

EG4[®] 280Ah WALLMOUNT AW CONDUIT BOX

QUICK-START GUIDE



TABLE OF CONTENTS

1.	SAFETY.....	1
1.1	SAFETY INSTRUCTIONS.....	1
1.2	IMPORTANT SAFETY NOTIFICATIONS	1
2.	BRIEF DESCRIPTION.....	3
3.	PACKING LIST.....	3
4.	CONDUIT BOX DIMENSIONS.....	4
4.1	EXTERIOR DIMENSIONS	4
4.2	LEFT & RIGHT-SIDE PANEL	5
4.3	TOP PANEL	5
5.	CONDUIT BOX GENERAL INSTALLATION	7
5.1	WITH EG4® WALLMOUNT 280AH AW	8
5.2	WITH EG4® 18KPV INVERTER.....	10

1. SAFETY

1.1 SAFETY INSTRUCTIONS

International safety regulations have been strictly observed in the design and testing of the equipment. Before beginning any work, carefully read all safety instructions, and always observe them when working on or with the ESS. The installation must follow all applicable national or local standards and regulations.

Incorrect installation may cause:

- Injury or death to the installer, operator or third party
- Damage to the inverter or other attached equipment

1.2 IMPORTANT SAFETY NOTIFICATIONS



DANGER: *Hazardous Voltage Circuits!*

There are various safety concerns that must be carefully observed before, during, and after the installation, as well as during future operation and maintenance. The following are important safety notifications for the installer and any end users of this product under normal operating conditions.

1. **Beware of high PV voltage.** Install an external DC disconnect switch or breaker and ensure it is in the “off” or “open” position before installing or working on the inverter. Use a voltmeter to confirm there is no DC voltage present to avoid electric shock.
2. **Beware of high grid voltage.** Ensure the AC switch and/or AC breaker are in the “off” or “open” position before installing or working on the inverter. Use a voltmeter to confirm there is no voltage present to avoid electric shock.
3. **Beware of high battery current.** Ensure that the battery module breakers and/or on/off switches are in the “open” or “off” position before installing or working on the inverter. Use a voltmeter to confirm there is no DC voltage present to avoid electric shock.
4. **Do not** open the inverter while it is operating to avoid electric shock and damage from live voltage and current within the system.
5. **Do not** make any connections or disconnections (PV, battery, grid, communication, etc.) while the system is operating.
6. An installer should make sure to be well protected by reasonable and professional insulative equipment [e.g., personal protective equipment (PPE)].
7. Before installing, operating, or maintaining the system, it is important to inspect all existing wiring to ensure that it meets the appropriate specifications and conditions for use.
8. Ensure that the PV, battery, and grid connections to the system are secure and proper to prevent damage or injuries caused by improper installation.
9. Some components of the system can be very heavy. Be sure to utilize team-lift among other safe lifting techniques throughout the installation.



WARNING: TO REDUCE THE RISK OF INJURY, READ ALL INSTRUCTIONS!

All work on this product (system design, installation, operation, setting, configuration, and maintenance) must be carried out by qualified personnel. To reduce the risk of electric shock, do not perform any servicing other than those specified in the operating instructions unless qualified to do so.

10. Read all instructions before installing. For electrical work, follow all local and national wiring standards, regulations, and these installation instructions.
11. Make sure the system is properly grounded. All wiring should be in accordance with the National Electrical Code (NEC), ANSI/NFPA 70.
12. The system can inter-connect with the utility grid only if the utility provider permits. Consult with the local AHJ (Authority Having Jurisdiction) before installing this product for any additional regulations and requirements for the immediate area.
13. All warning labels and nameplates on the system should be clearly visible and must not be removed or covered.
14. **Keep children** from touching or misusing the inverter and relevant systems.
15. **Beware!** Some parts of the system can be hot when in use. Do not touch the inverter's surface or most of the parts when they are operating. During operation, only the LCD and buttons should be touched.



WARNING!

Cancer and Reproductive Harm – See www.P65Warnings.ca.gov for more details.

DISCLAIMER

EG4 reserves the right to make changes to the material herein at any time without notice. Please refer to www.eg4electronics.com for the most updated version of our manuals/spec sheets.

2. BRIEF DESCRIPTION

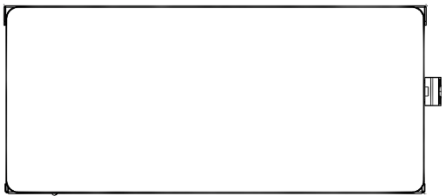
The EG4® 280Ah WallMount AW Conduit Box allows users a simple way to protect cables and connections between battery and inverter from the elements. The conduit box is designed to seamlessly integrate with the 280Ah WallMount AW Battery and either the FlexBOSS21, 12kPV or 18kPV Hybrid Inverters. The enclosure also has a lock and key mechanism to prevent unwanted tampering.



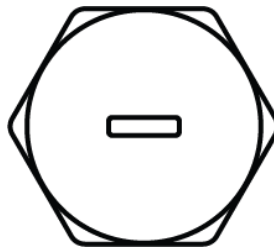
NOTE: This product is **not** compatible with the 280Ah WallMount Indoor battery.

