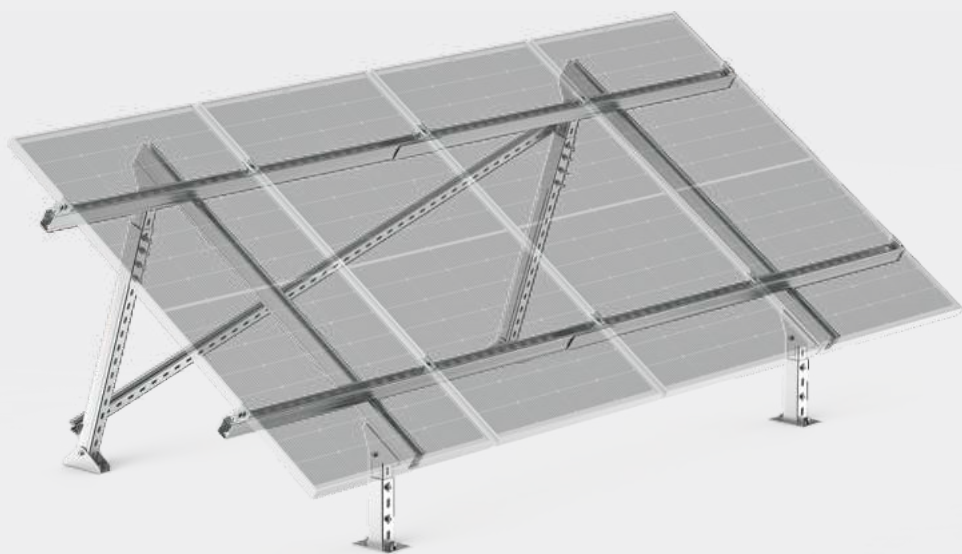




Solar Panel Mounting Bracket

User Manual



MODEL: RS-GM01/RS-GM02/RS-GM03

THIS MANUAL CONTAINS IMPORTANT SAFETY AND OPERATING INSTRUCTIONS FOR SOLAR PANEL MOUNTING BRACKET. PLEASE READ THIS MANUAL AND FOLLOW THE INSTRUCTIONS EXACTLY.

02	PRODUCT OVERVIEW
02	SAFETY & PREPARATION
03	COMPONENTS LIST
09	INSTALLATION STEPS
12	TECHNICAL SPECIFICATIONS

PRODUCT OVERVIEW

RICH SOLAR's mounting brackets are engineered for optimal performance and durability in off-grid solar installations. With an adjustable tilt and heavy-duty steel frame, these brackets provide a stable and efficient foundation for your solar panel system—whether installed on flat roofs, garages, sheds, or directly on the ground.

FEATURES

- Adjustable Tilt Angle (18°–45°) for optimal solar exposure.
- Wide Compatibility: Compatible with RICH SOLAR Mega Series 100W to 410W.
- Quick Installation: Pre-drilled holes and included hardware.
- Durable Construction: High-strength steel, withstands winds up to 60 m/s and snow loads up to 1.05 kN/m².

SAFETY & PREPARATION

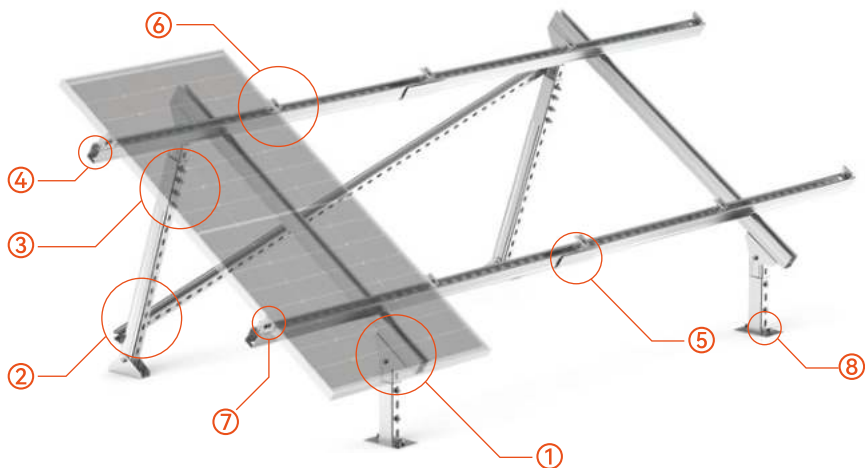
Tools Required:

