



# **POWER MAX™ PLUS ACCESSORIES**

**TILTED 10° ARRAY** 

**INSTALLATION INSTRUCTIONS** 



#### **SAFETY CONSIDERATIONS**

This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. **FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN PERSONAL INJURY OR DEATH.** 

Do not modify this product under any circumstances.

This product is intended for use by trained technicians only. This product should not be used by anyone who is not familiar with, and not trained to use it.

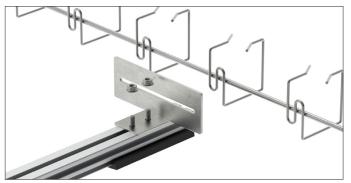
When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact. Be sure to wear proper safety equipment per your company protocol.

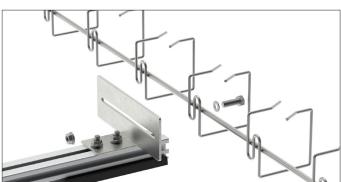
For proper performance and personal safety, be sure to select the proper size  $PREFORMED^{TM}$  product before application.

PREFORMED products are precision devices. To ensure proper performance, they should be stored in cartons under cover and handled carefully.



#### **INSTALLING SNAKE TRAY® - CABLE RUNS**





Secure the Snake Tray bracket to the ballast tray by sliding the T-bolts into the tracks of the tray and fitting the bracket on top of the bolts. Thread the flange nuts and torque to 15 ft-lb.

Attach the Snake Tray to the Bracket using 5/16 x 3/4" Hex Screw, Flat Washer and Flange Nut. Tighten securely.

For more on Snake Tray see: snaketray.com

### **INSTALLING CONDUIT & CABLE RUNS**



The POWER MAX™ Plus system is capable of supporting conduit runs by installing optional conduit brackets. Install the brackets into the ballast supports by using the provided T-bolt and flange nut. Torque to 15 ft-lb.

The wind deflectors have special cutouts to allow for the conduit to run from one ballast tray to the next. The conduit runs can then be tightened to the bracket by using the provided U-bolt and hardware.





# **INSTALLING A MICROINVERTER/OPTIMIZER**



Attach the Inverter Mounting Bracket to the ballast supports using the provided T-bolts and Flange Nuts. Torque to 15 ft-lb.

Using the hardware provided in the Mounting Bracket Kit, attach the Microinverter/Optimizer to the Inverter Mounting Bracket. Tighten securely.



# **INSTALLING BALLAST TRAYS**



Attach the optional ballast trays to the ballast supports using the provided T-bolts and Flange Nuts. Torque to 15 ft-lbs.





#### STEP 5: INSTALLING BALLAST TRAYS WITH ANCHOR ATTACHMENTS U-ANCHORS

#### NOTE

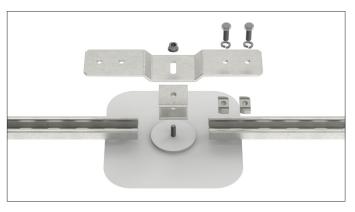
Unistrut Rails are only needed on systems with excessive loads.

## **CAUTION**

Caution statement can be found in the step description.

#### **NOTE**

These instructions do not include the installation of the attachment to the roof top surface. Refer to the attachment manufacturer for product specific installation instructions.



Item	Description	Qty	Supplied By
1	3/8" x 1-1/4" Hex Bolt & Lockwasher - Stainless Steel	4	PLP
2	Channel Nut, Unistrut p/n P3008 or Equivalent	2	Customer
3	Square Washer, Unistrut p/n P1063 or Equivalent	2	Customer
4	Rail, Unistrut p/n P3300 or Equivalent	N/A	Customer
5	Seismic Attachment Bracket	1	PLP
6	3/8" Flange Nut - Stainless Steel	2	PLP



Start by laying the Unistrut next to the roof anchor. With the Unistrut sections in place, lay the Seismic Attachment Bracket over the roof anchor stud. If necessary, use 1 or 2 square washers to shim the Attachment Bracket. Next, slide the Unistrut channel nuts into the Unistrut rail, aligning the channel nut holes with the Attachment Bracket holes. Tighten the flange nut and hex bolts. Torque to 20 ft-lb.

Each optional attachment bracket kit contains the below list of materials. This bracket is meant to attach to Unistrut (not included) and a roof anchor (et. Anchor products U-Anchor, OMG PowerGrip, etc.)

Caution: Without exception, Seismic Attachments must be installed/applied per the job specific project drawings. Be absolutely certain that the roof anchors are installed/secured to the roof surface per the manufacturer's specifications. Failure to do so could lead to a catastrophic structural failure and severe personal injury or death. Furthermore, failure to meet specifications void the system warranty.

Next, place the ballast tray over the Unistrut. Align the hole at the center of the tray over the Unistrut channel and channel nut. Use the provided 3/8" bolt and square washer to begin threading the bolt into the channel nut. Torque to 20 ft-lb.



# STEP 6: INSTALLING BALLAST TRAYS WITH ANCHOR ATTACHMENTS OMG ANCHORS



Place the attachment bracket on top of the anchor with the anchor stud in the center hole of the bracket. Lay the ballast tray over the anchor, aligning the holes over the attachment bracket.

Insert carriage bolts through the attachment bracket from the bottom of the tray and fasten the flange nuts. Using an extended drive bit, fasten the flange nut to the stud on the roof anchor. Torque flange nuts to 20 ft-lb.





Global Headquarters 660 Beta Drive Cleveland, OH 44143 Telephone: 800 260 3792 Fax: 440 442 8816 plp.com Email: info@plpsolar.com