



Installation Manual  
Universal Single-Arm Side-of-Pole Mount  
UNI-SA/14.0



Solar Mounting Solutions

## Introduction

The Universal Single-Arm Side-of-Pole Mount UNI-SA/14.0 is a simple and straightforward pole mounting solution for small area solar photovoltaic (PV) needs. With its user settable angle adjustment, it can support installations in a wide range of locations.

In addition, the UNI-SA/14.0 supports:

- ◆ PV panels with an inside extrusion dimension of between 5.0 inches to 12.6 inches.
- ◆ Pole diameters from 2.0 inches to 4.5 inches.

## 1. Installer Responsibility

The installer is solely responsible for:

- ◆ Complying with all applicable local or national building codes, including any that may supersede this manual
- ◆ Ensuring that IronRidge and other products are appropriate for the particular installation and the installation environment
- ◆ Ensuring that the selected pole mount can support the array under live load conditions
- ◆ Using only IronRidge parts and installer-supplied parts as specified by IronRidge. Substitution parts may void the warranty
- ◆ Ensuring safe installation of all electrical aspects of the PV array.

## 2. Customer Support

IronRidge makes every effort to ensure your mounting kit is easy to install. If you need assistance at any point with your installation or have suggestions on how we can improve your experience, call IronRidge customer support: (800) 227 9523

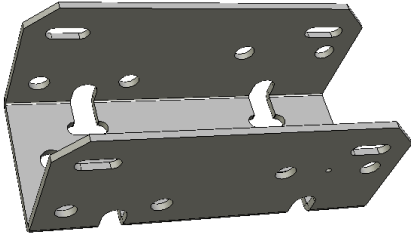
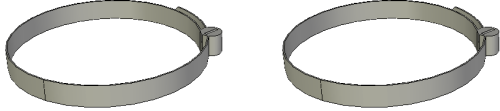
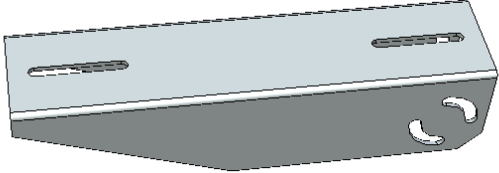
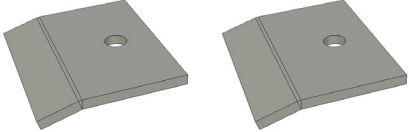
## 3. Tools Required For Assembly

The following tools are required to assemble the Universal Single-Arm Side-of-Pole Mount.

Tool	Use for
<p><b>Wrenches</b></p> <p>Open-end wrench, Box-end wrench, or 3/8" or greater socket drive with sockets to support the following size hex heads:</p> <ul style="list-style-type: none"> <li>◆ 5/16"</li> <li>◆ 7/16"</li> <li>◆ 1/2"</li> </ul>	<ul style="list-style-type: none"> <li>◆ 5/16-18 cap-end screws</li> <li>◆ 5/16-18 bolts</li> <li>◆ 1/4-20 cap-end screws</li> <li>◆ 1/4-20 bolts</li> <li>◆ Cap-end screws on hose clamps</li> </ul>
<p><b>Screwdriver</b></p> <p>Slotted, 1/4"</p>	<ul style="list-style-type: none"> <li>◆ Cap-end screws on hose clamps</li> </ul>

## 4. Component List

The Universal Single-Arm Side-of-Pole Mount kit contains the following parts:

<p><b>Bracket (51-3517-020)</b></p> <p>Attaches to the pole with the hose clamps, providing the link between the pole and the module/arm assembly</p> 	<p><b>Hose Clamps (27-5000-010) x2</b></p> <p>Attach to the pole and hold the Bracket. These hose clamps are compatible with poles ranging from 2.0 inches to 4.5 inches</p> 
<p><b>Arm (51-0627-001)</b></p> <p>Attaches to the bracket, supporting the PV Module.</p> 	<p><b>PV Module Clamps (50-8001-051) x2</b></p> <p>Attach the PV Module to the Arm by clamping to the module's extrusion</p> 

Part	Qty	Part Number
PV Module Clamp Hardware Kit	1	29-5003-005
1/4-20 x 3/4" SS hex-cap bolt	2	23-2520-050
1/4 flat washer, SS	4	25-2502-000
1/4 split lock washer, SS	2	24-2501-000
1/4 hex nut, SS	2	24-2520-440
Arm to Bracket Fastening Kit	1	29-5005-000
5/16-18 x 3/4" SS hex-cap bolt	4	23-3118-021
5/16 flat washer, SS	8	25-3102-000
5/16 split lock washer, SS	4	25-3101-000
5/16 hex nut, SS	4	25-3118-440

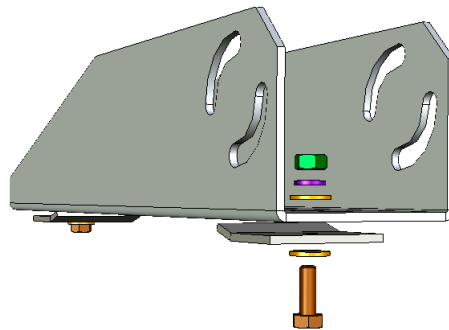
## 5. Assembly

### Step 1 - mounting the arm to the PV module

Parts Required	Qty	Part Number
PV Module	1	User-supplied
Arm	1	51-0627-001
PV Module Clamps	2	50-8001-051
1/4-20 x 3/4" SS hex-cap bolt	2	23-2520-050
1/4 flat washer, SS	4	25-2502-000
1/4 split lock washer, SS	2	24-2501-000
1/4 hex nut, SS	2	24-2520-440

1. With the arm oriented as shown, insert a 1/4" bolt, washer and PV module clamp through one of the slots.

Place a washer, lock washer and hex nut on the end of the bolt, and tighten loosely.