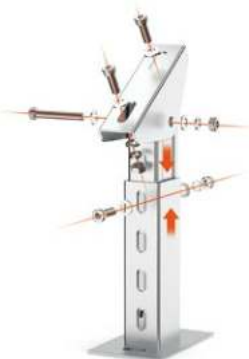
 ☐ Tape measure	 ☐ Chalk line	 ☐ Allen key
 ☐ Open-end spanner	 ☐ PPE (gloves, safety glasses)	

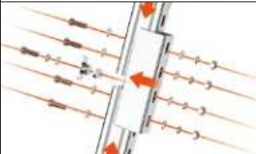
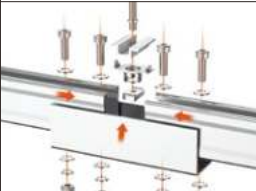
Safety Guidelines:

1. Comply with local building codes and standards.
2. Conduct a risk assessment before installation.
3. Use fall protection systems when working at heights.
4. Ensure first aid kits and emergency protocols are in place.
5. Provide safety training to all personnel.

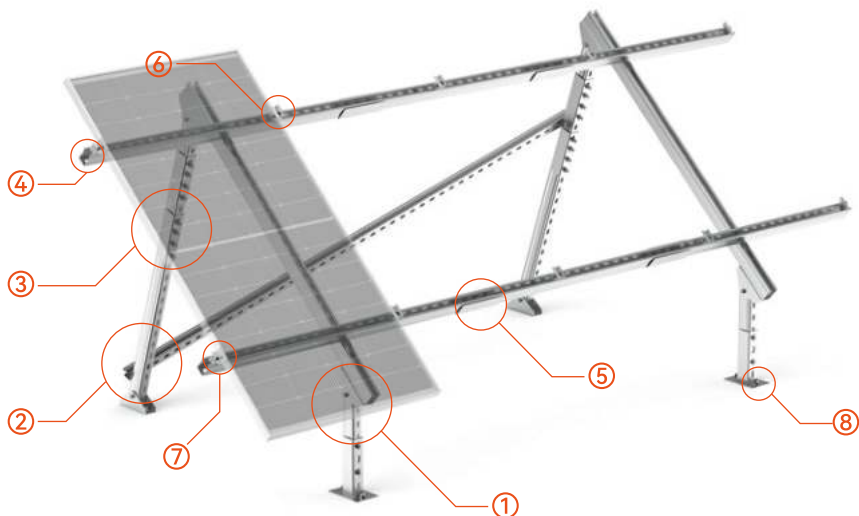
COMPONENTS LIST (RS-GM01)



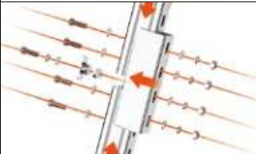
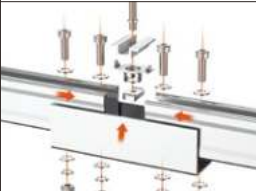
No	Picture	Part No.	Part name	Part qty Each pc	Part qty Each set
1		1.01	Beam 950mm	1	2
		1.02	Front leg 300mm	1	
		1.03	Rear Leg 250mm	1	
		1.04	Rear Leg 750mm	1	
		1.05	U62 rear leg splice kit	1	
		1.06	adapter	3	
		1.07	Base rear foot	1	
		1.08	Hex bolt M10*30*1	10	
		1.09	Flat washer M10*2	20	
		1.1	Spring washer M10*1	10	
		1.11	Hex nut M10*1	10	
		1.12	Hex bolt M10*70*1	3	
		1.13	Flat washer M10*2	6	
		1.14	Spring washer M10*1	3	
		1.15	Hex nut M10*1	3	

