# Balcony Solar Brackets Install Manual



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## -. Introduction of Product

1. The balcony solar bracket has a unique installation method. The adjustable triangle can meet various angle adjustments. The specific assembly bracket not only ensures the overall stability of the system, but also improves the convenience of installation. High-quality design components and a small number of accessories makes it an efficient solution for small projects.

Before installation, please read the entire manual carefully!

#### 2. The parts are as follows:

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Inner Tube	Outer Tube	Adjustable End Clamp	Hook	Inclined Beam	Bottom Beam	Rail

#### 3.Shipping pre-assembled:

	Main Beam		
	Combination		
Adjustable Inner and	(Inclined Beam +	Steel	
Outer Tube	Bottom Beam +	Combination	
Combination	Z-Shaped	Combination	
	Anti-Drop		
	Fastener)		

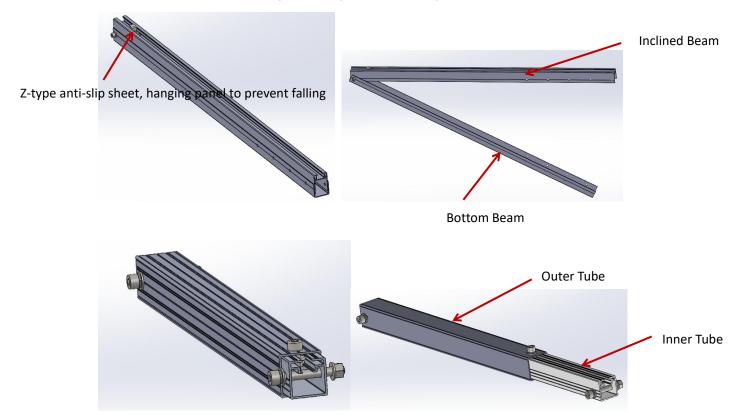
## $\square$ . Install Tools and Devices

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6mm Allen Wrench	Electrical Tools	Tape Measure	Fine Marker Pen
		-	
Torque Wrench	String	Adjustable Wrench	Socket Wrench (M10/M8)

## $\equiv$ . Install Explanations

### **1**、Installation of Triangle Tripod

1) According to the drawing, assemble the Pre-Assembled Main Beam and the Adjustable Inner and Outer Tubes according to the angle of the drawing.

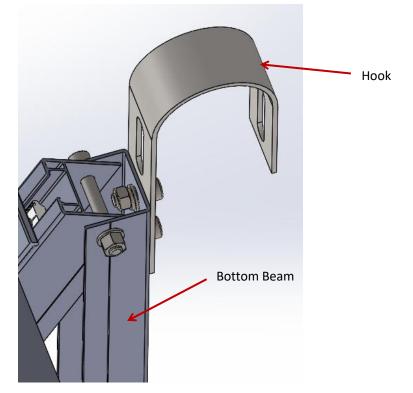


After the Tripod is installed, the diagram is as follows:



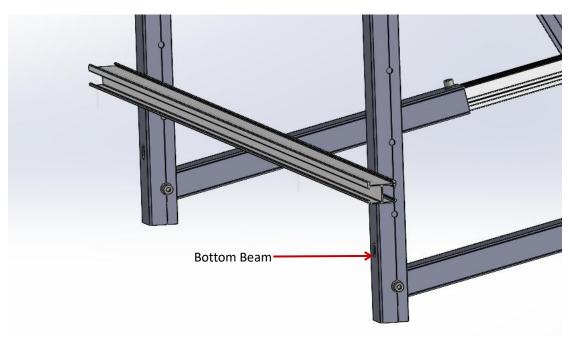
### 2 Installation of Hook and Rail

1) Use 2 sets of M8X20 bolts to fix the hook and the Bottom Beam.



2) Use M8X25 bolts + T-shaped clamps to fix the cross bar and Bottom Beam.

