UMS-D pole mounting bracket installation manual

Chapter 1 Product Introduction

This solar mounting enables the solar panels to be hung on top of the cylindrical columns.It's a mart and simple PV mounting solution for residential projects.The main material of this mounting structure is aluminum alloy AL6005-T5 and stainless steel SUS304. The product has strong corrosion resistance.This mounting kit has high pre-assembled characteristics and saves installation time and cost greatly.

Please kindly read the whole manual carefully before installation.



Chapter 2 Product Introduction

No.	Product Name	Picture	Qty	Remark
1	Rail L=600mm		2pcs	（ The detailed configuration of a complete set of components）
2	Aluminum Angle 42x28 L=1200/600mm		2set	
3	U Screw bolt		2set	
4	Exchange End Clamp 30mm and 35mm		4set	
5	L Feet connector		4set	

Chapter 3 Installation tools

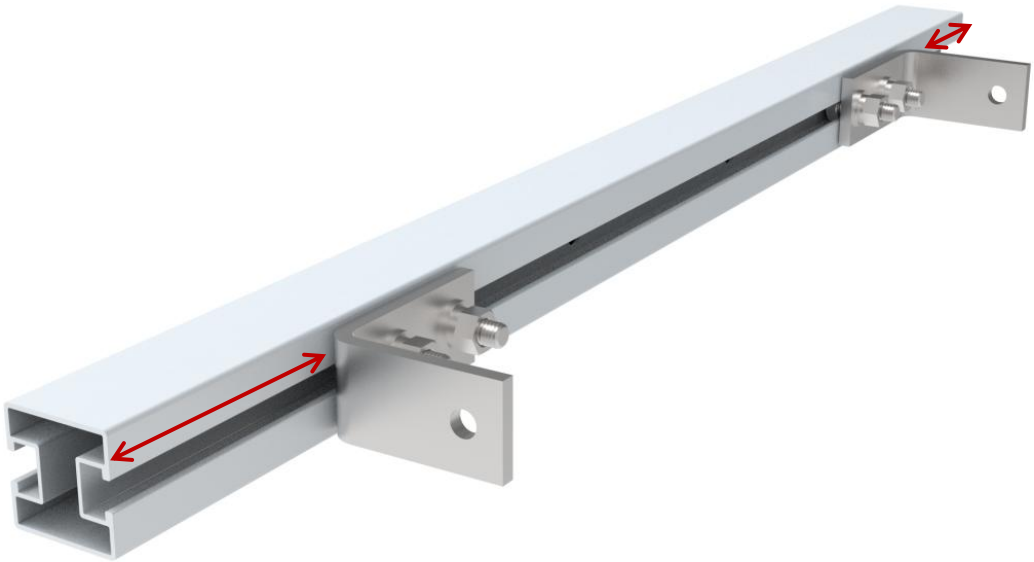
In order to further enhance the installation efficiency, please make sure to prepare the following tools before the construction and installation process.