No	Picture	Part No.	Part name	Part qty Each pc	Part qty Each set
2		2.01	U41 Strengthen pile	1	1
		2.02	M10 Plastic steel nut	2	
		2.03	Flat washer M10*1	2	
		2.04	Spring washer M10*1	2	
		2.05	Hex nut M10*30*1	2	
3		3.01	Hex bolt M10*30*1	1	4
		3.02	Flat washer M10*1	1	
		3.03	Spring washer M10*1	1	
		3.04	M10 Plastic steel nut	1	
4		4.01	U62 Rail 1500mm	1	4
5		5.01	U62 rail splice kit	1	2
		5.02	Hex bolt M10*30*4	4	
		5.03	Spring washer M10*4	4	
		5.04	Flat washer M10*8	8	
		5.05	Hex nut M10*4	4	
6		6.01	U-mid clamp	1	6
		6.02	M8 nut	1	
		6.03	hex bolt M8*45*1	1	
		6.04	Spring washer M8	1	
		6.05	Ground clip	1	
7		7.01	U-end clamp	1	4
		7.02	hex bolt M8*35*1	1	
		7.03	M8 nut	1	
		7.04	Spring washer M8	1	
8		8.01	expand bolt M12*150mm	1	8

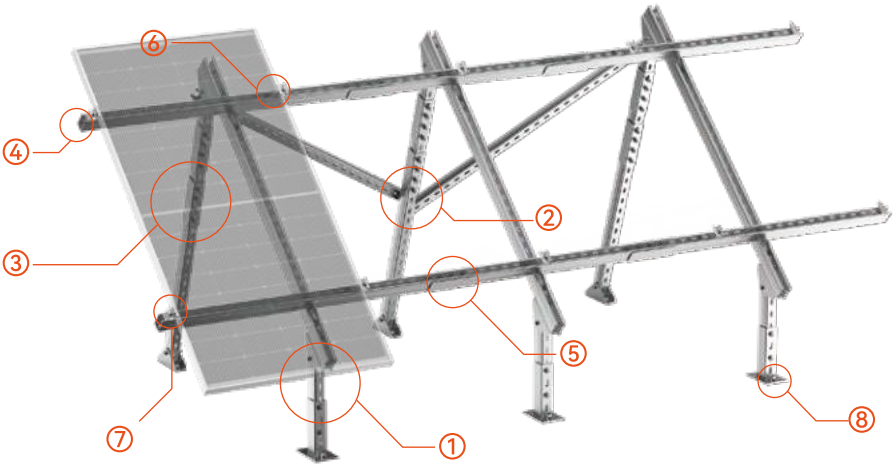
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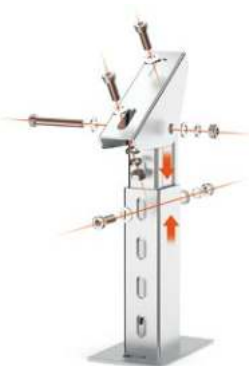


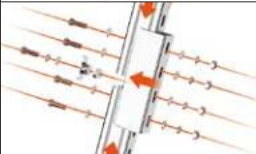
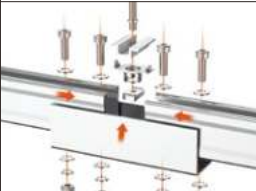
No	Picture	Part No.	Part name	Part qty Each pc	Part qty Each set
1		1.01	Beam 1400mm	1	2
		1.02	Front leg 300mm	1	
		1.03	Rear Leg 250mm	2	
		1.04	Rear Leg 750mm	1	
		1.05	U62 rear leg splice kit	2	
		1.06	adapter	3	
		1.07	Base rear foot	1	
		1.08	Hex bolt M10*30*1	14	
		1.09	Flat washer M10*2	28	
		1.1	Spring washer M10*1	14	
		1.11	Hex nut M10*1	14	
		1.12	Hex bolt M10*70*1	3	
		1.13	Flat washer M10*2	6	
		1.14	Spring washer M10*1	3	
		1.15	Hex nut M10*1	3	

