different network environments and other conditions. Parsec Technologies Inc. will not accept any liability for any damage caused by an antenna due to unknown variables. Parsec Technologies Inc. reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication will be applicable.

Support Contact & Version



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