

Your trustworthy brand for smart solar mounting system



 GRACE SOLAR

## INFLUENTIAL PV MOUNTING SYSTEM BRAND

Your trustworthy brand for smart solar mounting system

Intelligent Tracker | Ground Mounting | Roof Mounting

2024/01/01

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Xiamen Grace Solar New Energy Technology Co., Ltd.





BORN FROM RENEWABLE ENERGY  
DRIVES SOLAR FORWARD

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## COMPANY PROFILE

Industry's  
Upper echelon

### About Grace

- BYMEA Group Registered Capital: 500Million
- Staff Number: 650
- Factory Area: 110000m<sup>2</sup>
- Experiment Center : 2000m<sup>2</sup>

Xiamen Grace Solar New Energy Technology Co., Ltd., as a trustworthy brand for smart solar mounting system, after more than 10 years of rapid development, we currently ranks among the top 5 in global market share and the top 1 in Japanese market share. GS's global cumulative installed capacity is 33GW, with an annual production capacity of 10GW. Hundreds of MW projects have been successfully installed in more than 100 countries and regions including Japan, the United States, Australia, Europe, the Middle East, Africa and Southeast Asia. Integrating new technologies such as AI artificial intelligence, Internet of Things, energy storage, energy Internet, and intelligent manufacturing, we have successively launched GS-Light intelligent tracking system, GS-Smart ground mounting system, and GS-Energy roof mounting system, with more than 100 patents. It is one of the few Chinese brands that can provide complete installation solutions in the DSP and CSP markets.

Grace Solar has a team of highly sophisticated engineers who have been abroad, and has established a fully equipped key laboratory. Grace Solar products have passed certifications in many countries and regions around the world, including UL, TUV, CE, JIS, MCS, AS/NZS1170, Wind Tunnel Test Report, as well as bank ability report for our GS-light Tracker. Establish long-term and stable strategic partnerships with many Top 500 companies globally. Grace Solar adheres to the brand spirit of "Born from renewable energy, drives solar forward", based on the energy industry, and constantly exploring ahead, with the original intention of Chinese manufactured and global strategy. Bring Grace Solar to all homes!

#### • Enterprise Vision

Bring Grace Solar to all homes

#### • Enterprise Mission

Mount every solar plant firm as rock, bring more profits from the sun

#### • Enterprise Core Value

Do it right the first time

#### • Enterprise Roots

Most trustworthy products and service

Best stage for hard workers acheive glorious goal

Fastest payback and most stable growth brand for investors



**Xiamen Tongxiang Manufacturing Center**  
(Biggest PV Mount Manufacturing Center in Xiamen)



Headquarters  
5000 m<sup>2</sup>



Production Center  
62000 m<sup>2</sup>



Production Center II  
45000 m<sup>2</sup>



## Brand Honors

### • Brand Honors

Grace Solar was awarded the title of High-tech Enterprise, Specialising in ultra new SMEs, innovative SMEs, Executive Director Unit of APIA (Asian Photovoltaic Industry Association), Vice Chairman of ASTI, Director Unit of China Photovoltaic Industry Association, Fujian New Energy Technology Member of the Industry Promotion Association, influential photovoltaic bracket brand, outstanding photovoltaic bracket supplier and other domestic and foreign honorary titles, more than 10 awards every year.



### Certified Patents

100+ Patents

### Large Scale

Rich experience with 100mw+ large scale projects  
Excellent management ability for large projects

### UHV

Quick reaction to UHV Projects  
The Japanese market accounts for 80% of the local market prefectures

### China's First

The first in China! Photovoltaic carport Aluminum alloy profiles obtained JIS H 4100 certification

## Certification system

### • Certification system

Grace Solar PV Mounting System has passed a number of patents in the field of solar PV, ISO9001 quality management system, Wind Tunnel Test, SGS, UL, TÜV, MCS, AS/NZS1170, Japanese patents and other authoritative certification at home and abroad.

\*Note: The picture only shows part of the certificate. Please contact us for more certification information.



Wind Tunnel Test



JIS Certificate



TÜV Certificate



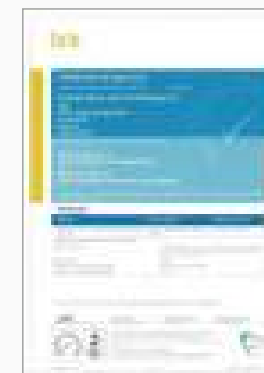
CE Certificate



ISO 9001:2015



Japan Certificate



MCS Certificate



AS/NZS 1170 Certificate

### Authoritative Certification

Certification by dozens of authoritative organizations at home and abroad

### Global Partners

Stable cooperation with dozens of global top 500 companies

### Total Installed Capacity

Cumulative installed capacity 33GW

### Strict Quality Control

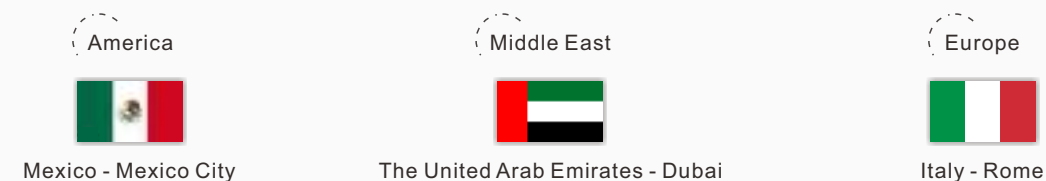
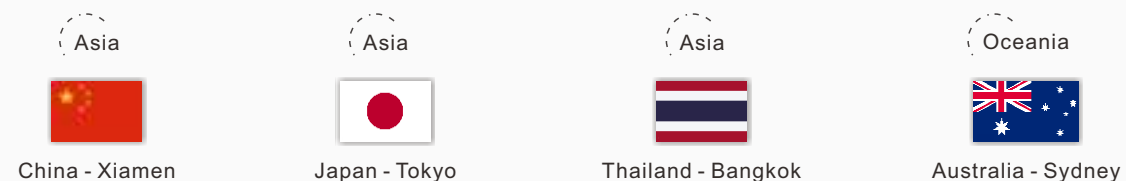
Large-scale factory, strict quality control

## INTERNATIONAL BRAND GLOBAL SERVICE



- 1**  
Largest Export Volume in Japan
- 5**  
Top 5 in Global Market Export Share
- 10**  
Production Capacity: 10GW/Year
- 33+**  
Cumulative installed capacity 33+GW
- 100+**  
Has served 100 + countries and regions around the world
- 4000+**  
Existing Cases 4000 +

### Branch



## R&D AND PRODUCTION

### R&D and Innovation

Grace Solar adheres to the principle that technology is the first productive force and increases investment in R&D and technology. the company's R&D center has more than 50 personnel, including 1 registered structural engineer, 2 doctors, 5 masters, 42 undergraduates and 46 personnel with medium and senior titles.