No	Picture	Part No.	Part name	Part qty Each pc	Part qty Each set
2		2.01	U41 Strengthen pile	1	1
		2.02	M10 Plastic steel nut	2	
		2.03	Flat washer M10*1	2	
		2.04	Spring washer M10*1	2	
		2.05	Hex nut M10*30*1	2	
3		3.01	Hex bolt M10*30*1	1	4
		3.02	Flat washer M10*1	1	
		3.03	Spring washer M10*1	1	
		3.04	M10 Plastic steel nut	1	
4		4.01	U62 Rail 1100mm	1	6
5		5.01	U62 rail splice kit	1	4
		5.02	Hex bolt M10*30*4	4	
		5.03	Spring washer M10*4	4	
		5.04	Flat washer M10*8	8	
		5.05	Hex nut M10*4	4	
6		6.01	U-mid clamp	1	6
		6.02	M8 nut	1	
		6.03	hex bolt M8*45*1	1	
		6.04	Spring washer M8	1	
		6.05	Ground clip	1	
7		7.01	U-end clamp	1	4
		7.02	hex bolt M8*35*1	1	
		7.03	M8 nut	1	
		7.04	Spring washer M8	1	
8		8.01	expand bolt M12*150mm	1	8

COMPONENTS LIST (RS-GM03)



No	Picture	Part No.	Part name	Part qty Each pc	Part qty Each set
1		1.01	Beam 1600mm	1	3
		1.02	Front leg 300mm	1	
		1.03	Rear Leg 250mm	2	
		1.04	Rear Leg 750mm	1	
		1.05	U62 rear leg splice kit	2	
		1.06	adapter	3	
		1.07	Base rear foot	1	
		1.08	Hex bolt M10*30*1	14	
		1.09	Flat washer M10*2	28	
		1.1	Spring washer M10*1	14	
		1.11	Hex nut M10*1	14	
		1.12	Hex bolt M10*70*1	3	
		1.13	Flat washer M10*2	6	
		1.14	Spring washer M10*1	3	
		1.15	Hex nut M10*1	3	

No	Picture	Part No.	Part name	Part qty Each pc	Part qty Each set
2		2.01	U41 Strengthen pile	1	2
		2.02	M10 Plastic steel nut	2	
		2.03	Flat washer M10*1	2	
		2.04	Spring washer M10*1	2	
		2.05	Hex nut M10*30*1	2	
3		3.01	Hex bolt M10*30*1	1	6
		3.02	Flat washer M10*1	1	
		3.03	Spring washer M10*1	1	
		3.04	M10 Plastic steel nut	1	
4		4.01	U62 Rail 1600mm	1	6
5		5.01	U62 rail splice kit	1	4
		5.02	Hex bolt M10*30*4	4	
		5.03	Spring washer M10*4	4	
		5.04	Flat washer M10*8	8	
		5.05	Hex nut M10*4	4	
6		6.01	U-mid clamp	1	6
		6.02	M8 nut	1	
		6.03	hex bolt M8*45*1	1	
		6.04	Spring washer M8	1	
		6.05	Ground clip	1	
7		7.01	U-end clamp	1	4
		7.02	hex bolt M8*35*1	1	
		7.03	M8 nut	1	
		7.04	Spring washer M8	1	
8		8.01	expand bolt M12*150mm	1	12

INSTALLATION STEPS

Step 1: Site Preparation

Mark leg positions based on panel dimensions and layout.
Pour concrete footings (if applicable) as per technical drawings.

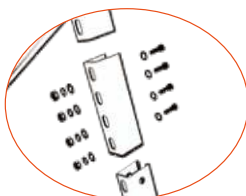
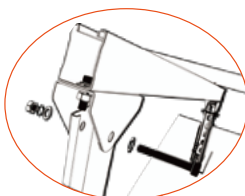


1.1

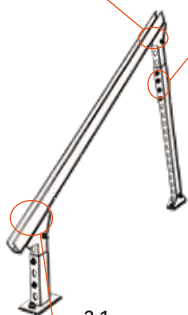


1.2

Step 2: Assemble Legs & Beams



Connect front/rear legs to braces using M10×70 bolts (2 washers + spring washer + nut).



