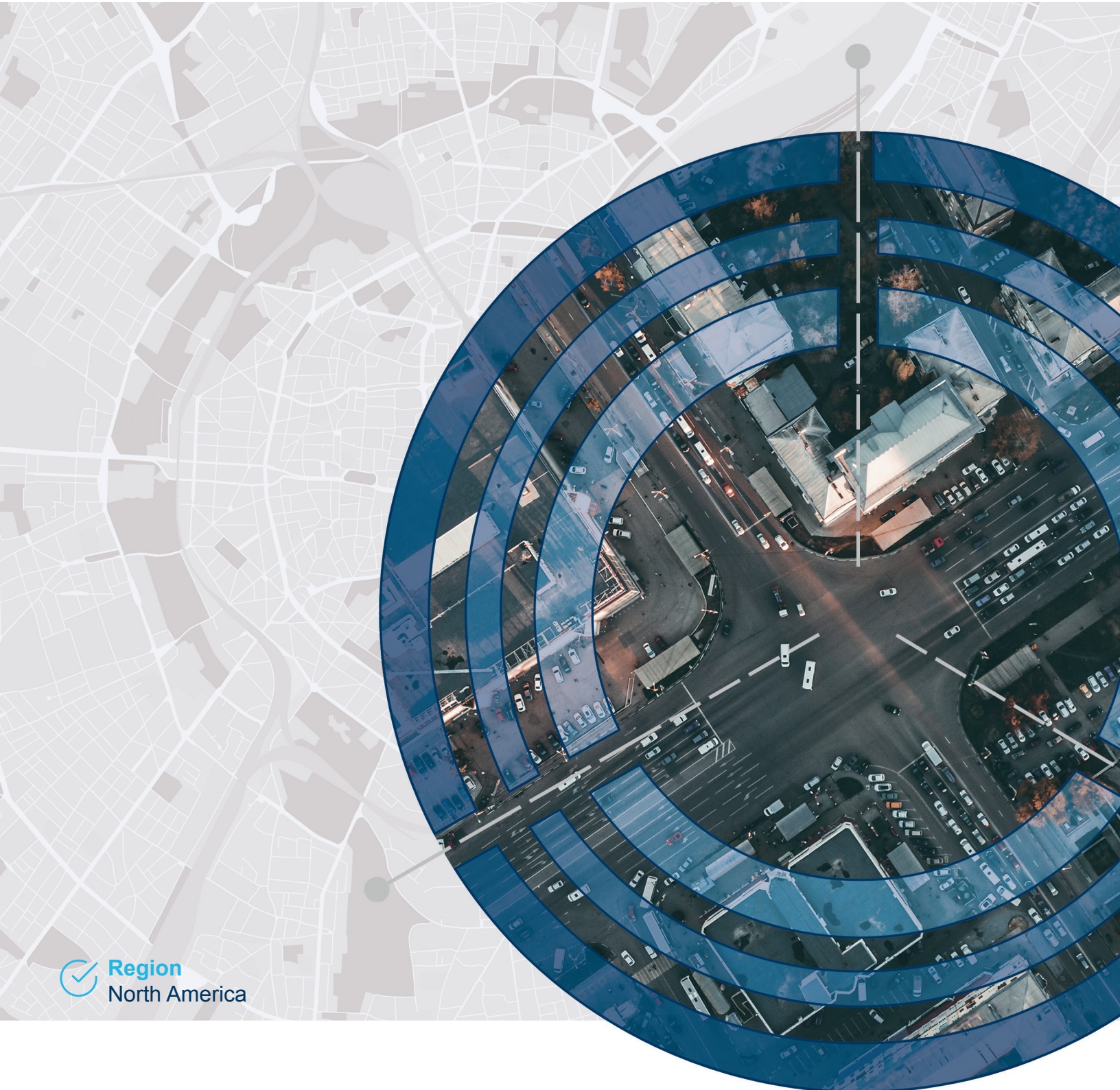


## Outdoor Wireless Cabinet Installation Instructions



# TABLE OF CONTENTS

Using This Technical Instruction	3
Inspecting Shipment	3
Desiccant Removal	3
Lifting Tab Removal	3
Product Overview	4
Standard Cabinet Features	4
Customized Cabinet Features	4
Front Isometric View	5
Rear Isometric View	6
Product Specifications	7
Installation	8
Lifting and Rigging Instructions For Cabinet	9
Clearance Requirements	10
Existing Slab Installation	11
Electrical Wiring Diagram	11
Cabinet Grounding Information	12
Ground Wire	12
Grounding the Cabinet	12
Dimensional View	13-14
Rack Rails	14
Battery Exhaust Fans	15
Ground Bar Assembly	15