3. PACKING LIST

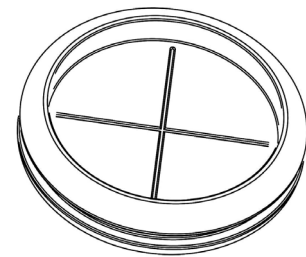
The items listed below will arrive with the product shipment:



280Ah WallMount AW Conduit Box
Weight: 16.85 lbs. (7.64kg)



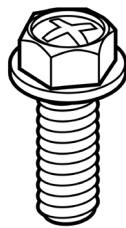
Knockout Plugs	
M63×1.5	Qty 4
M50×1.5	Qty 1
G1	Qty 2
PG21	Qty 2



Grommets	
RSB-28	Qty 2
RSB-35	Qty 2
RSB-50	Qty 1
RSB-63	Qty 4



Keys

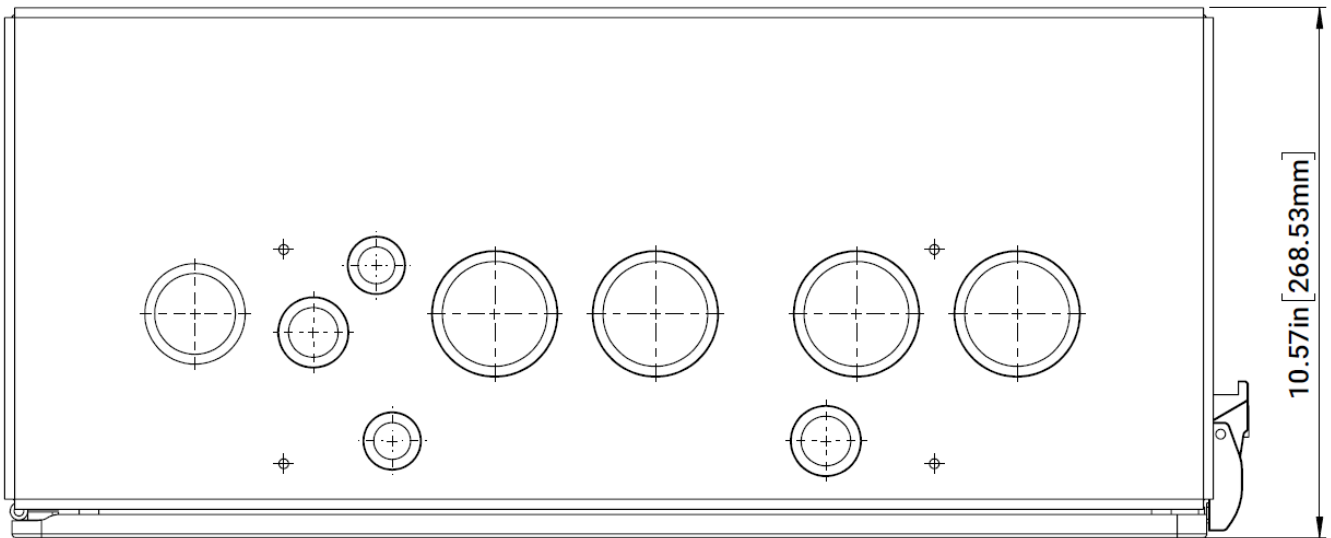


Side Screws x4

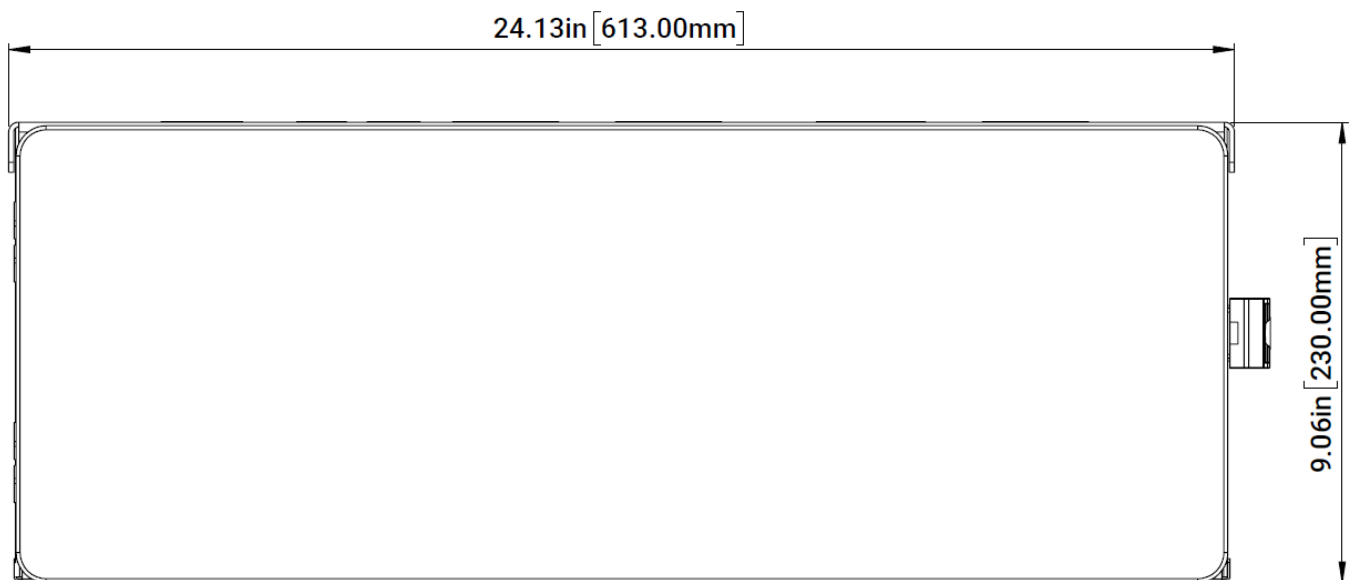
4. CONDUIT BOX DIMENSIONS

4.1 EXTERIOR DIMENSIONS

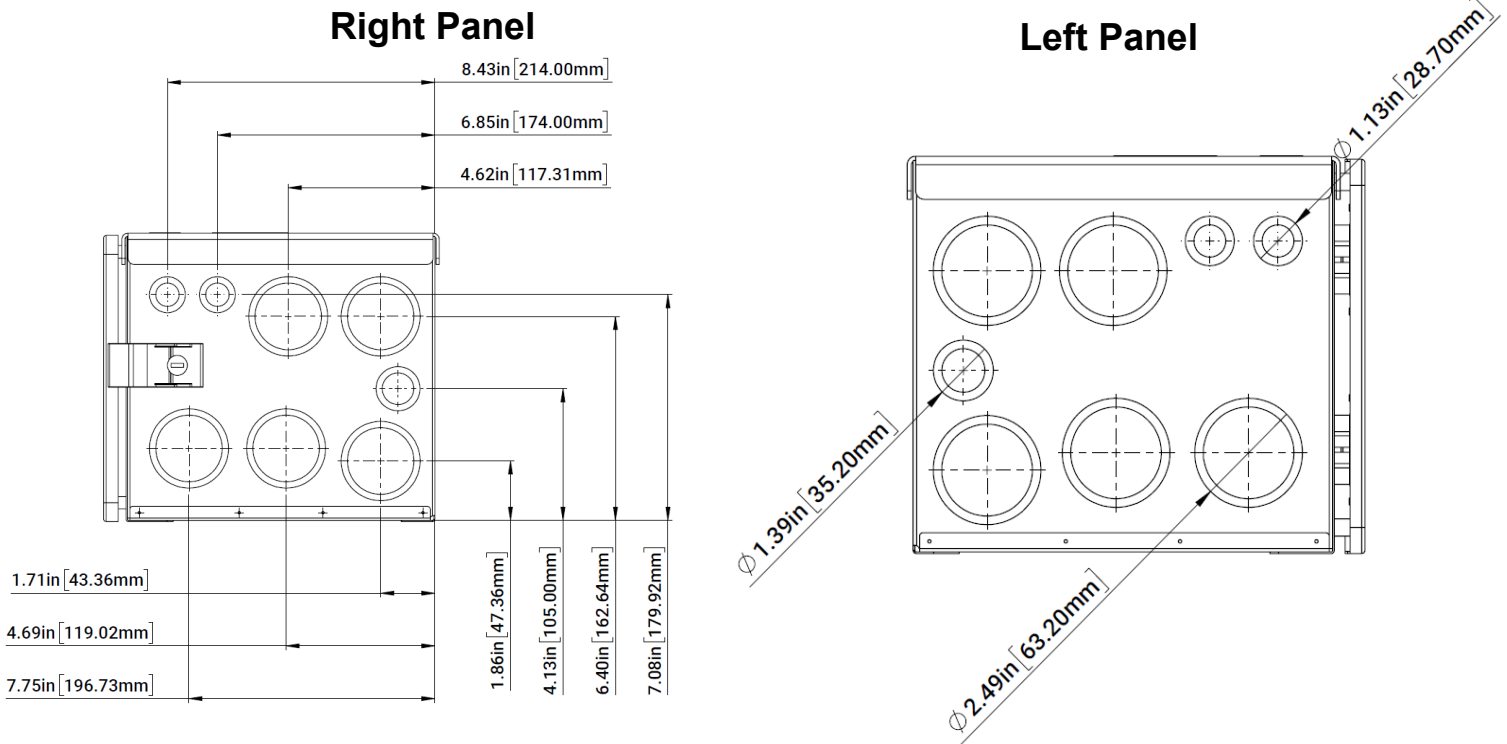
Top View



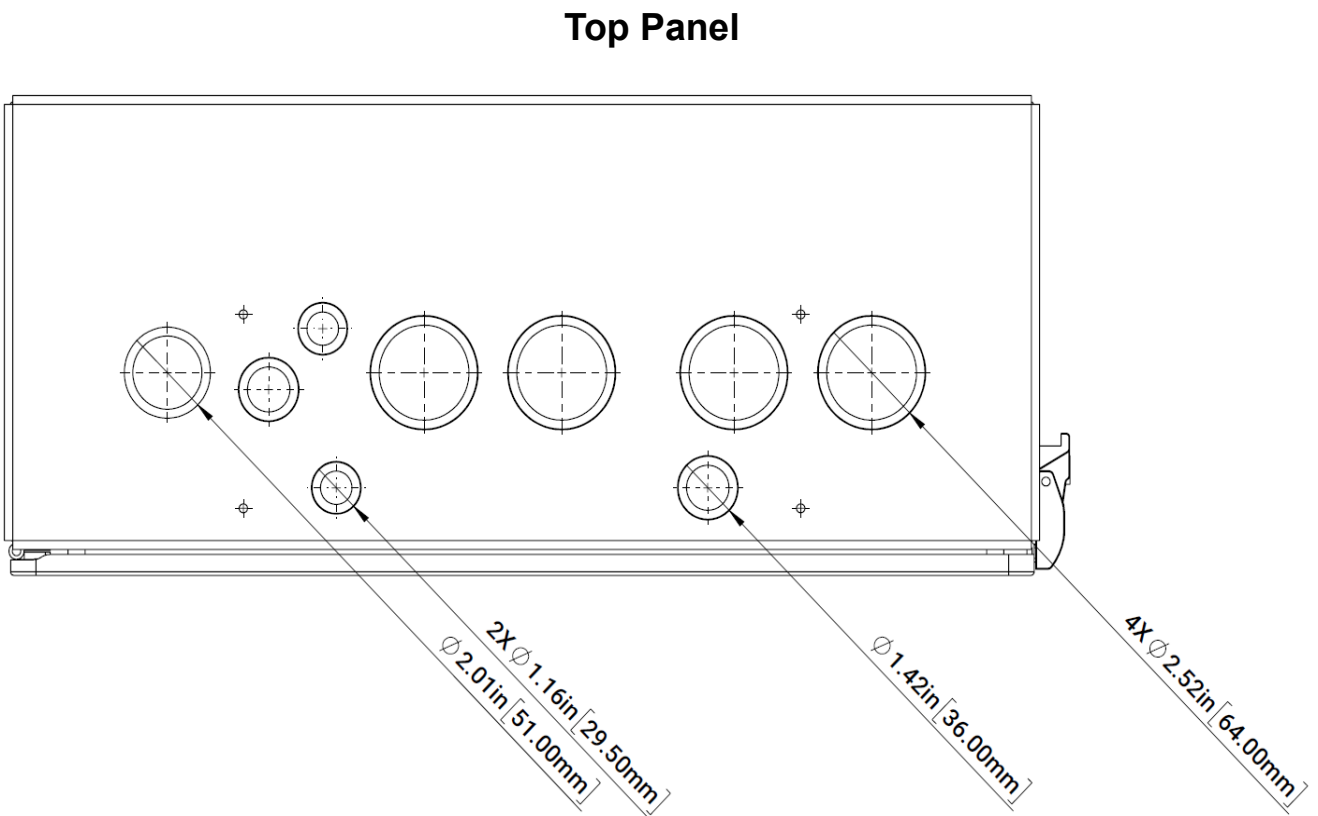
Front View