Grace Solar pays attention to the development and cooperation of industry university research integration, and maintains long-term cooperation and technical exchanges with Tongji University, Central South University, Xiamen University and other famous colleges. It uses a "professional" technical team and an "innovative" R&D model to jointly create a series of high-tech products with excellent performance and advanced technology, which are always in the forefront of the industry in terms of structural safety and system performance.

### Production Capacity

The manufacturing base is located in Tong'an, Xiamen, with an area of 110,000m², 15 independent R&D and design production lines, 50+ sets of equipment, and a production capacity of 10GW/year. It can deliver industry-leading quality products on time and respond quickly to customer needs.



### Automated Production Workshop



#### R&D Design

World-class PV Mounting System Solution Supplier  
The R&D team has more than 50 people  
Over 100 national patents



#### Manufacturing

Area of 110,000m²  
15 independent R&D and design production lines  
50+ sets of equipment  
Production capacity of 10GW/year



#### Quality management

International management concept strictly implement ISO9001, APQP quality control system, and obtain SGS, UL, CE, TUV, JIS, MCS, AS/NZS1170, Wind tunnel testing, bankability and other domestic and foreign authoritative certifications.



#### After-sales service

Service centers established on 5 continents  
7X24 hours service



## DEVELOPMENT HISTORY



# GS-LIGHT

## INTELLIGENT TRACKING SYSTEM

PV Mounting System Solution



600W+ Large module  
multipoint drive



2 intelligent core  
algorithms



Efficient and stable  
communication



Extreme weather  
protection strategy

**210MM, 600W+  
LARGE CAPACITY ULTRA  
HIGH POWER SOLUTION**



## GS-Light Intelligent Tracking System Solution

### ● GS Light-Terrain Adaptability

GRACESOLAR INTELLIGENT TRACKING SYSTEM SOLUTIONS

- The north-south slope can be adapted to 20%
- Simple structure and easy installation



Complex Terrain



Agricultural-Photovoltaic Complementary



Fishery-Photovoltaic Complementary



Large Flat Ground Power Plant

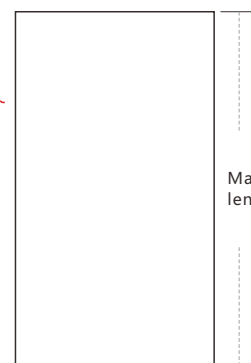
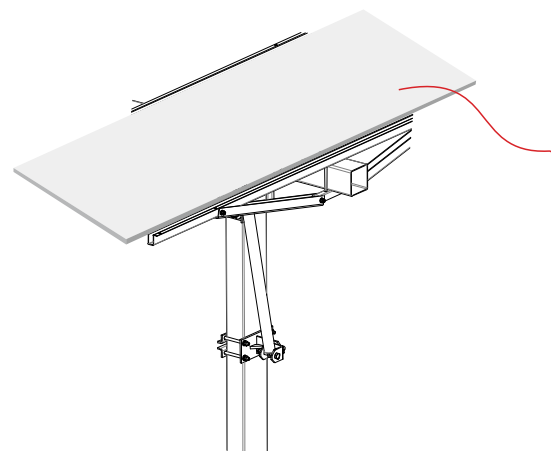


Typhoon And Highly Corrosive

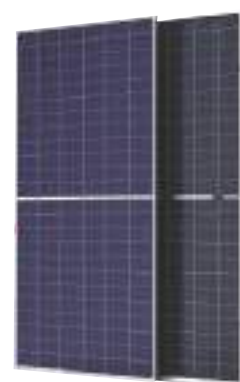
### ● GS Light-Module Adaptability

GRACESOLAR INTELLIGENT TRACKING SYSTEM SOLUTIONS

- Match module length up to 2.5m



Match module length up to 2.5m

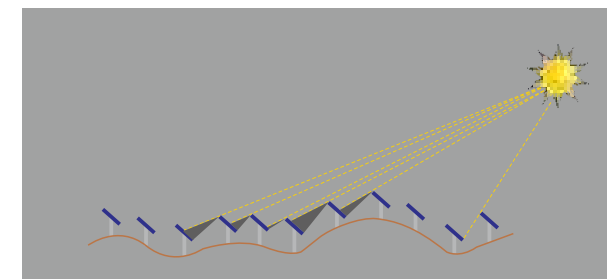


### ● GS Light-Intelligent Tracking Control Strategy

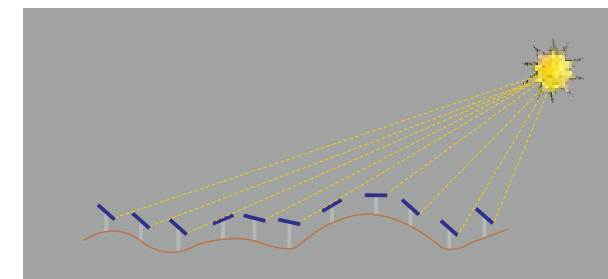
GRACESOLAR INTELLIGENT TRACKING SYSTEM SOLUTIONS

- Intelligent calculation based on different terrain and weather conditions can increase power generation by 8%