## TABLE OF FIGURES:

Figure A – Front Isometric View	5
Figure B – Rear Isometric View	6
Figure C – Cabinet Overall Dimensions	7
Figure D – Pad Mounting Details	8
Figure E – Lifting and Rigging Instructions	9
Figure F – Clearance Requirements	10
Figure G – Electrical Wiring	11
Figure H – Front Dimensional View	13
Figure I – Right Side View	14
Figure J – Left Side View	14
Figure K – Rack Rail Detail	14
Figure L – Battery Compartment Exhaust Fans	15
Figure M - Ground Bar Assembly	15

# Installation Instructions: Outdoor Wireless Cabinet



## Using This Technical Instruction

Please review all sections of this document before the usage of the PPC OWC-1952B-ACTP-17 Outdoor Wireless Cabinet. Typical applications, mechanical descriptions, installation instructions, safety guidelines, grounding instructions and wiring diagrams are included.

Two types of messages appear throughout this manual, which are identified by the following icons:



Note - indicates special conditions.



Caution - indicates possibility of personal injury or equipment damage.

## Inspecting Shipment

Upon receipt of the equipment:

- Inspect the shipping container(s) and note any signs of damage. Then unpack the container(s) and carefully inspect equipment for damage. If the equipment has been damaged in transit, immediately report the extent of damage to the transportation company and to PPC. Order replacement equipment if necessary.
- Check the packing list to assure complete and accurate shipment of all listed items. If the shipment is short or irregular, contact PPC as described in the warranty (Appendix A, Terms and Conditions). If the equipment must be stored for a prolonged period, do so in the equipment's original container. If equipment ever needs to be returned, please use the original packaging if available.

## Desiccant Removal

Cabinets are shipped with desiccant packets located inside and secured within each cabinet.



Desiccant packets contained within cabinets are for shipping only. Remove immediately upon shipment arrival.

## Lifting Tab Removal

Cabinets are shipped with lifting tabs bolted to the upper sides of the cabinet to assist with installation.



Lifting tabs are for cabinet installation only. Remove lifting tabs once cabinet installation is complete.



# Installation Instructions: Outdoor Wireless Cabinet



## Product Overview

The PPC Wireless Outdoor Cabinet is constructed of aluminum with a powder coat painted finish for reduced weight and superior corrosion resistance. The cabinet has a main front door for accessing the equipment from the front side and a rear door for accessing the rear of the equipment. There is also access to the batteries from the front side and rear. Both doors are equipped with quarter-turn pad lockable latches for security. The top of the cabinet has double-wall construction to reduce the effects of solar radiation and for structural integrity.

## Standard Cabinet Features

- Overall dimensions:
  - 82" H x 37" D x 32" W (Base Cabinet)
  - 47.49" W (w/ Air conditioner and load center)
- Constructed of aluminum for reduced weight with a rugged TGIC powder coat finish for superior corrosion resistance
- Top is double-wall construction to reduce the effects of solar radiation and for structural integrity
- Has two doors located on the front and rear
- Doors include positive door stops to hold door in the open position
- Doors include two-point swing-handles with provisions for padlocking
- Front and rear bay is equipped with a stationary 19"/23" EIA rails for equipment mounting
- One unit of rack space is 1.75" based on standard EIA rack mount spacing
- Includes a base pedestal for storage and cable access
- Includes screened louvers for battery ventilation
- Includes four cable entry ports in the floor pan
- Includes four lifting tabs for overhead lifting

## Customized Cabinet Features

- Two GFCI convenience outlet, 125 VAC, 20 Amp in the front of the main bay
- 60-Amp generator connector
- 4,000 BTU 115 VAC air conditioner with a 500-Watt heater mounted on the side wall of the cabinet main bay - optional second air conditioner can be added to the rear door if required
- Exterior-mounted 100 Amp AC power panel is provided to supply power to auxiliary equipment
- 50-kA 120/240 VAC Surge suppression is provided to protect your sensitive electronic equipment from the effects of transient voltage surges
- AC Main Power Disconnect Switch (located on the outside of the cabinet)

# Installation Instructions: Outdoor Wireless Cabinet



## Front Isometric View

Illustrated in the figure below is a front view with the cabinet doors opened. The AC meter socket, input power panel, surge suppressor, and generator connector are on the exterior.



Figure A – Front ISO view of cabinet with doors open

# Installation Instructions: Outdoor Wireless Cabinet



## Rear Isometric View

Illustrated in the figure below is a front view with the cabinet doors opened. The AC meter socket, input power panel, surge suppressor, and generator connector are on the exterior.



Figure B – Rear ISO view of cabinet with doors open

# Installation Instructions: Outdoor Wireless Cabinet



## Product Specifications

OWC-1952B-ACTP-17 – Cabinet overall dimensions:  
Height – 81.93"  
Width – 32.02" (47.49" w/ air conditioner and load center)  
Depth – 36.8"  
Approx. Weight – 480lbs.