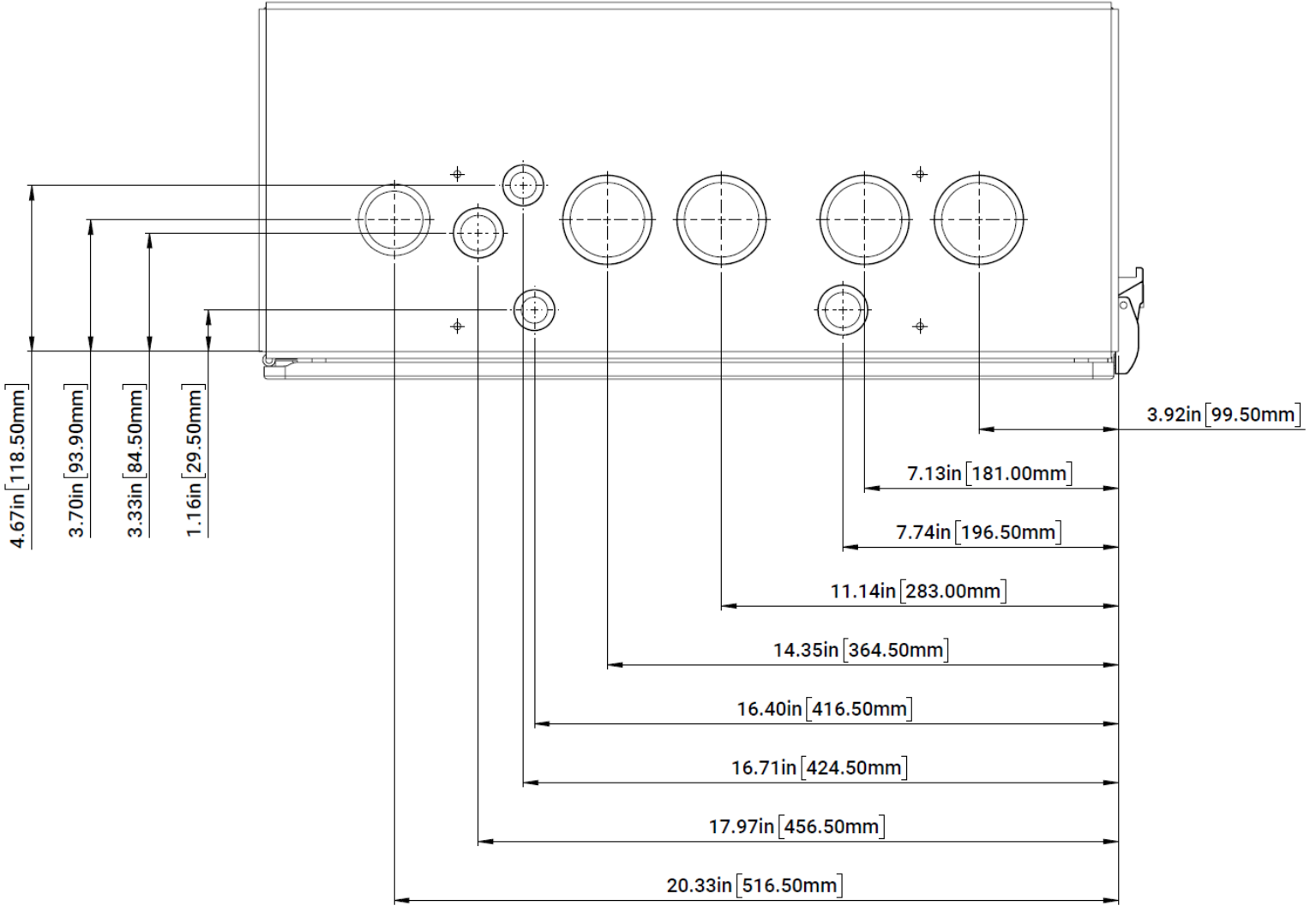


4.2 LEFT & RIGHT-SIDE PANEL



4.3 TOP PANEL





U.S. NOM. TRADE SIZE	ACTUAL KO SIZE
3/4 in.	1.13 – 1.16 in. (28.7 – 29.4 mm)
1 in.	1.39 – 1.42 in. (35.2 – 36.1 mm)
1 1/2 in.	2.01 in. (51 mm)
2 in.	2.49 - 2.52 in. (63.2 – 64 mm)

5. CONDUIT BOX GENERAL INSTALLATION

The conduit box is a highly recommended accessory for the battery to retain all the cables inside an enclosure for added protection and safety. The conduit box houses the wires that are running from the inverter to other external connections.