#### ■ Whole optimization tracking

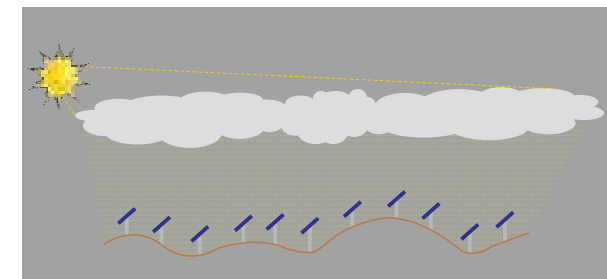


Conventional astronomical tracking

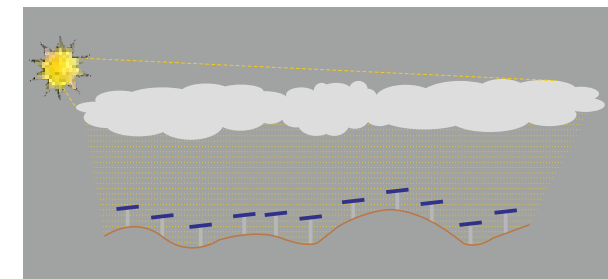


Whole optimization tracking

#### ■ Overcast day tracking strategy



Conventional astronomical tracking



Tracking based on cloud charts

### ● GS Light-Tracking System Real-time Monitoring

GRACESOLAR INTELLIGENT TRACKING SYSTEM SOLUTIONS



Home Page



Electrical Diagram



Module Array



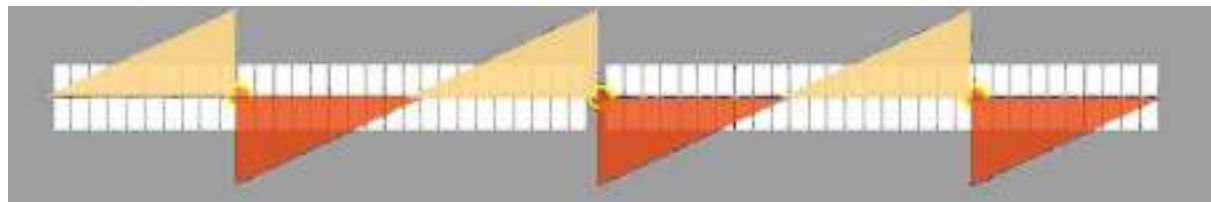
Device Parameters

## GS-Light Intelligent Tracking System Solution

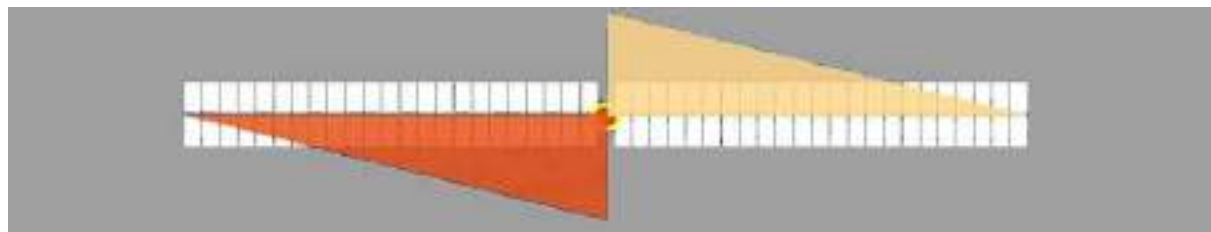
### • GS Light-Product Reliability

GRACESOLAR INTELLIGENT TRACKING SYSTEM SOLUTIONS

- The multi-point drive increases the natural frequency of the system, and the stiffness of the structure is increased by 20% compared with the traditional single-point drive, which significantly improves the wind resistance of the tracking system



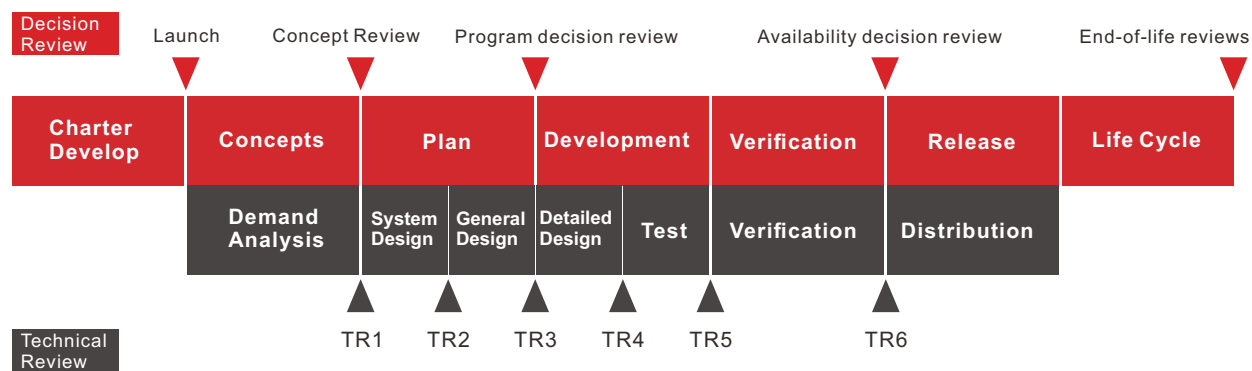
Multi-point drive torque load distribution diagram