			
String	Electric tool	Hexagon sleeve	Screwdriver
			
Marking Pen	Monkey wrench	Tape measure	Angle ruler

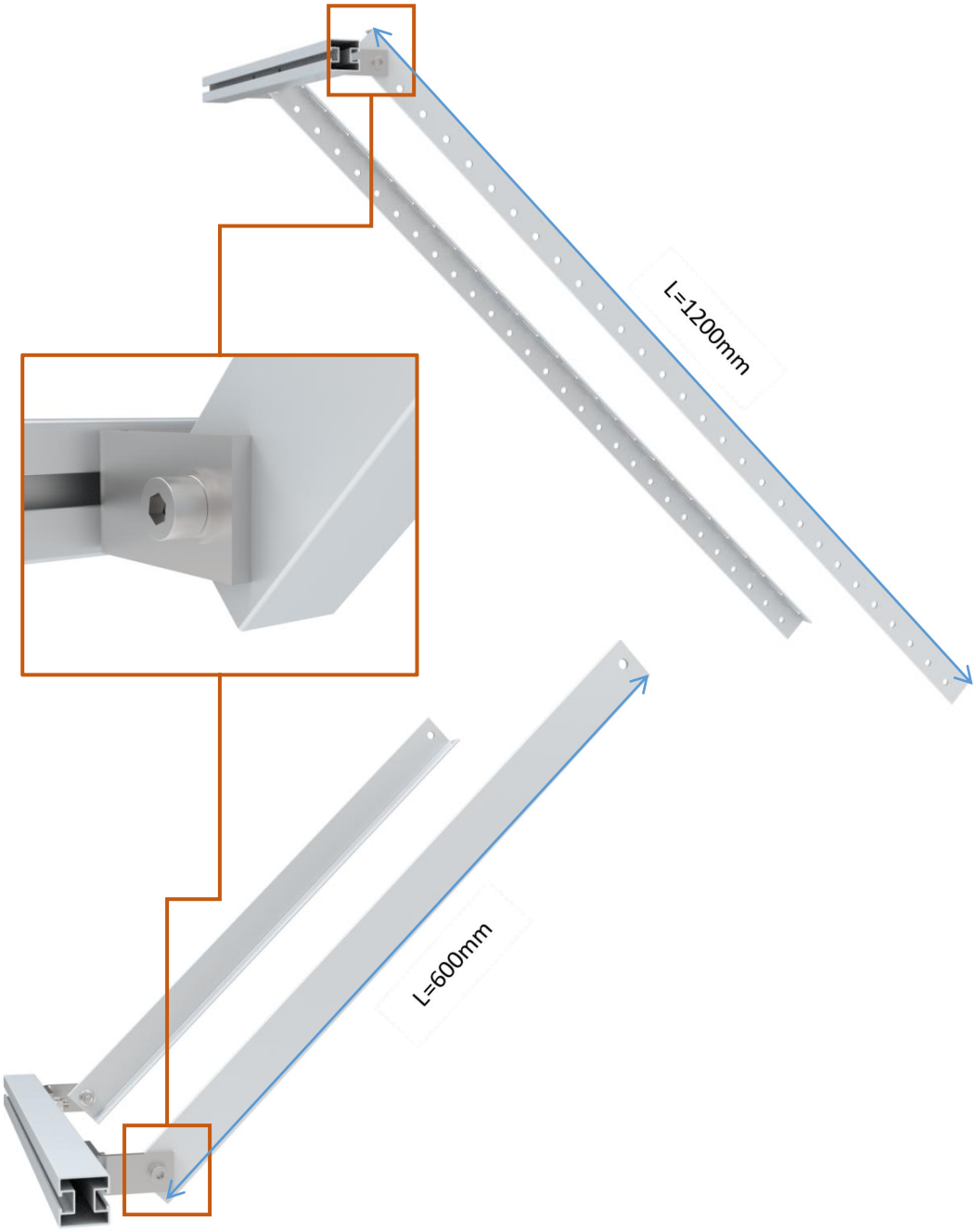
Chapter 4 Installation Steps

4.1 Take the Rail and L feet connector. The hexagonal bolt M8x25 on the connector passes through the cross-section of the rail and is positioned with lines drawn to mark the distance (70mm) from the head to the cross-section of the guide rail. Ensure that the distances on both sides to the cross-section are consistent. After positioning, lock it in place.