Step 1 (if applicable): Identify the four screw locations that attach to the All Weather battery on the lower side of the conduit box. **(Figure 1)**. Place the conduit box on top of the battery and use the (4) screws provided with the battery to tighten the conduit box to the battery.

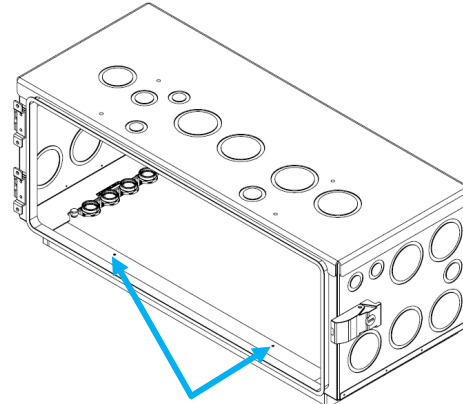


Figure 1 – Screw Install Location

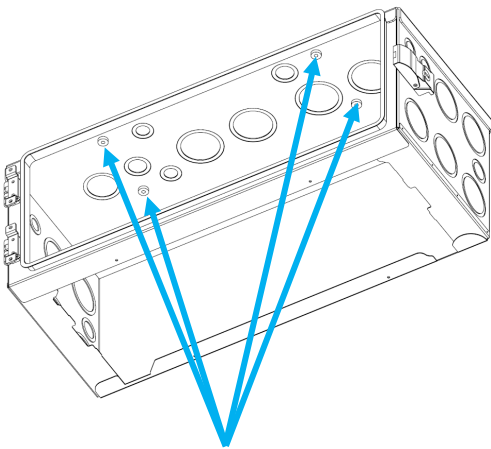


Figure 2 –Screw Install Location

Step 2: If installing the WallMount along with the 12 or 18kPV inverter, please use the 4 threaded inserts on the top side of the conduit box to secure it to the inverter as shown in **Figure 2**. The screws needed are included with the 12 or 18kPV.