Single point drive torque load distribution diagram

### • GS Light-Leading IPD Product Research and Development System

GRACESOLAR INTELLIGENT TRACKING SYSTEM SOLUTIONS

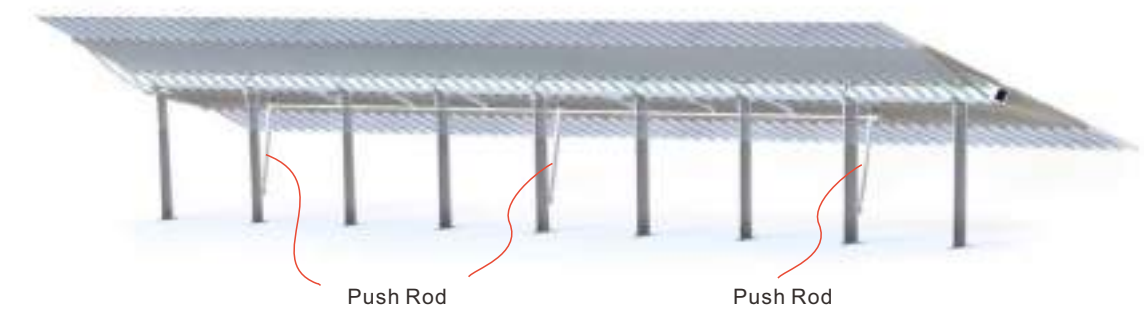


### • GS Light-Features

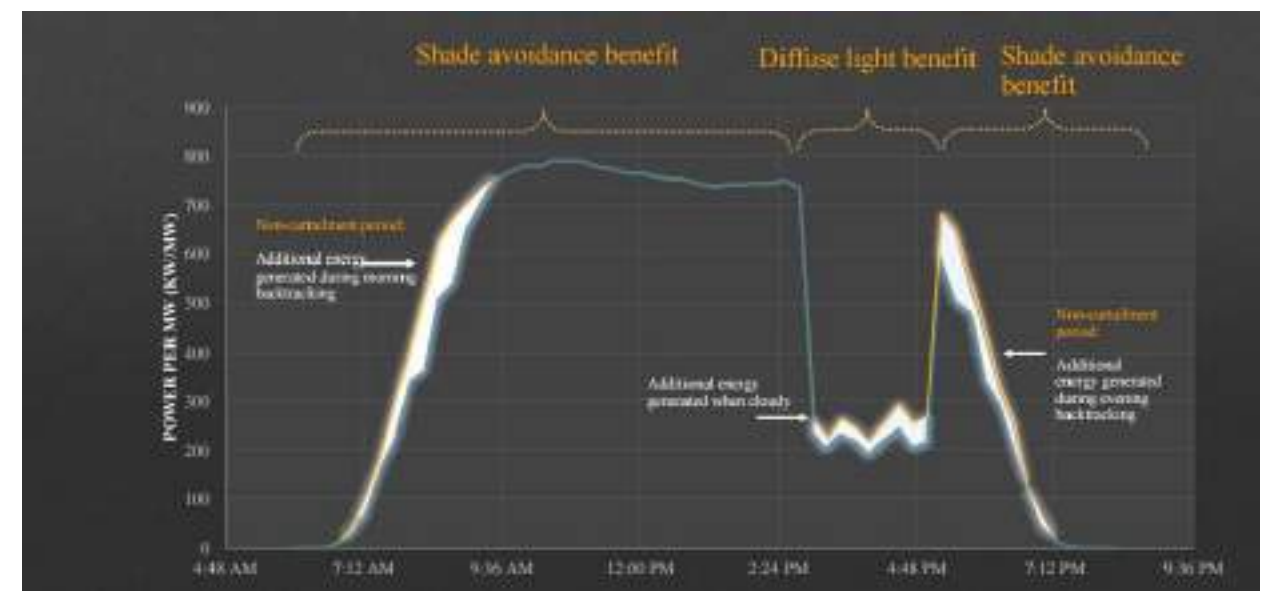
GRACESOLAR INTELLIGENT TRACKING SYSTEM SOLUTIONS

#### a. The features of using a push rod drive are as follows

- Compared with slew drive, easy installation
- Compared with the slew drive products, the whole strings do not need to reserve the space of slew drive, and the aerodynamic performance of the tracker is better with good integrity. At the same time, module cleaning is more convenient and can reduce the cost of O&M



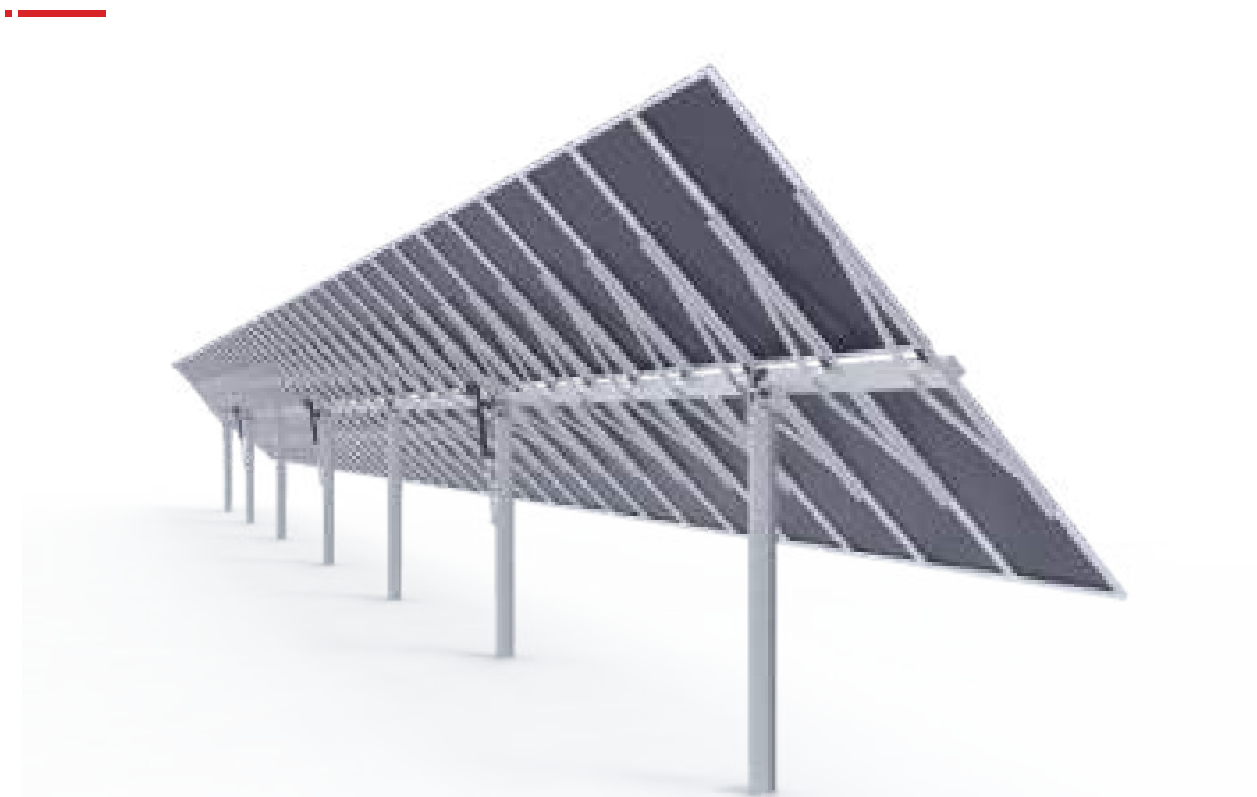
#### b. The power generation can be greatly increased by eliminating the shadow in sunrise and sunset + eliminating the difference of pile foundation height + mode of overcast day tracking





# GS-Light Intelligent Tracking System Solution

## Intelligent Tracking System (Multipoint Drive) - 2P



### System Introduction

Self-developed unique and highly reliable multi-point transmission tracking structure system, large torque tube, structure rigidity increased by 20%, can resist greater wind resistance, each row of trackers has 2 or more drivers, which is more improved accurate tracking accuracy and structural reliability, using the most advanced wind tunnel design, can adapt to multi-angle protection strategies, specifically designed for 182mm and 210mm large silicon high-power components.

### Suitable Power Plant Project

It is suitable for various power plant projects, especially in power plants with bifacial double class module or high civil construction costs.

### Features

- 3 single-row drive devices, can improve the structural rigidity of the system and the system has stronger wind resistance;
- Adopt advanced AI intelligence and double-sided tracking algorithm, higher power generation;
- The column span is larger, the number of installed machines is less, and the construction cost is greatly reduced;
- Forward-looking design, applicable to 182mm and 210mm large silicon wafer high-power components, with a maximum of 120 modules;
- Differentiated column design, different pile foundations can be selected according to different geological conditions, the slope of 15% in the north and south can be realized, and the slope in the east-west direction is unlimited;
- The system has passed third-party testing and certification such as wind tunnel and TUV to ensure stable operation of the system for 25 years;
- It can be matched with AC or PV power supply to improve the stability of wireless transmission, take into account the laying of string and tracking cables, and greatly reduce the cost per kilowatt-hour (LCOE) of the power station.