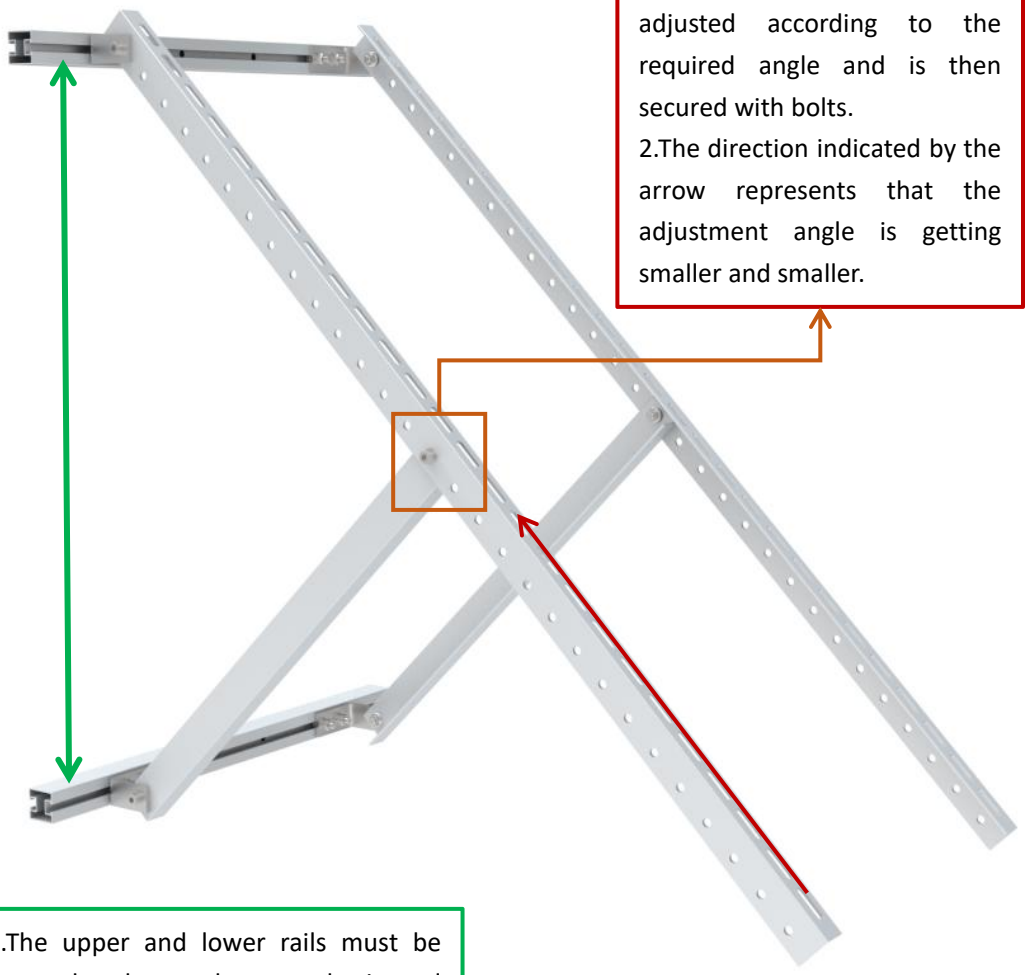
Note: The parameters are set according to the current component specifications (1200x880x35mm)



4.2 Take the Aluminum Angle 42x28 and the internal hexagon bolts M8x20. Use the internal hexagon bolts M8x20 to pre-lock the locked rail and the aluminum angle.



4.3 Pre-lock with an M8x20 hex socket bolt, then adjust the angle with an angle gauge and secure the bolt and nut. During the locking process, the rail must remain on the same horizontal plane.