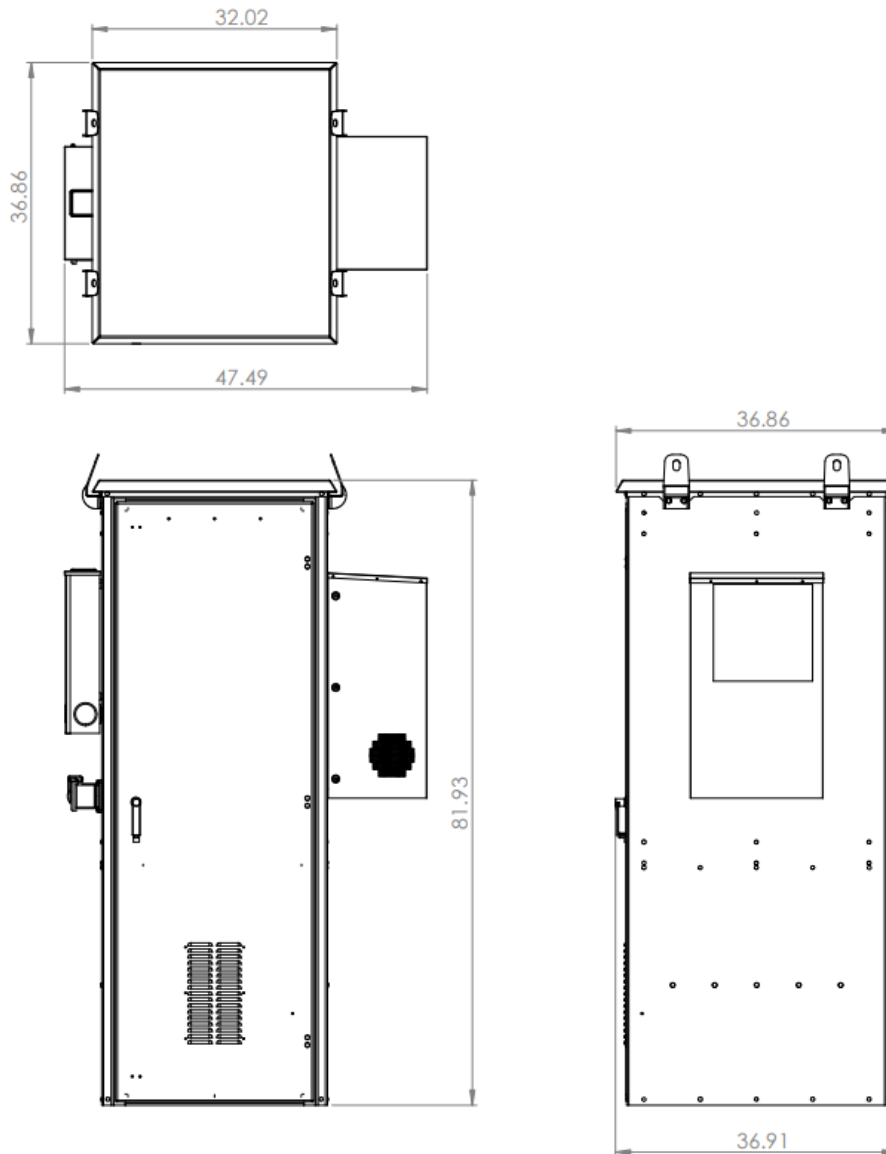


Figure C – Cabinet overall dimensions

# Installation Instructions: Outdoor Wireless Cabinet



## Installation

The cabinet should be mounted on a concrete pad. See figure below for pad mounting-hole pattern.



Due to the cabinet's weight and size, mounting of the cabinet will require proper hoisting equipment. Lifting eyelets are provided to facilitate hoisting.



During cabinet mounting, fixture the cabinet securely to avoid personal injury or cabinet damage.