### Technical Information

Mechanical Aspect	
Number of tracker drive modules	2X60
Number of motors per tracker	3-5
Tracking range	±50°
Material	Hot-dip galvanized steel + aluminum-magnesium-zinc plate + pre-galvanized
East-west land slope	Unlimited
North-south land slope	< 15%
Module arrangement	Double row Portrait
Ground clearance	> 500mm, (customizable)
Foundation form	Ramming post, PHC pile, Concrete
Standard wind speed	< 47m/s, 3 seconds gust, (customizable)
Protection wind speed	18m/s
Mechanical tracking accuracy	±2°
Land occupation rate	30%
Grounding method	Self-grounding
Electrical Aspect	
Drive way	Linear actuator drive
Motor power	220W
Flat time	< 8 minutes
Controller	MCU
Control tracking accuracy	< 2°
Control mode	Independent GPS time control + tilt sensor hybrid control
Limit protection	Mechanical limit + motor hard limit + soft limit
Motor protection	Overheat protection, overcurrent protection, self-locking protection
Operating temperature	-40-+70°C
Protection level	IP65
Power consumption	< 0.04kWh/day
Power supply	String power supply/external power supply
Communication method	LoRa/Zigbee wireless communication or RS485
Signal transmission method	Wired/wireless optional

# GS-Light Intelligent Tracking System Solution

## Intelligent Tracking System (Independent Single Row) - 1P



### System Introduction

The self-developed independent single-row tracking bracket 1P system can adapt to the 20% slope of the north and south slopes, keep close to the ground, and have strong wind resistance. The standard product can install up to 90 modules, and the number of installed modules can be adjusted according to the string configuration and the size of the terrain. It is the best choice for irregular land power stations. The electronic control adopts the most advanced AI intelligent controller, which can be equipped with self-powered strings and small lithium battery panels.

### Suitable Power Plant Project

It is suitable for various power plant projects, especially in power plant projects with irregular land.

### Features

- Installation is more convenient;
- Customized quick control system debugging system;
- AI intelligent control system can increase production capacity output by 6%;
- The north-south slope can be adapted to 20%;
- Higher utilization rate of irregular land;
- DC string and lithium battery backup power supply, reducing LCOE cost.

### Technical Information

#### Mechanical Aspect

Number of tracker drive modules	1X90
Number of motors per tracker	1
Tracking range	±60°
Material	Hot-dip galvanized steel + aluminum-magnesium-zinc plate + pre-galvanized
East-west land slope	Unlimited
North-south land slope	< 20%
Module arrangement	Single row Portrait
Ground clearance	> 500mm, (customizable)
Foundation form	Ramming post, PHC pile, Concrete
Standard wind speed	< 47m/s, 3 seconds gust, (customizable)
Protection wind speed	18m/s
Mechanical tracking accuracy	±2°
Land occupation rate	30%
Grounding method	Self-grounding

#### Electrical Aspect

Drive way	Slew driver
Motor power	150W
Flat time	< 8 minutes
Controller	MCU
Control tracking accuracy	< 2°
Control mode	Independent GPS time control + tilt sensor hybrid control
Limit protection	Mechanical limit + motor hard limit + soft limit
Motor protection	Overheat protection, overcurrent protection, self-locking protection
Operating temperature	-40-+70°C
Protection level	IP65
Power consumption	< 0.02kWh/day
Power supply	String power supply/external power supply
Communication method	LoRa/Zigbee wireless communication or RS485
Signal transmission method	Wired/wireless optional



# GS-Light Intelligent Tracking System Solution

## Intelligent Tracking System (Double Row Linkage)



### System Introduction

The self-developed two row linkage tracking system adopts larger cross-section and high-strength main beam, with better stiffness, higher natural vibration frequency and more safety and reliability. It is suitable for high-power and large-size modules. Compared with the conventional single row tracking system, the number of electric control and drive is twice less, and the failure rate is lower. Through wind tunnel test, a more reasonable wind resistance mechanism is obtained, which can more effectively protect the 25 year life of the power plant.

### Features

- The number of electronic controls and drives is small, and the failure rate is lower;
- Strong adaptability, simple installation, convenient operation and maintenance;
- More reasonable design, safer and more reliable;
- A more reasonable wind resistance mechanism through wind tunnel test;
- AI intelligent control system can increase production capacity output by 6%;
- DC string and lithium battery backup power supply, reducing LCOE cost.

### Suitable Power Plant Project

It is suitable for power plant projects with relatively flat land, especially in power plant projects with lower cost requirements.

### Technical Information

#### Mechanical Aspect

Number of tracker drive modules	2X60
Number of motors per tracker	1
Tracking range	±60°
Material	Hot-dip galvanized steel + aluminum-magnesium-zinc plate + pre-galvanized
East-west land slope	< 5%
North-south land slope	< 15%
Module arrangement	Single row Portrait, 2 rows linkage
Ground clearance	> 500mm, (customizable)
Foundation form	Ramming post, PHC pile, Concrete
Standard wind speed	< 47m/s, 3 seconds gust, (customizable)
Protection wind speed	18m/s
Mechanical tracking accuracy	±2°
Land occupation rate	30%
Grounding method	Self-grounding

#### Electrical Aspect

Drive way	Slew driver
Motor power	150W
Flat time	< 8 minutes
Controller	MCU
Control tracking accuracy	< 2°
Control mode	Independent GPS time control + tilt sensor hybrid control
Limit protection	Mechanical limit + motor hard limit + soft limit
Motor protection	Overheat protection, overcurrent protection, self-locking protection
Operating temperature	-40-+70°C
Protection level	IP65
Power consumption	< 0.04kWh/day
Power supply	String power supply/external power supply
Communication method	LoRa/Zigbee wireless communication or RS485
Signal transmission method	Wired/wireless optional

# GS-SMART

## GROUND MOUNTING SYSTEM

PV Mounting System Solution



Easy to assemble



Convenient  
maintenance



Safe and reliable



Nice appearance

**HIGH EFFICIENCY**  
**HIGH QUALITY**  
**HIGH INCOME**



GS-Smart Ground Mounting System Solution

## Ground Mounting System

Aluminum alloy and Aluminium-Zinc-Magnesium coated steel are used for GS-ground mounting system. It can be customized to ensure safety, ease of installation and aesthetics. High quality-durability-standardization, fast installation and flexibility have become the most widely used solutions in Grace solar PV plant construction.