2.1



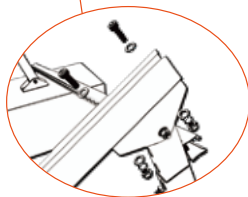
2.2

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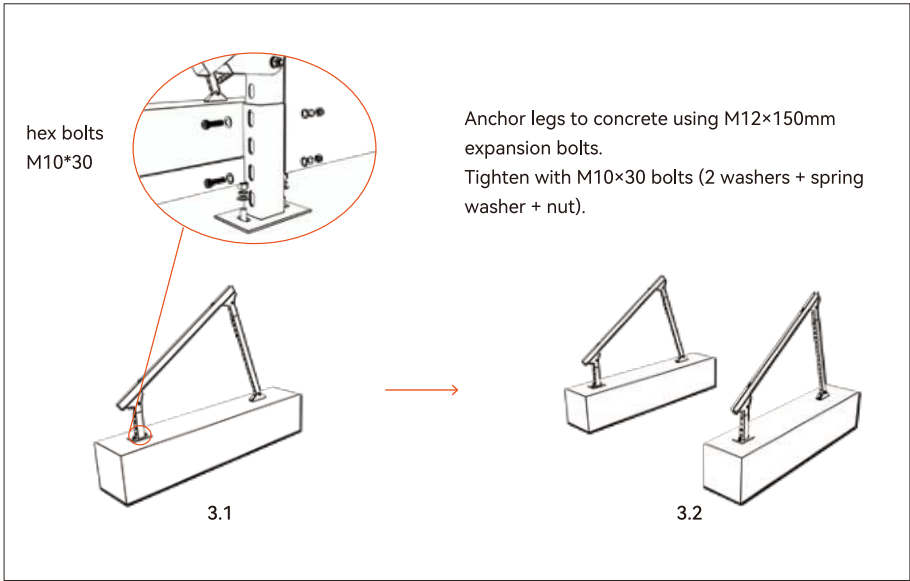


Attach beams to legs with M10×70 bolts. Ensure tilt angle is 18°–45°.