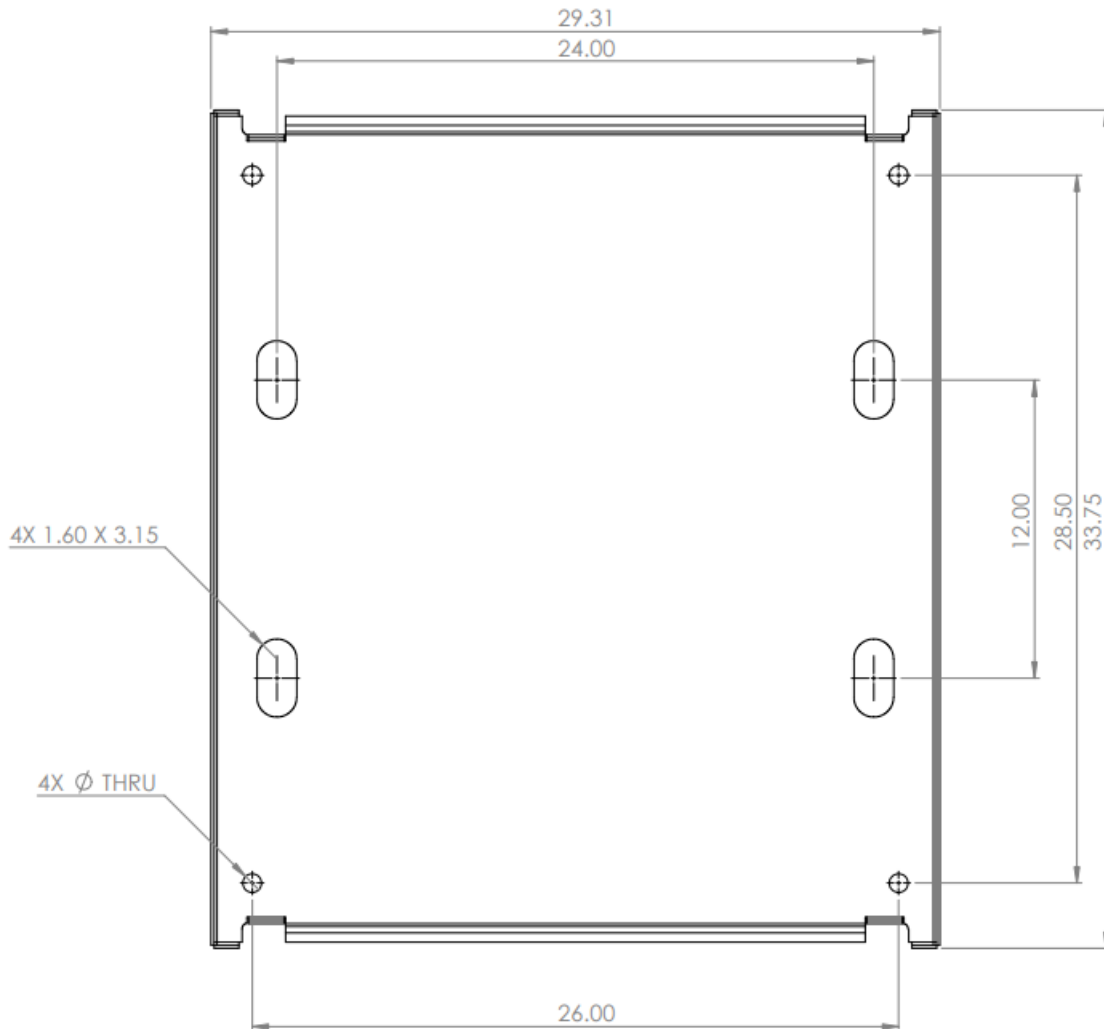


Figure D: Pad mounting details



# Installation Instructions: Outdoor Wireless Cabinet



## Lifting and Rigging Instructions For Cabinet

The lifting slings should be oriented at approximately a 60-degree angle from the top of the cabinet roof to match the angle of the lifting eyes as shown in the diagrams that follow. Two optional rigging configurations are illustrated below.

- Attach four lifting slings approximately 5 ft long each to the four lifting eyes on the cabinet.
- Connect all four lifting slings to a boom line in the center, above the cabinet.
- Tie a length of rope to the bottom of the cabinet to use as a tag line.