### Fixed Foundation



Concrete Foundation

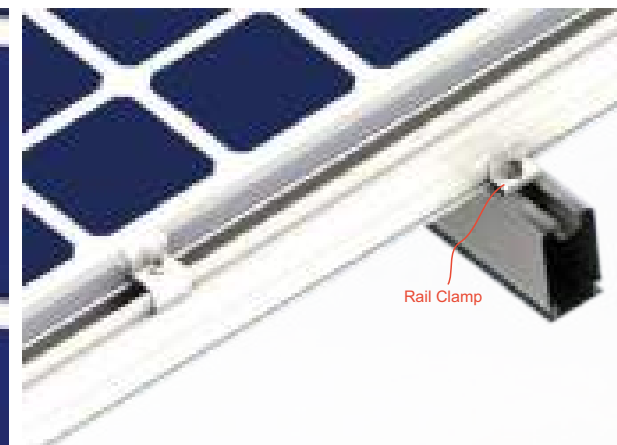


Ground Screw Foundation

### Module Fixed

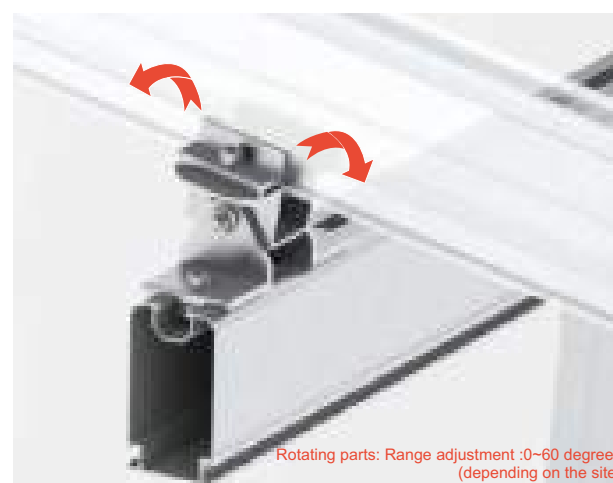


Inter Clamp



End Clamp

### Rotating Parts



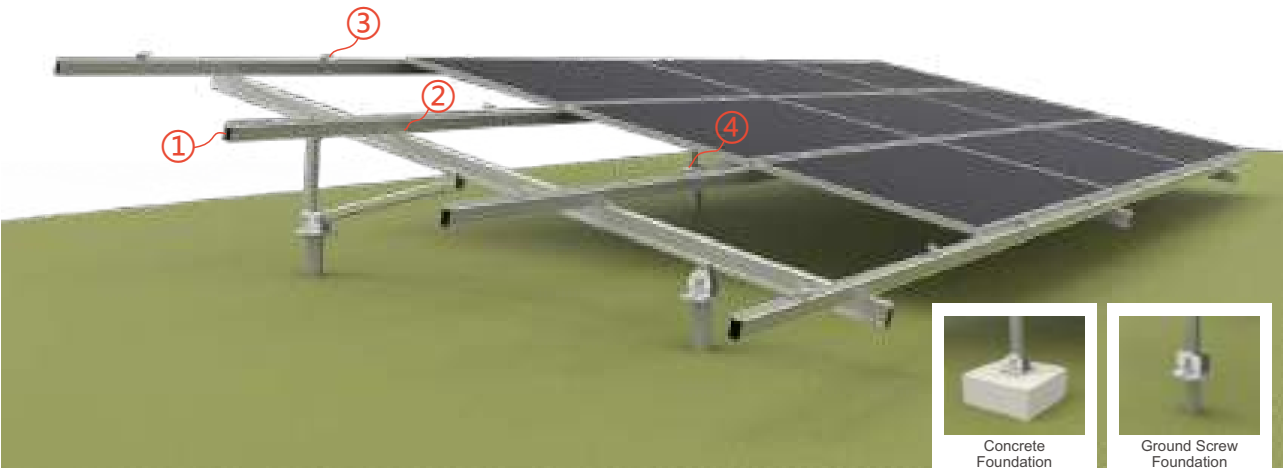
Rail Rotation Clamp



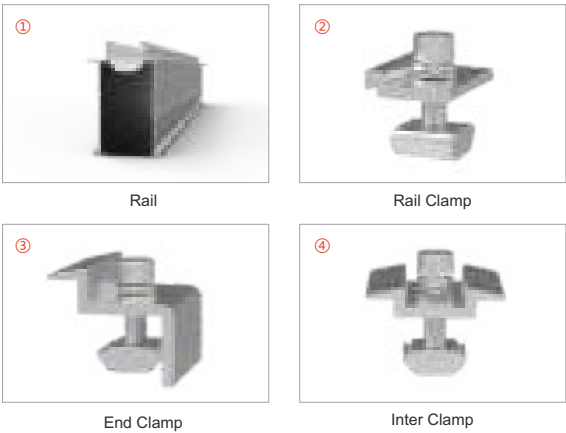
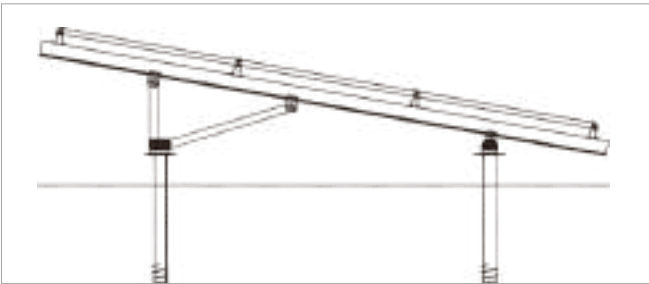
Adjustable Top Cap

A-Type Ground Mounting System

Landscape Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*35mm	Clearance	369mm
Module Power	555W	North-south Span	2119mm
Module Inclination (in degree)	10 deg	East-west Span	3500mm
Module arrangement	3 rows, 4 columns	Capacity	6600W
Number of installations	12 pcs	Maximum wind speed	30m/s

Arrangement



Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	4450mm	8 pcs
Rail Splice	AL 6005-T5	200mm	4 pcs
Rail Clamp	AL 6005-T5&SUS 304	40mm	24 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	16 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	16 pcs
Support Beam Kits	AL 6005-T5&SUS 304	3700mm	3 pcs
Tube	AL 6005-T5	870mm	3 pcs
Tube	AL 6005-T5	440mm	3 pcs
Base	AL 6005-T5&SUS 304	100*160mm	3 pcs
Base	AL 6005-T5&SUS 304	130*160mm	3 pcs
Ground Screw	Q235	1600mm	6 pcs
Grounding Clip	SUS 304	49*30*22mm	16 pcs
Grounding Lug	SUS 304	20mm	2 pcs



