

# SunWize Power & Battery Mount Installation Guide Small Format Side of Pole



## **Included Parts:**





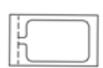
B) 2x Saddle Bracket



C) 2x Tilt Leg



D) 1x Anti-Seize Packet



E) 2x Easy Mount Bracket



F) 4x Angle Bracket



**G) 4x Band Clamp** 



H) 1/4" Flange Nut



I) 5/16" Flange Nut



J) 5/16" Flange Bolt

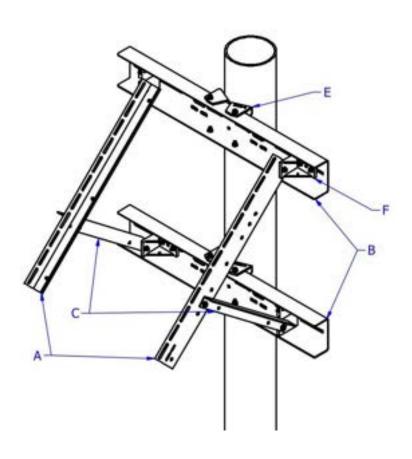


K) 1/4" Flange Bolt



# 30.5" Module Rail SOP Mount Specifications

Part #	Rail Length (inches)	Max Module Qty. (Small Format)
240086	30.5	1

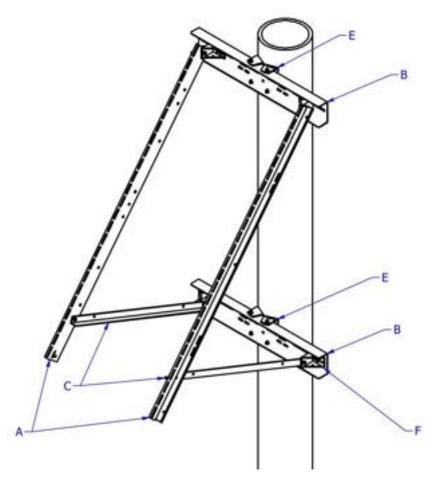


#### **Hardware Note:**

- Apply anti-seize to all hardware to prevent galling
- 1 ft-lb = 12 in-lb = 1.36 Nm
- Use 5/16" hardware → Mount assembly
- Use 1/4" hardware → Mounting module to rails
- Use 3/8" bolts → Tilt leg spring nuts

# **68.75" Module Rail SOP Mount Specifications**

Part #	Rail Length (inches)	Max Module Qty. (Small Format)
240089	68.75	3

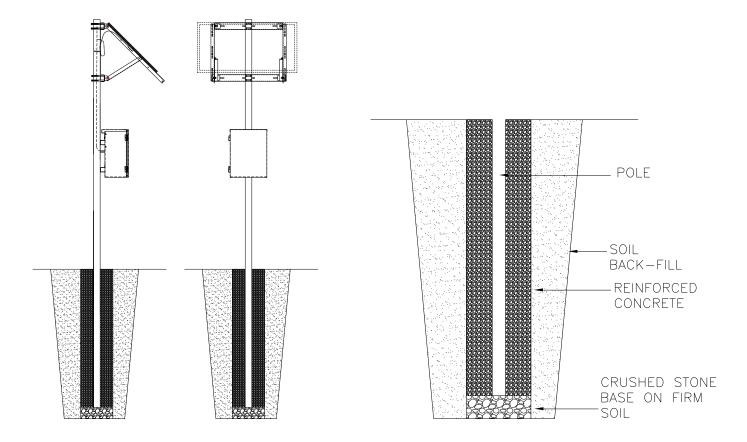


#### **Hardware Note:**

- Apply anti-seize to all hardware to prevent galling
- 1 ft-lb = 12 in-lb = 1.36 Nm
- Use 5/16" hardware → Mount assembly
- Use 1/4" hardware
- $\rightarrow$ Mounting module to rails
- Use 3/8" bolts
- Tilt leg spring nuts