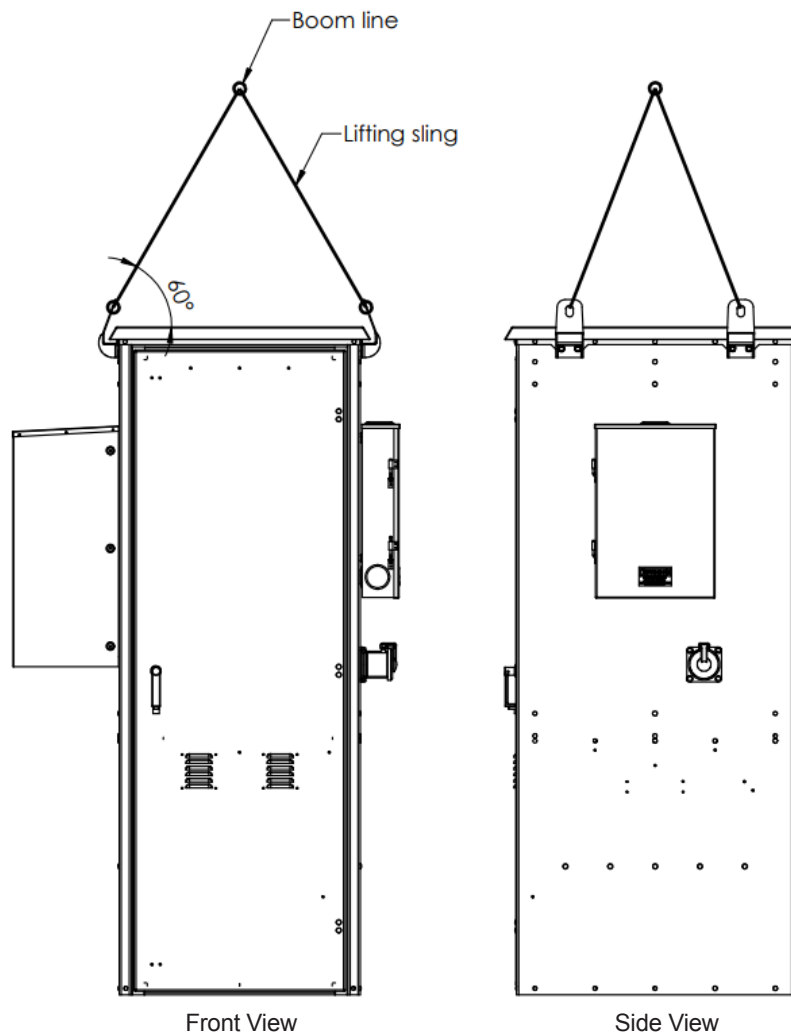


Figure E: Lifting and rigging instructions

# Installation Instructions: Outdoor Wireless Cabinet



## Clearance Requirements

When selecting a location to mount the cabinet, assure that proper clearance is available to allow adequate ventilation and to allow the cabinet door to open fully. See Figure L for top view of cabinet footprint.

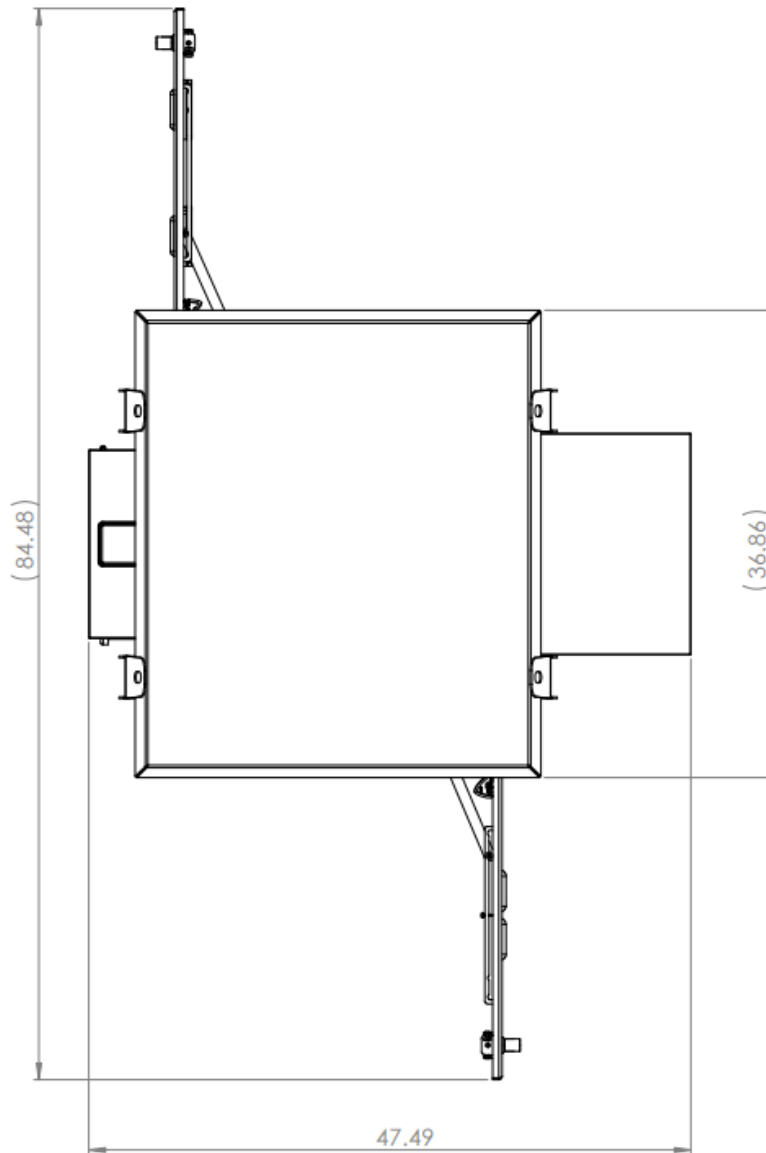


Figure F: Cabinet clearance requirement

# Installation Instructions: Outdoor Wireless Cabinet



## Existing Slab Installation

Use the procedure below to mount the cabinet on an existing concrete slab. The procedure is written for use of 5/8" x 4.5" wedge-type expansion anchors.