A-Type Ground Mounting System

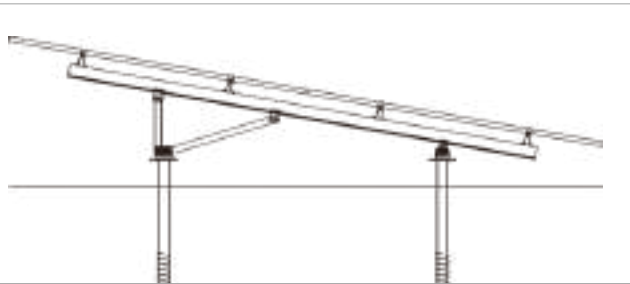
Portrait Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*35mm	Clearance	296mm
Module Power	555W	North-south Span	2119mm
Module Inclination (in degree)	10 deg	East-west Span	3000mm
Module arrangement	2 rows, 6 columns	Capacity	6600W
Number of installations	12 pcs	Maximum wind speed	30m/s

Arrangement



Component List

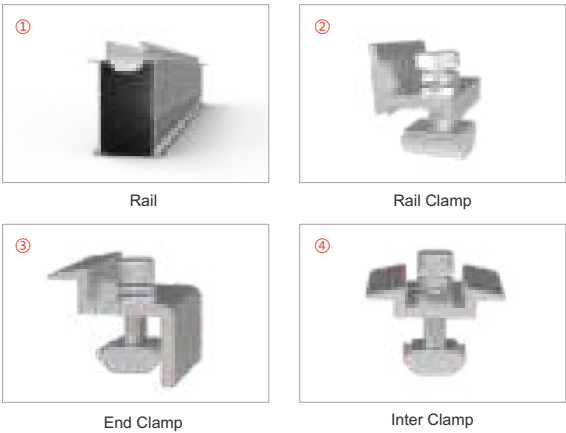
Description	Material	Specification	QTY
Rail	AL 6005-T5	3550mm	8 pcs
Rail Splice	AL 6005-T5	200mm	4 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	24 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	20 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	8 pcs
Support Beam Kits	AL 6005-T5&SUS 304	3700mm	3 pcs
Tube	AL 6005-T5	870mm	3 pcs
Tube	AL 6005-T5	440mm	3 pcs
Base	AL 6005-T5&SUS 304	100*160mm	3 pcs
Base	AL 6005-T5&SUS 304	130*160mm	3 pcs
Ground Screw	Q235	1600mm	6 pcs
Grounding Clip	SUS 304	34*34mm	10 pcs
Grounding Lug	SUS 304	20mm	2 pcs

VV-Type Ground Mounting System

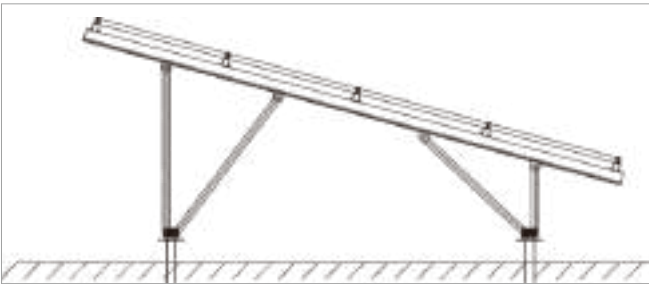
Landscape Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



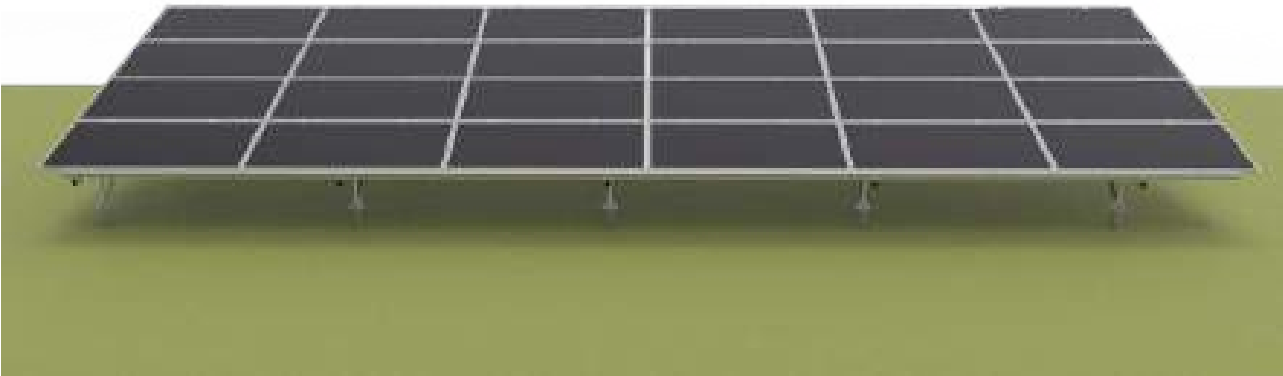
Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*35mm	Clearance	500mm
Module Power	555W	North-south Span	3010mm
Module Inclination (in degree)	15 deg	East-west Span	3000mm
Module arrangement	4 rows, 6 columns	Capacity	13320W
Number of installations	24 pcs	Maximum wind speed	37m/s