## **Pole Mount Site Preparation**

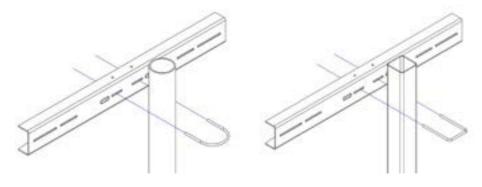
- The pole used to support the PV array must be designed per the local soil conditions to meet the following minimum requirements:
  - Array area based at tilted angle
  - o Typical sustained wind speed per the recommended local building code.
- The pole is to be seated against a firm crushed stone base, on firm compacted soil a minimum of 6" below the frost line encased in reinforced concrete per ASTM standards.
- The pole is to be level and plumb.
- Pole diameter and wall thickness sized to withstand array forces without damage.
- Ensure mount and module point due south in northern hemisphere, or due north in southern hemisphere.



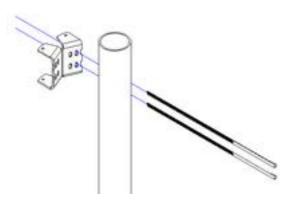
#### **Mount Installation**

 Fasten the upper Easy Mount Solar Bracket to the pole at the desired maximum height of the mount using two 1/2" stainless steel band clamps (provided). For high wind loads U-bolts (not provided) are required. DO NOT use the easy mount bracket when using U-bolts. The saddle or Easy Mount Solar Bracket can optionally be lag-bolted or through-bolted to the pole.

### U-Bolt Mounting (recommended):

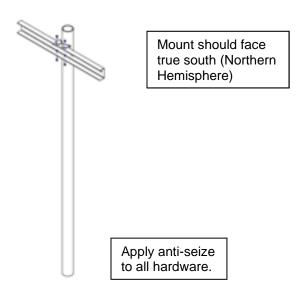


#### **Band Clamp Mounting:**

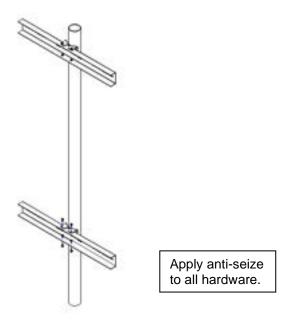


2. Fasten the saddle bracket to the Easy Mount Solar Bracket using the provided 5/16" hardware.

Tighten using a 1/2" wrench to 10-12 ft-lb torque.

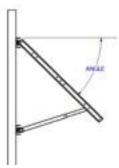


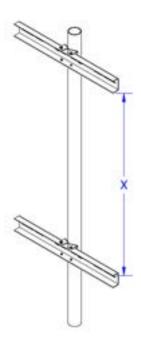
- 3. When using band clamps, tighten to 4-5 ft-lb torque. Wiggle saddle bracket to remove slack in band clamps and retighten. Repeat until clamps are snug.
- 4. Attach lower *Easy Mount Solar Bracket* and saddle bracket using same method in steps one and two. **Do not fully tighten** *Easy Mount Solar Bracket*.



Tighten saddle bracket using a 1/2" wrench to 10-12 ft-lb torque.

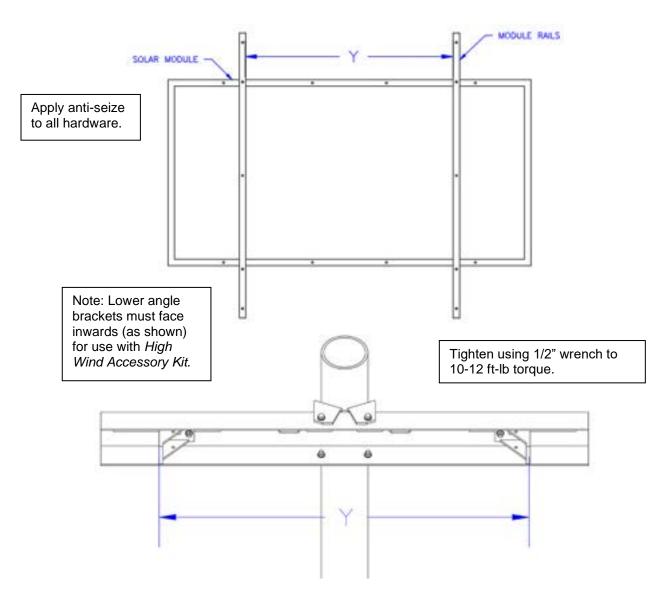
5. Adjust the lower *Easy Mount Solar Bracket* and saddle bracket to the approximate distance from the upper saddle bracket and fully tighten U-bolts or band clamps. Use the below chart for rough spacing between the two saddles.