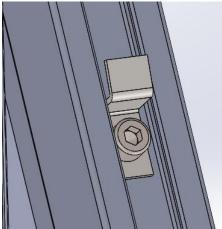






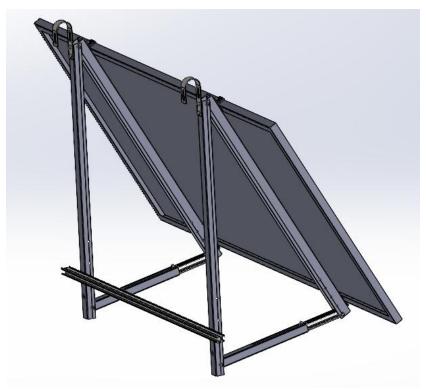
## 3 Installation of Panel

1 ) First hang the panel on the Z-shaped Anti-Drop Fastener, and then fix the panel with 4 sets of Adjustable End Clamps.

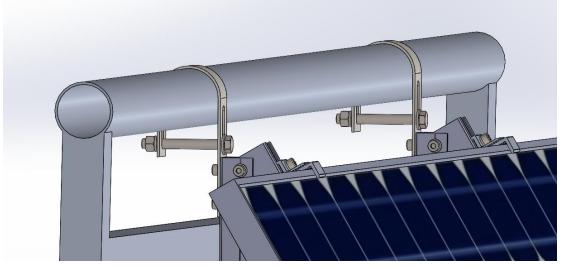


### 4、 Installed on the balcony

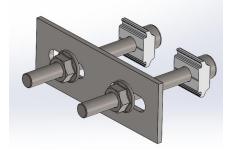
1) Hang the assembled bracket on the balcony railing.



2) Use M12\*100 Bolts to Fix the Hooks.



3) Use the Steel Sheets to fix the Rail 20: Slide the nut into the groove of Rail 20, and then lock with Flange Nut.

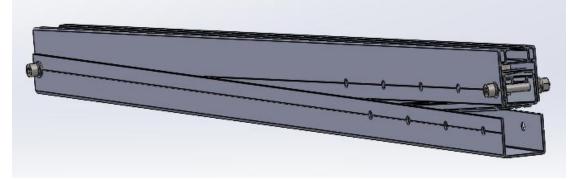




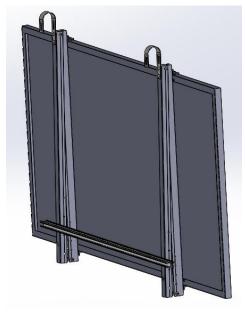
4) Finish the Installation.

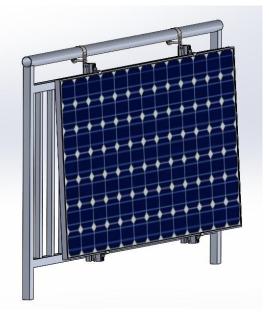


When space is limited (use the tripod not to open to reduce the size of the footprint)
1. When installing the tripod in the first step, the bolts of the Adjustable Outer Tube and the Bottom Beam may not be locked, as shown below:
(put it at the end and then lock it)



2. The other steps are the same. Lock up the Bracket on balcony. As shown below:





3. After fixing the bracket to the guardrail of Balcony, then adjust the angle and lock the bolts of the Outer Tube and the Bottom Beam.



## 四. Installation Precautions

### 4.1. Notes on engineering installation dimensions

The specific dimensions involved in the engineering installation shall be subject to the engineering construction drawing. These installation instructions are for the purpose of illustrating how to install the product only.

### 4.2. Precautions when installing stainless steel fasteners

Due to the good ductility of stainless steel, it is essentially different from carbon steel; improper use will cause the bolt and nut to be unable to unscrew after they are mated. That is, "locked up" is commonly known as "bited to death". Prevention of deadlock mainly includes the following aspects:

4.2.1. Reduced coefficient of friction:

(1) Ensure that the thread surface is clean (such as no lime sand, debris);

(2)It is recommended to apply water wax or add lubricant (such as butter, 40# engine oil) to the surface during installation;

4.2.2. Correct method of operation:

(1) It must be screwed perpendicular to the axis of the thread, never tilted;

(2) During the tightening process, the applied force must be uniform, and the tightening torque cannot exceed the specified safe torque value;

(3) Use a torque wrench or socket wrench as much as possible, avoid using an adjustable wrench or an electric wrench; use an electric wrench and try to lower the speed as much as possible.

(4) Avoid using at high temperature, do not rotate quickly when using, to avoid locking caused by rapid temperature rise; (such as using an electric wrench, etc.)