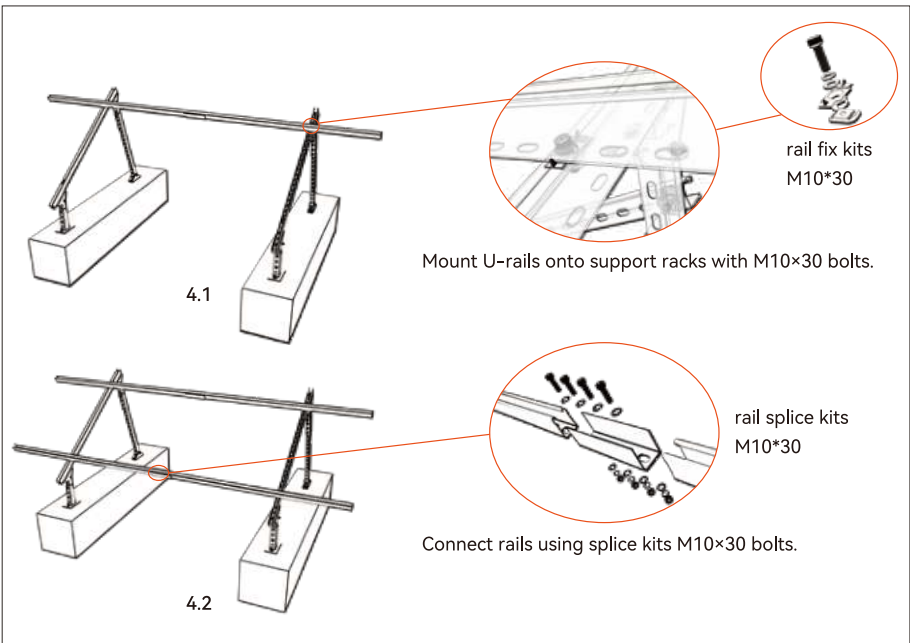
hex bolts
M10×70



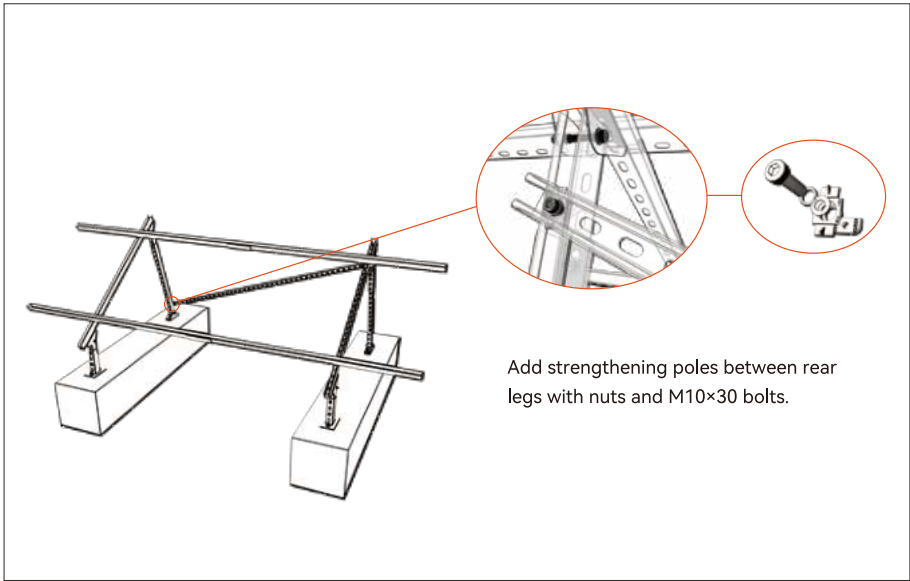
Step 3: Secure Base to Ground



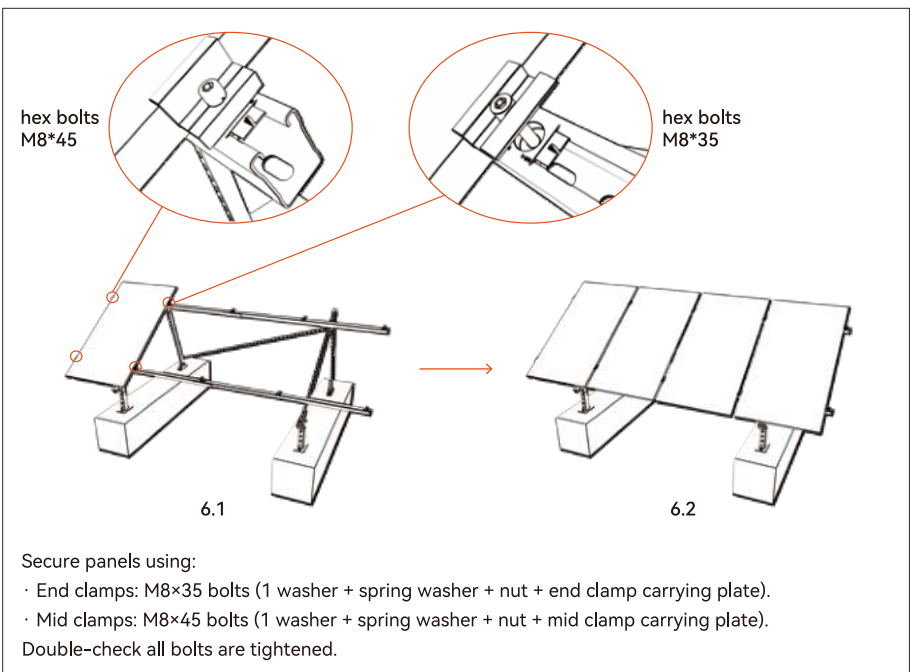
Step 4: Install Rails



Step 5: Reinforce Structure



Step 6: Mount Solar Panels



TECHNICAL SPECIFICATIONS

Model	Dimensions (L×W)	Compatible Panel Series
RS-GM01	3000×950 mm (9.84×3.12 ft)	Mega 100 / 100 SLIM / 150
RS-GM02	3300×1400 mm (10.83×4.59 ft)	Mega 200 / 220 / 250
RS-GM03	4800×1600 mm (15.75×5.25 ft)	Mega 335 / 410
Material: High-strength Steel		
Tilt Range: 18°–45°		
Maximum Wind Resistance: 60 m/s		
Maximum Snow Load: 1.05 kN/m2		

NOTES

For custom leg spacing, consult RICH SOLAR engineers with: Panel dimensions, site wind/snow loads, and tilt angle. Retain this manual for future maintenance.

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