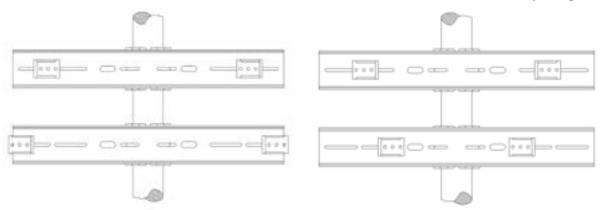
6. Lay rails on module holes (but do NOT attach) to determine upper angle bracket spacing. Measure between the inside of the module rails. Attach angle brackets so that the module rails can be mounted with the correct spacing.

Mount Angles from Horizontal vs Saddle Spacing (X)			
Degrees	30.5in Rail	68.75in Rail	
30	12.5 (using fourth hole)	36in (using fifth hole)	
45	20in (using fourth hole)	48in (using fourth hole)	
60	30.2in (using the first hole)	71in (using second hole)	

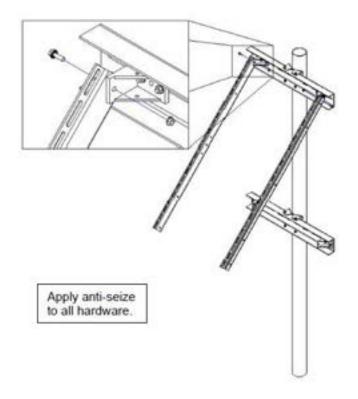


## **Foot Orientation for Maximum Spacing**

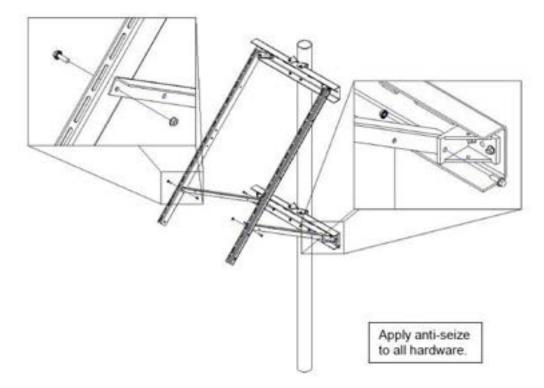
## **Foot Orientation for Minimum Spacing**



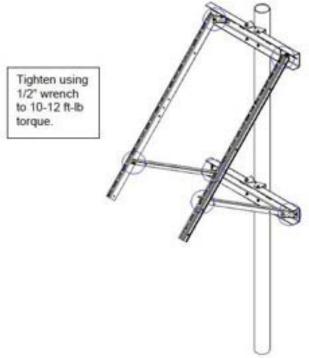
7. Attach panel rails to upper saddle L-brackets using 5/16" hardware provided.



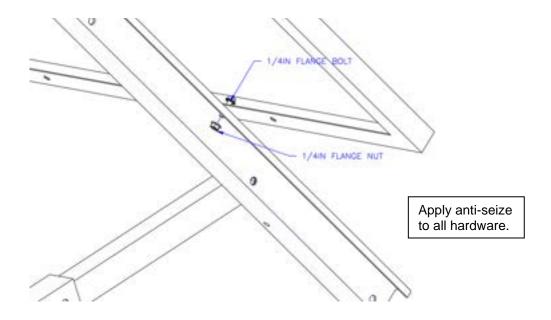
8. Attach legs to lower saddle angle brackets.



9. Tighten all remaining bolted connections circled below.



- 10. Check alignment of all assembled parts and ensure all bolted connections are tight.
- 11. Mount the solar modules to the rails using the 1/4" hardware provided.



12. **(OPTIONAL)** If using the *Cable Bracing Accessory Kit*, attach one bracket to the lower tilt leg and run the cable to the opposite corner of the saddle bracket. Tighten and lock the cable in place. Repeat with other bracket and cable on opposite side. Reference manual 310187 for details.