Have the following equipment ready before beginning this procedure:

- One masonry drill
- One 5/8" (15.9 mm) masonry drill bit
- Masonry expansion anchors
- One 15/16" wrench
- A pencil
- One hammer

1. Select a convenient mounting location on the slab.
2. Position the provided mounting template on the slab in the desired location for the cabinet and mark the location of the mounting holes.
3. Place the template out of the way.
4. Drill 5/8" (15.9 mm) diameter by 3" (7.62 cm) deep holes at the locations marked in Step 2.
5. Insert the anchor bolts into the holes in the slab and tap them firmly into the holes with a hammer.
6. Remove the nuts and washers from the expansion anchors.
7. Place the cabinet over the studs and reinstall the nuts and washers (removable panels provide access to the anchor bolts).
8. Secure the cabinet to the slab by securely tightening all anchor bolts to 70 ft-lbs or as recommended by the expansion anchor manufacturer.

## Electrical Wiring

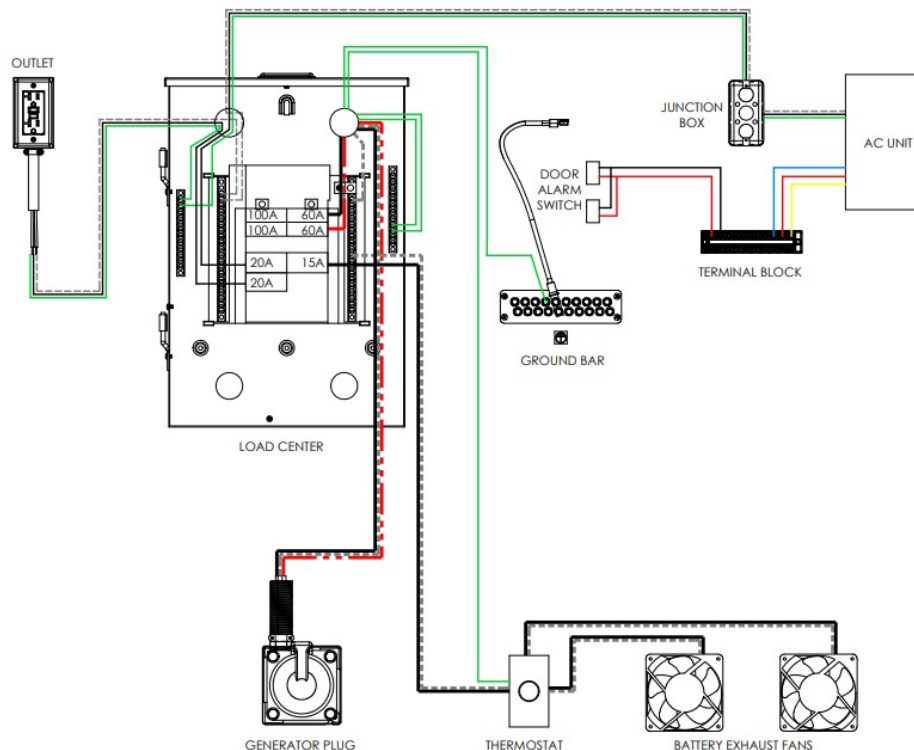


Figure G: Electrical wiring

# Installation Instructions: Outdoor Wireless Cabinet



## Cabinet Grounding Information

Bonding and grounding should be done in accordance with the operating telephone company's standard procedures and must comply with local electrical codes.

## Ground Wire

The ground wire protects the electronics from voltage surges. A #6 ground wire must be properly grounded to provide lightning surge protection for the cabinet. Please follow this practice for attaching the ground unless local policies dictate otherwise.

**For safety and performance reasons, it is imperative that a cabinet be properly grounded. The following guidelines should be used to ground the cabinet unless local practices, rules, or regulations dictate otherwise.**

Each door and equipment rack are grounded to the cabinet frame. The cabinet frame is connected to the internal grounding bus by a stranded wire. A similar ground wire must be used to connect the ground bus to each equipment ground lug. These ground wires may need to be removed temporarily to troubleshoot ground faults. The wire may be removed by unscrewing the screws that secure the green wire to the ground bus. **Be sure to reattach these wires after troubleshooting and resolving any ground conflicts.**

Be sure to ground the cabinet before connecting power to the cabinet. This grounding must always be in effect to safeguard personnel.

## Grounding the Cabinet

1. Drive ground rod(s) into the ground near the cabinet location a minimum of 8 ft deep. This may include using a single copper rod driven into the soil or grounding rings as shown above. Refer to local codes for any additional requirements.
2. Using a Megger-type ohmmeter, measure the resistance between cabinet ground and ground rod(s). The resistance must be 25 ohms or less.
3. If the ohm requirement in Step 2 is met, proceed to Step 4. Otherwise, follow standard practices to achieve the lowest resistance to ground. Compliance with Step 2 or lowest possible resistance to ground is required before proceeding to Step 4.
4. Connect a #6 ground wire to cabinet and ground rod(s).