If installing the WallMount as an additional battery or along with non-EG4 inverter, please use the plugs to cover the top holes on the conduit box. Refer to **Figure 3**.

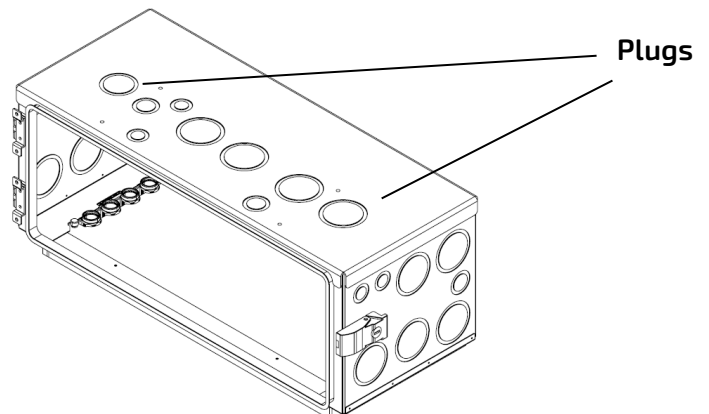


Figure 3 – Conduit Box Plug Location

5.1 WITH EG4® WALLMOUNT 280AH AW



CAUTION: ALWAYS MOUNT THE BATTERY IN AN UPRIGHT POSITION!

Mounting Instructions

1. Place mounting bracket on wall at proper mounting height (top of the bracket a minimum 28.0625 in) from the ground; use a level to make sure the bracket is straight, and mark mounting hole locations. Drill holes to accommodate mounting hardware being used.
The images below correlate to the steps taken in this list.



Note: *The top of the mounting bracket at 28.0625 in. from the ground makes the battery sit on the ground.*

2. Secure mounting bracket to the wall using the included expansion bolts (concrete/brick walls) or appropriate hardware required for the mounting surface.



Note: *If not mounting into concrete or brick using the included expansion bolts, ensure bolts are mounted into both studs or other supportive material. The battery is 300 lbs., please ensure full mounting support.*

3. Attach the WallMount battery pack to the mounting bracket. To accomplish this, lift the battery up and hook the flange on the back of the battery into the flange on the front of the mounting bracket. Secure the battery to the mounting bracket with the 4 included side screws. See Figure 5.



Note: *The battery is very heavy. Please use the team lift technique to prevent damage to personnel and/or equipment*

4. Attach the conduit box (sold separately) to the top of the WallMount battery using the included hardware.
5. Finally, properly ground the battery, attaching a grounding conductor to the M6 grounding screw on top of the battery to the Equipment Grounding System.