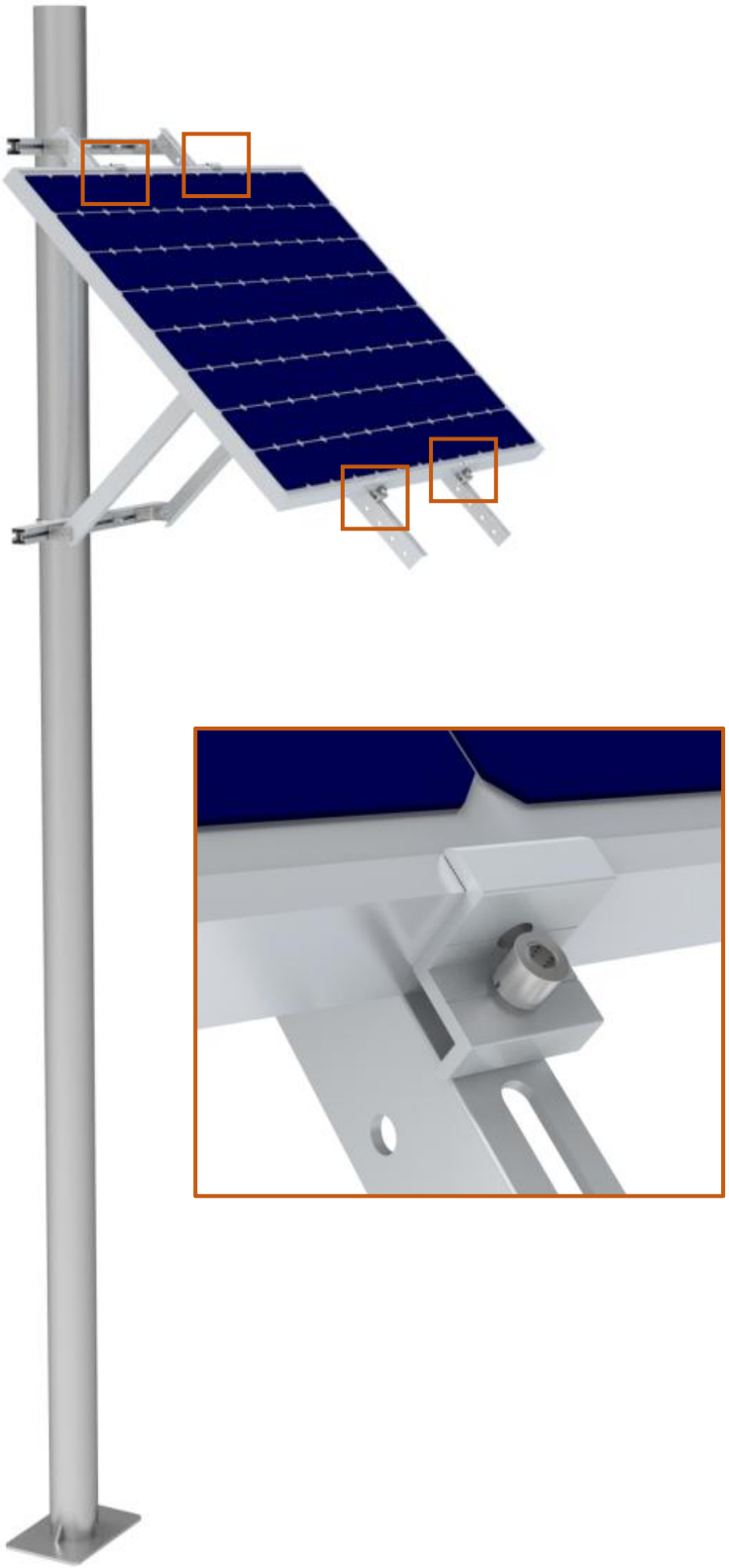
1.The aluminum angle is adjusted according to the required angle and is then secured with bolts.
2.The direction indicated by the arrow represents that the adjustment angle is getting smaller and smaller.

1.The upper and lower rails must be ensured to be on the same horizontal plane.)(As indicated by the green arrow
2.The distance indicated by the green arrow can be adjusted up or down depending on the angle.

4.4 Insert the U Screw bolt into the cylindrical tube of the column. Confirm the height from the ground. Then, align the assembled (steps 4.1-4.3) components with the U Screw bolt. The U Screw bolt should pass through the hole in the rail and be secured with a nut.



4.5 Place the component on the aluminum angle. After confirming that both sides are symmetrical, use the Exchange End Clamp to lock it in place. Once the M8x30 internal hexagon bolts and nuts are all tightened, the installation is complete.



Chapter 5 Installation Notes

5.1 Safety Precautions

(1) The structure may cause harm to the body;

(2) The accessories of the structure may cause harm to the body;

(3) Pay attention to your head and eyes;

(4) In the working area, take careful of your action.

5.2 Stainless Steel Fasteners Notes

Because of its good ductility, stainless steel is essentially different from carbon steel; improper use will result in bolts and nuts can't be turned off.Prevention of this situation is mainly in the following aspects:

(1) Reduction of friction coefficient:

- Make sure the thread surface is clean, no ash, dirt, etc.

- It is recommended to use wax or lubricant, such as butter and 40# oil, on the surface of bolts when installing.

(2) Correct operation:

- When screwing, it must be perpendicular to the axis of the thread.Do not tilt.- In the tightening process, the force must be uniform, and the tightening torque should not exceed the specified safety torque value.

- Use torque wrench or socket wrench as far as possible, avoid using movable wrench or electric wrench. If you need to use electric wrench, you should try to reduce the speed.

- Avoid high-temperature use, do not use fast rotation, avoid rapid temperature rise and lead to lock.

5.3 Notes after Finishing Work

(1) After the work is completed, the small parts left on the site, such as bolts, conductive sheets, etc., should be retrieved to avoid the missing of small parts in the final installation.

(2) When the weather is bad or need to stop work for a long time, please tidy up the parts to prevent soil fouling or loss.