# Installation Instructions: Outdoor Wireless Cabinet



## Dimensional View

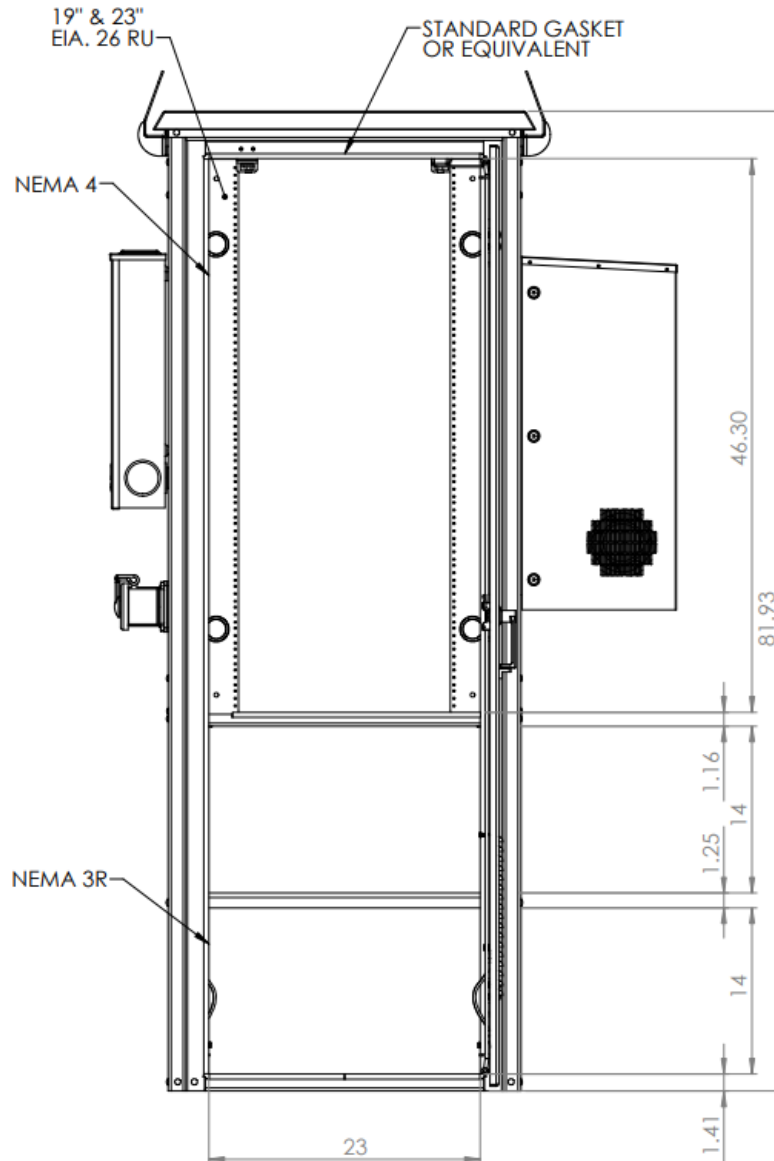


Figure H: Front dimensional view



# Installation Instructions: Outdoor Wireless Cabinet



## Dimensional View

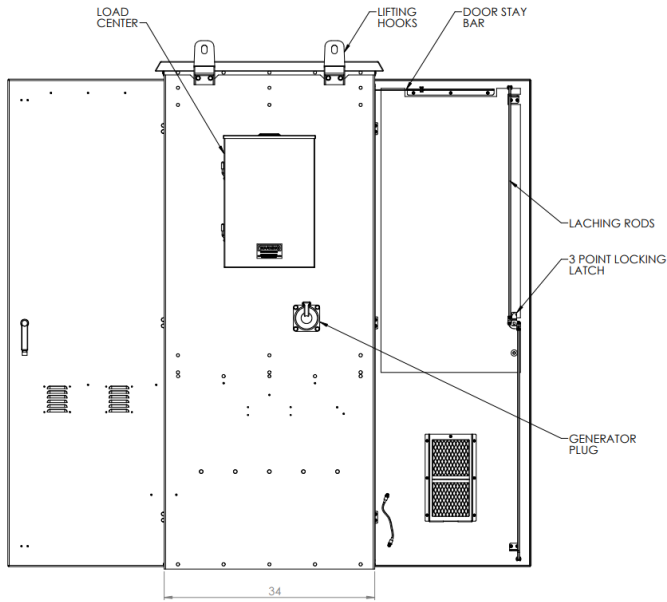


Figure I: Right side view

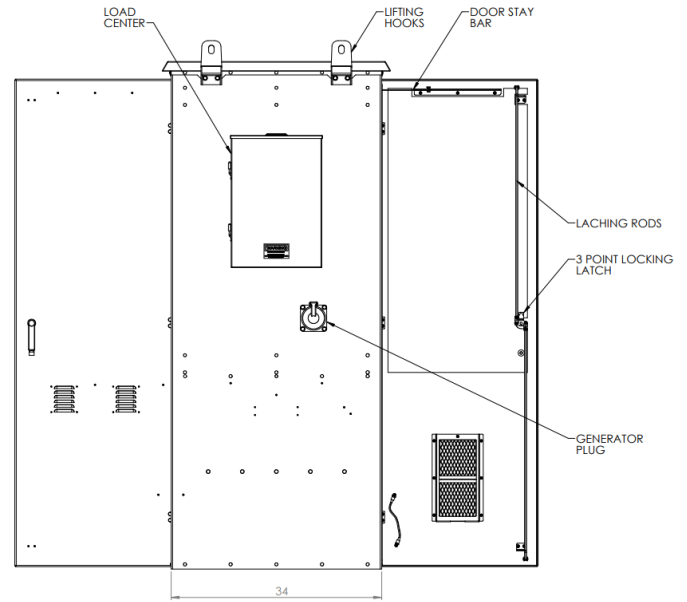


Figure J: Left side view

## Rack Rails

Rack rails for the 5G series are pictured to the right in Figure K. They are made from 0.125" aluminum. The mounting holes are tapped for a 10-32 mounting screw and are spaced according to EIA standard for 19" / 23" rack mounting.

The enclosure comes with two sets of rails for front and rear mounting of equipment. The rails are fully adjustable