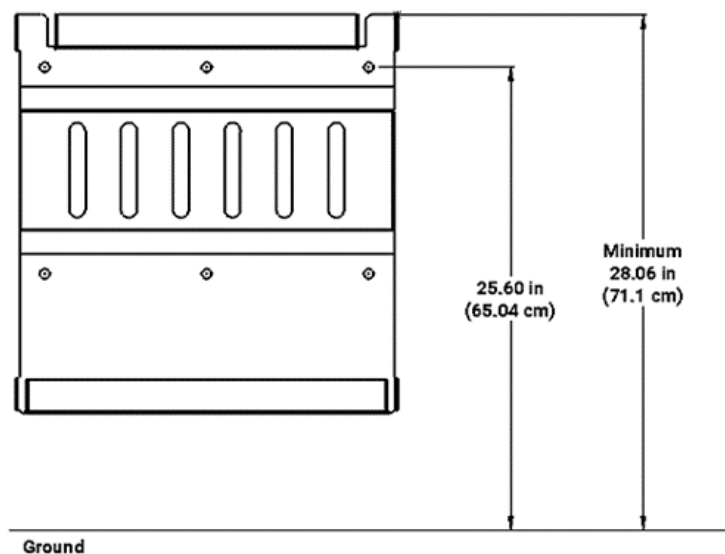


Figure 4 – WallMount Installation with Conduit Box Steps 1 & 2

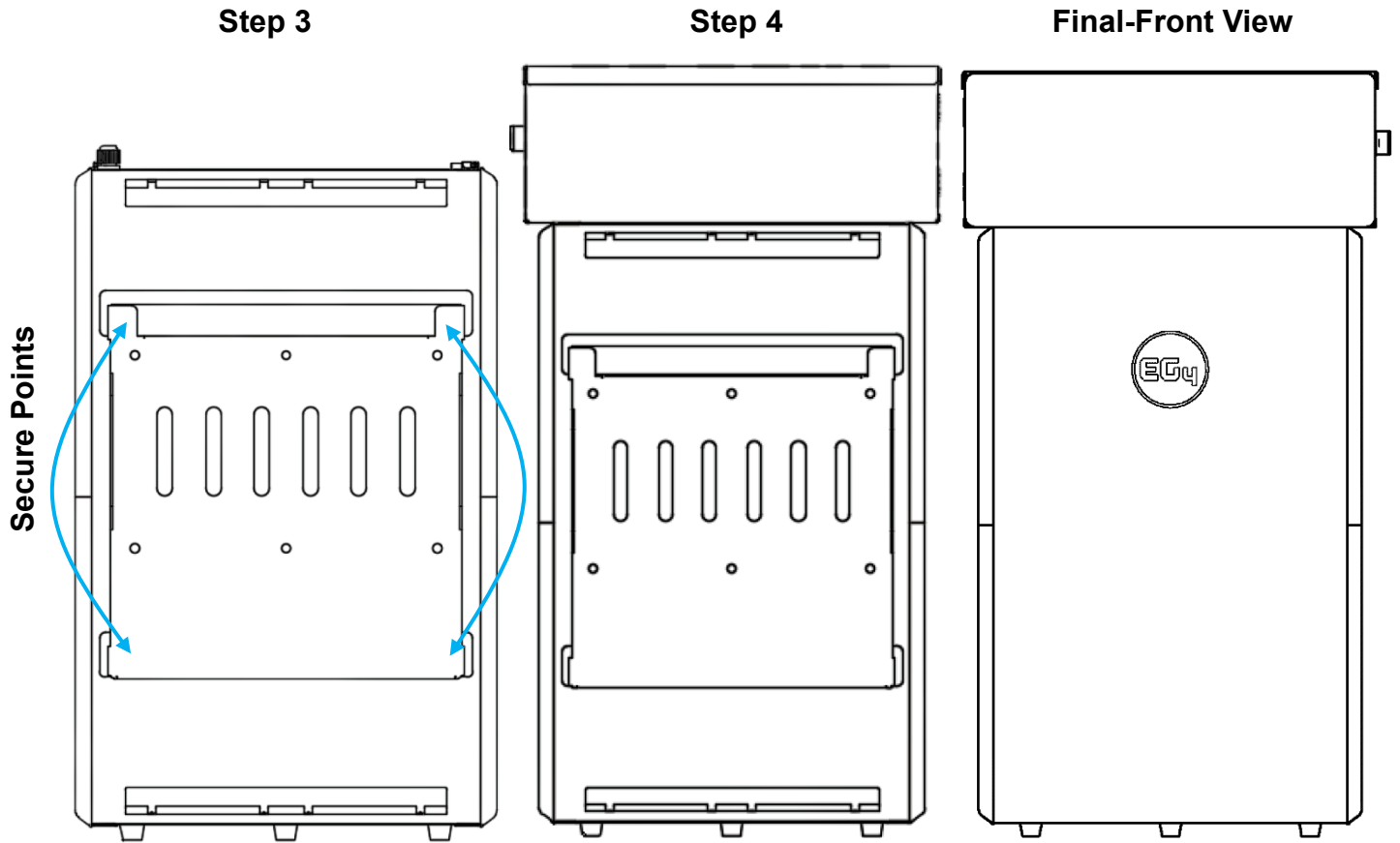


Figure 5 – WallMount Installation with Conduit Box Steps 3, 4 & 5

Scan or select the QR code below to navigate to the EG4® WallMount All Weather 280Ah user manual.



5.2 WITH EG4® 12 OR 18KPV INVERTER



CAUTION: ALWAYS MOUNT THE BATTERY IN AN UPRIGHT POSITION!

Mounting Instructions with EG4 12/18kPV (See diagrams on following pages)

Note: If **not** mounting into concrete or brick using the included expansion bolts, ensure bolts are mounted into both studs or other supportive material. The battery is over 300 lbs., please ensure full mounting support.

1. Place mounting bracket on wall at proper mounting height (Min. 28.0625 in.) from the ground; use a level to make sure the bracket is straight, and mark mounting hole locations. Drill holes to accommodate mounting hardware being used.
The images below correlate to the steps taken in this list.



Note: The mounting bracket at 28.0625in from the ground makes the battery sit on the ground.

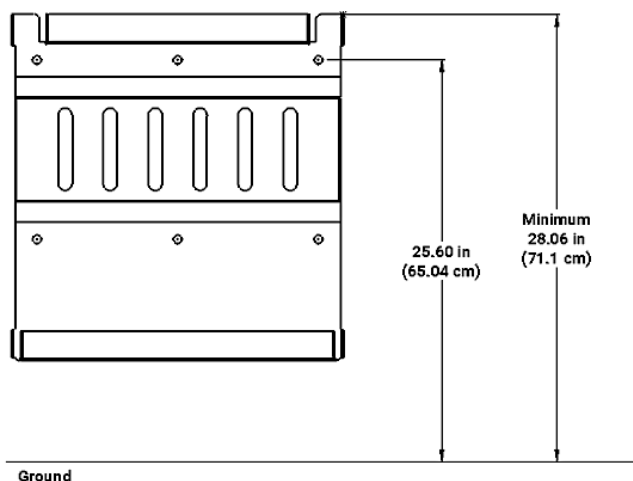
2. Align the provided X-bracket with the holes on the mounting bracket and secure both to the wall, using the included expansion bolts (concrete/brick walls) or appropriate hardware required for the mounting surface. The X-bracket will be behind the mounting plate, against the wall.
3. Using the X-bracket as a guide, attach the inverter mounting bracket using the appropriate hardware required for the mounting surface.
4. Attach the WallMount battery pack to the mounting bracket. To accomplish this, lift the battery up and hook the flange on the back of the battery into the flange on the front of the mounting bracket. Secure the battery to the mounting bracket with the 4 included side screws.



Note: The battery is very heavy. Please use the team lift technique to prevent damage to personnel and/or equipment

5. Attach the conduit box (sold separately) to the top of the WallMount battery using the included hardware.
6. Attach the 12/18kPV to the inverter mounting bracket making sure that the holes of the inverter align with the conduit box and secure to each other with the included hardware.
7. Finally, properly ground the battery, attaching a grounding conductor to the M6 grounding screw on top of the battery to the Equipment Grounding System.