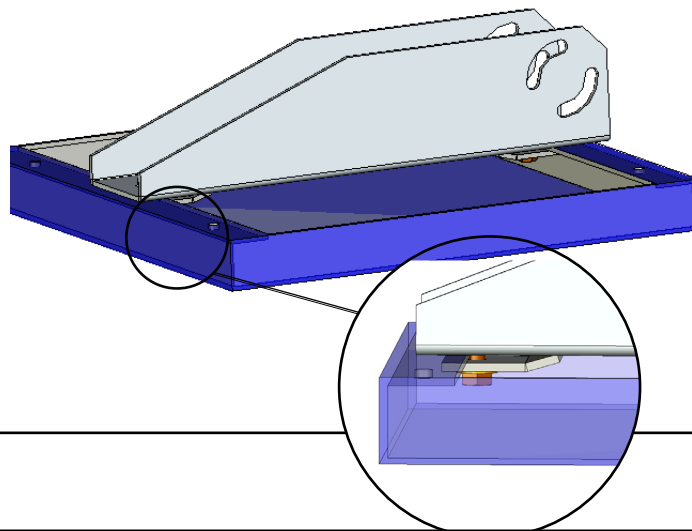
2. Repeat step 1 attaching the remaining clamp to the other slot on the arm.

3. Lay the PV Module face-down on a protected flat surface.

Center the arm on the back of the panel as shown and position the clamps under the edges of the module's flange.



Make sure that the clamp bolts are resting against the module's flange before tightening.



4. Tighten the clamp bolts to 7 ft-lbs.

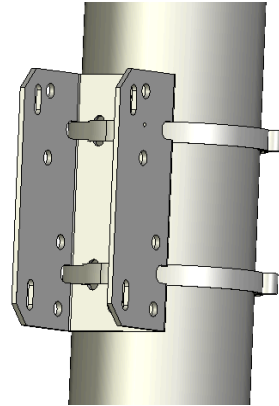
## Step 2 - attaching the bracket to the pole


Parts Required	Qty	Part Number
Hose Clamp	2	27-5000-010
Bracket	1	51-3517-200

5. Thread each hose clamp through one of the sets of narrow center holes in the bracket as shown.

When placing the bracket on the pole, ensure that:

- ◆ The flat side of the bracket is against the pole, and
- ◆ The end of the bracket with the arm mounting holes nearest to the edge is up.



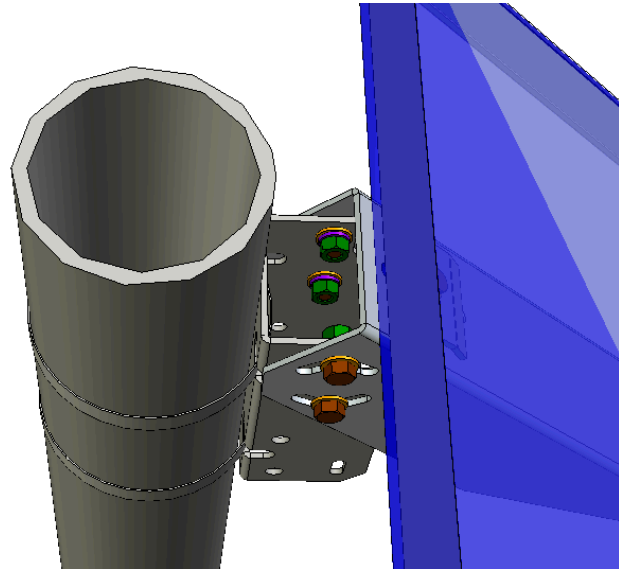
 This hose clamp is only compatible with poles ranging from 2.0 inches to 4.5 inches.

6. Tighten the hose clamp screws to 35 inch-lbs.

### Step 3 - attaching the panel/arm assembly to the bracket

Parts Required	Qty	Part Number
5/16-18 x 3/4" SS hex-cap bolt	4	23-3118-021
5/16 flat washer, SS	4	25-3102-000
5/16 split lock washer, SS	4	25-3101-000
5/16 hex nut, SS	4	25-3118-440

1. Place the panel/arm assembly on the bracket as shown.



2. Insert the bolt and flat washer from the inside out. Place a flat washer, lock washer, and hex nut on the outside. This orientation allows you to tighten the bolt with just one wrench.
3. Adjust the tilt of the panel as desired, and tighten the bolts to 8.3 ft-lbs.

## IronRidge 20-Year Warranty

IronRidge warrants each Mounting Structure to be free from defects in materials and workmanship for twenty years from the date of first purchase when installed properly and used for the purpose for which it is designed. The warranty covers the replacement cost of parts to repair the product to proper working condition. Transportation and incidental costs associated with warranty items are not reimbursable. The warranty does not cover normal wear, or damage resulting from misuse, abuse, improper installation, negligence, or accident. Furthermore, it does not cover units that have been altered, modified or repaired without written authorization from the manufacturer or its authorized representative, or units used in a manner or for a purpose other than that specified by the manufacturer.