through the length of the enclosure. The rails are also reversible between 19" and 23" racking to better suit all mounting needs.

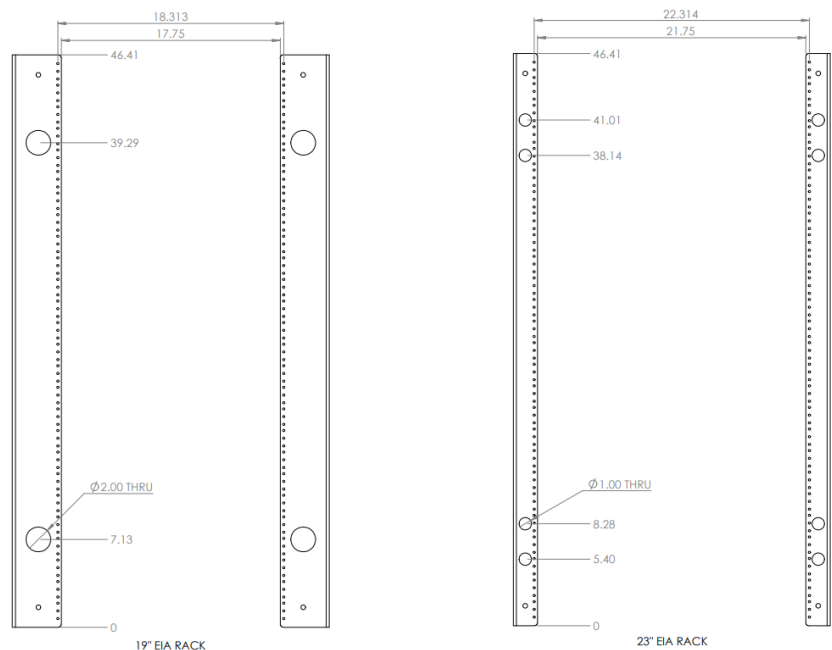


Figure K: Rack rail detail

# Installation Instructions: Outdoor Wireless Cabinet



## Battery Exhaust Fans

The 5G series has an air ventilated battery compartment designed to support up to four 12v batteries. The intake filter is mounted to the front door and the exhaust on the rear door. The battery compartment is ventilated with two 115v 53cfm fans.



Figure L: Exhaust fans

## Ground Bar Assembly

The inside panel contains a 12 inch copper ground bar mounted on isolators.

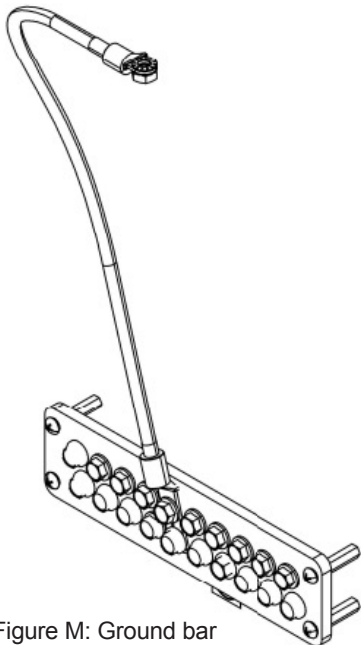


Figure M: Ground bar





r1\_04162024