Step 1 (front view)



Step 2 (back view)

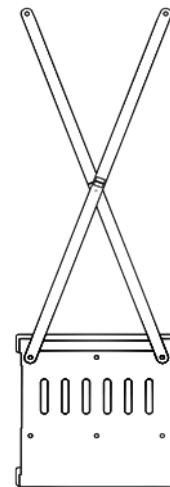
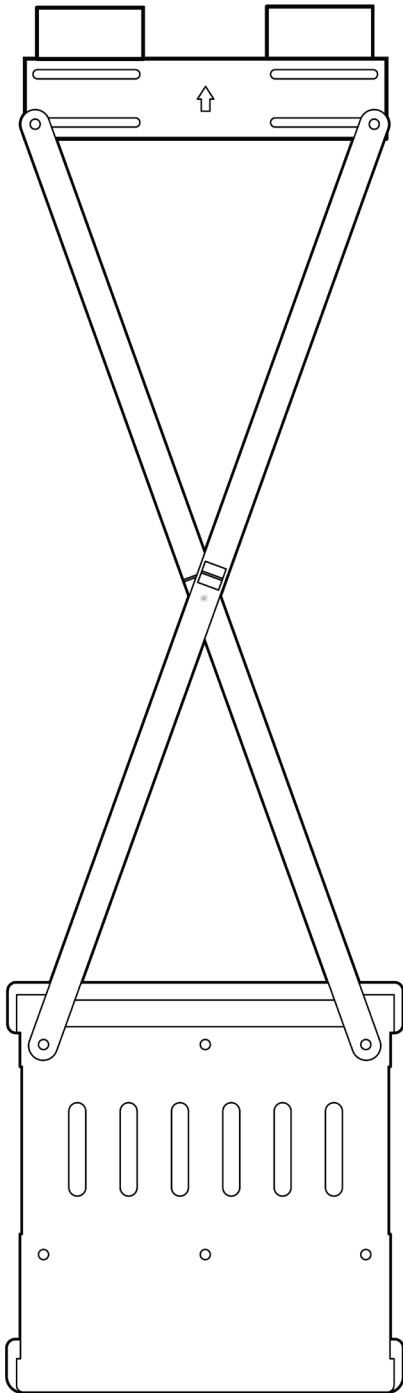


Figure 6 – WallMount Installation with Conduit Box & 12/18kPV Steps 1 & 2

Step 3 (back view)



Step 4 (back view)

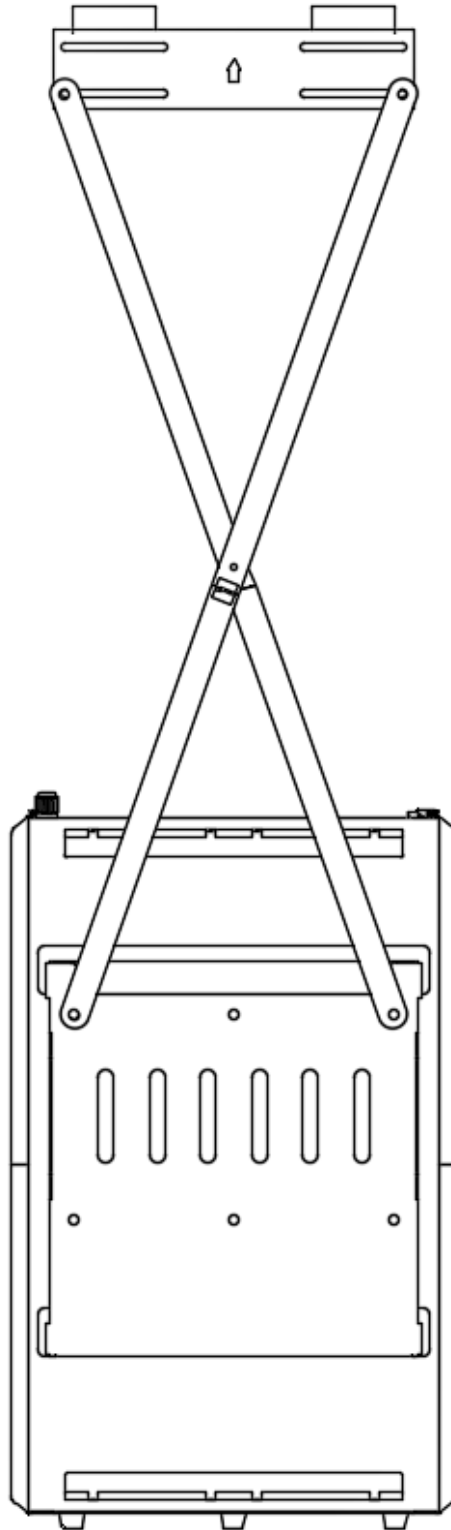
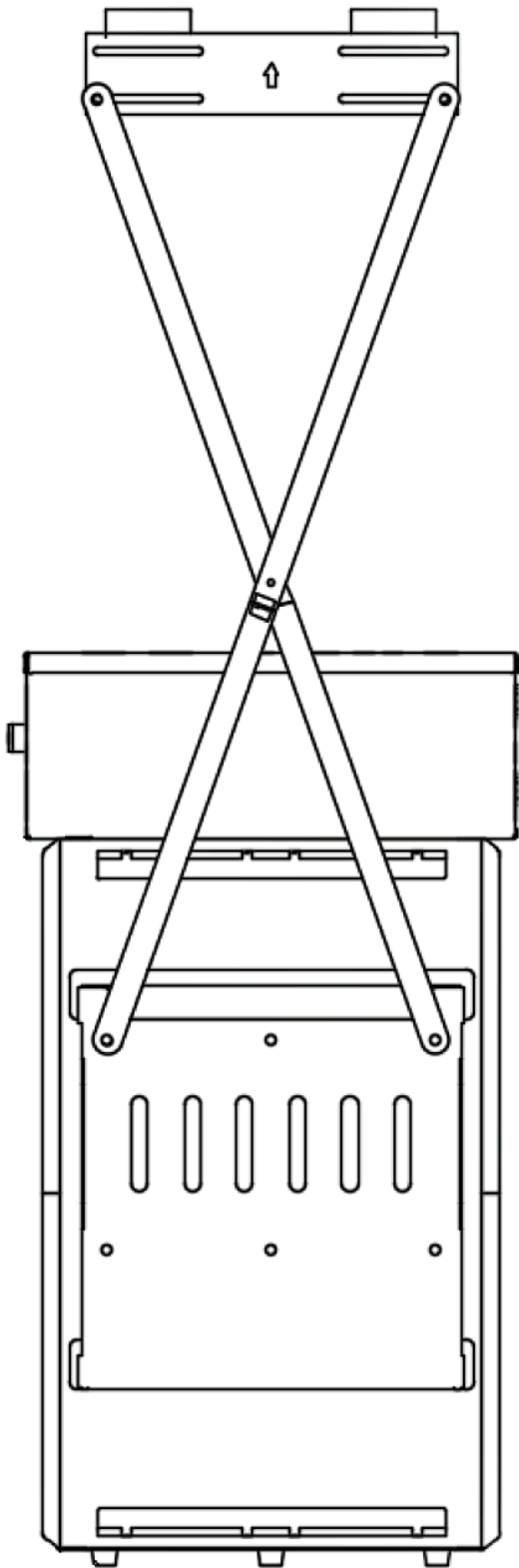


Figure 7 – WallMount Installation with Conduit Box & 12/18kPV Steps 3 & 4

Step 5 (back view)



Step 6 (back view)

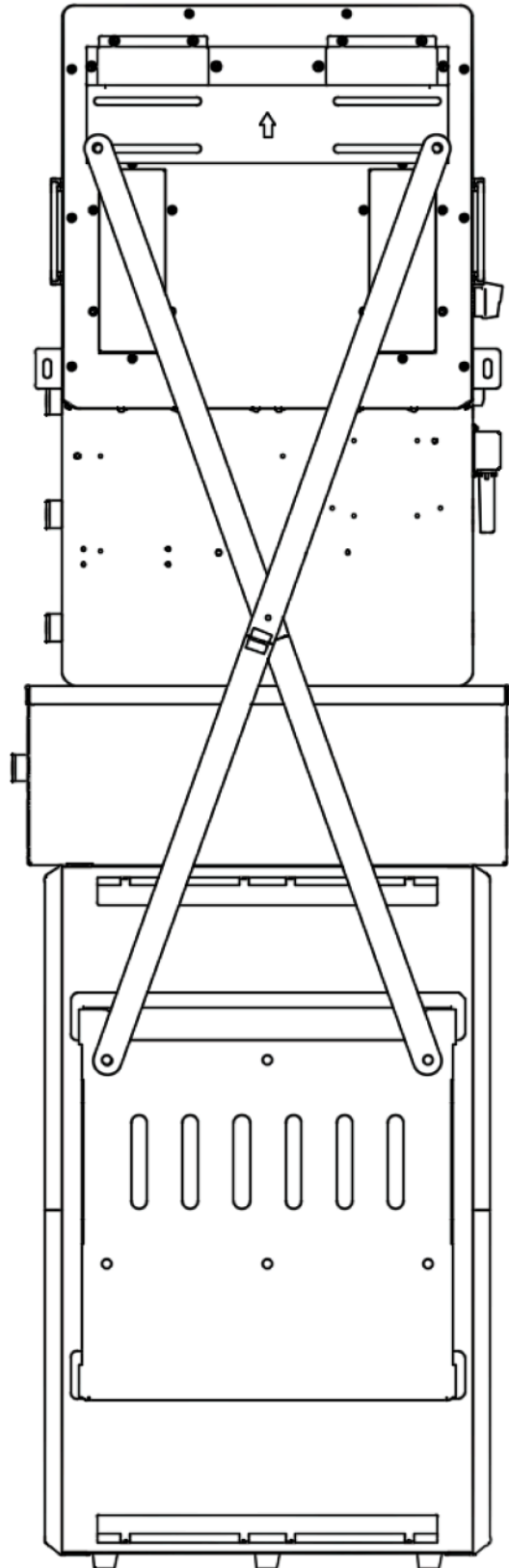


Figure 8 – WallMount Installation with Conduit Box & 12/18kPV Steps 5 & 6

Final - Front View w/ Dimensions

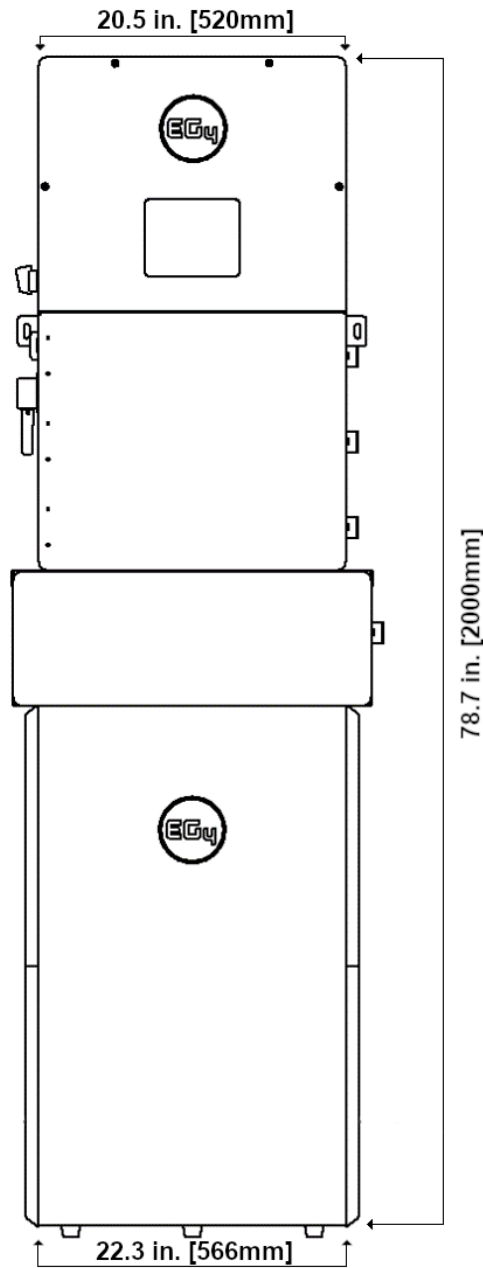


Figure 9 – WallMount Installation with Conduit Box & 12/18kPV Final

Scan or select the QR code below to navigate to the EG4® 12kPV quick-start guide.



Scan or select the QR code below to navigate to the EG4® 18kPV user manual.





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