Arrangement



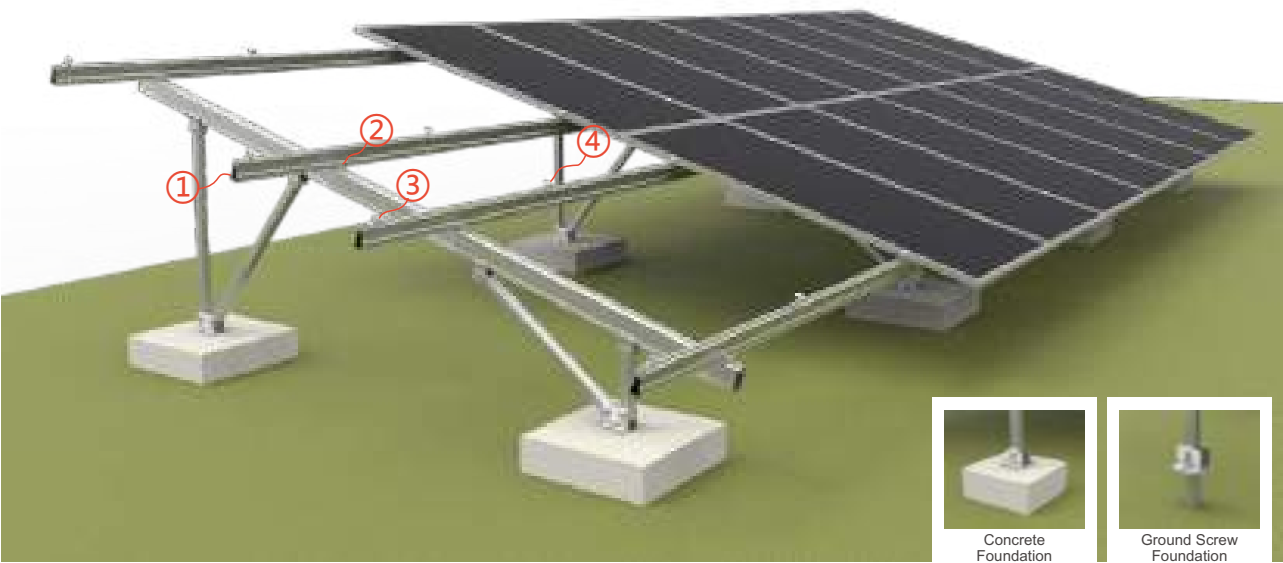
Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	3600mm	10 pcs
Rail	AL 6005-T5	3000mm	10 pcs
Rail Splice	AL 6005-T5	200mm	15 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	50 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	36 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	24 pcs
Support Beam Kits	AL 6005-T5&SUS 304	4800mm	5 pcs
Tube	AL 6005-T5	600mm	5 pcs
Tube	AL 6005-T5	1240mm	5 pcs
Tube	AL 6005-T5	1490mm	5 pcs
Tube	AL 6005-T5	1450mm	5 pcs
Base	AL 6005-T5&SUS 304	130mm	10 pcs
Ground Screw	Q235	1600mm	10 pcs
Grounding Clip	SUS 304	25*16*23mm	24 pcs
Grounding Lug	SUS 304	20mm	2 pcs

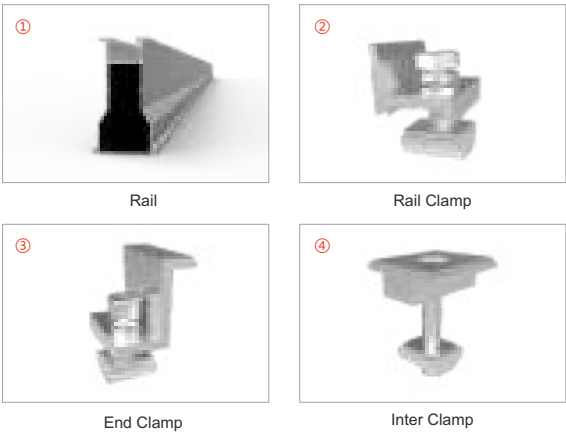


VV-Type Ground Mounting System

Portrait Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2187*1102*35mm	Clearance	500mm
Module Power	495W	North-south Span	2615mm
Module Inclination (in degree)	30 deg	East-west Span	3000mm
Module arrangement	2 rows, 9 columns	Capacity	8910W
Number of installations	18 pcs	Maximum wind speed	37m/s

Arrangement



Component List

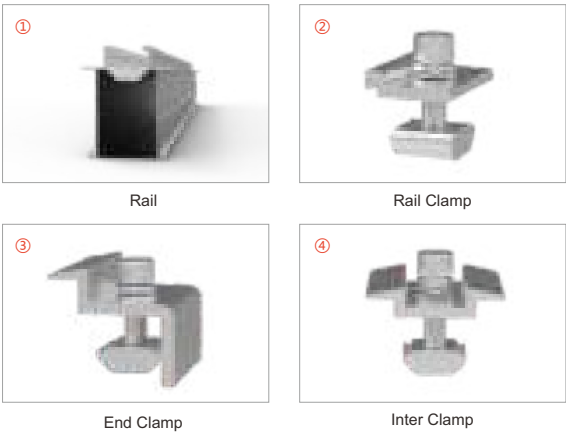
Description	Material	Specification	QTY
Rail	AL 6005-T5	3400mm	12 pcs
Rail Splice	AL 6005-T5	200mm	8 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	32 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	32 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	8 pcs
Support Beam Kits	AL 6005-T5&SUS 304	4800mm	4 pcs
Tube	AL 6005-T5	600mm	4 pcs
Tube	AL 6005-T5	1240mm	4 pcs
Tube	AL 6005-T5	1490mm	4 pcs
Tube	AL 6005-T5	1450mm	4 pcs
Base	AL 6005-T5&SUS 304	130mm	8 pcs
Grounding Clip	SUS 304	34*34mm	20 pcs
Grounding Lug	SUS 304	20mm	4 pcs

N-Type Ground Mounting System

Landscape Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



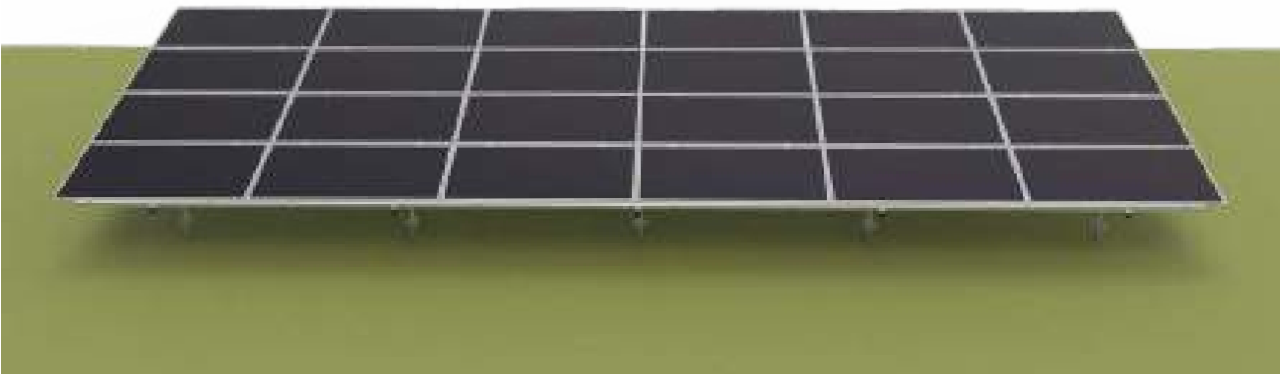
Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*34mm	Clearance	1000mm
Module Power	550W	North-south Span	2816mm
Module Inclination (in degree)	10 deg	East-west Span	2850mm
Module arrangement	4 rows, 6 columns	Capacity	13200W
Number of installations	24 pcs	Maximum wind speed	34m/s

Arrangement

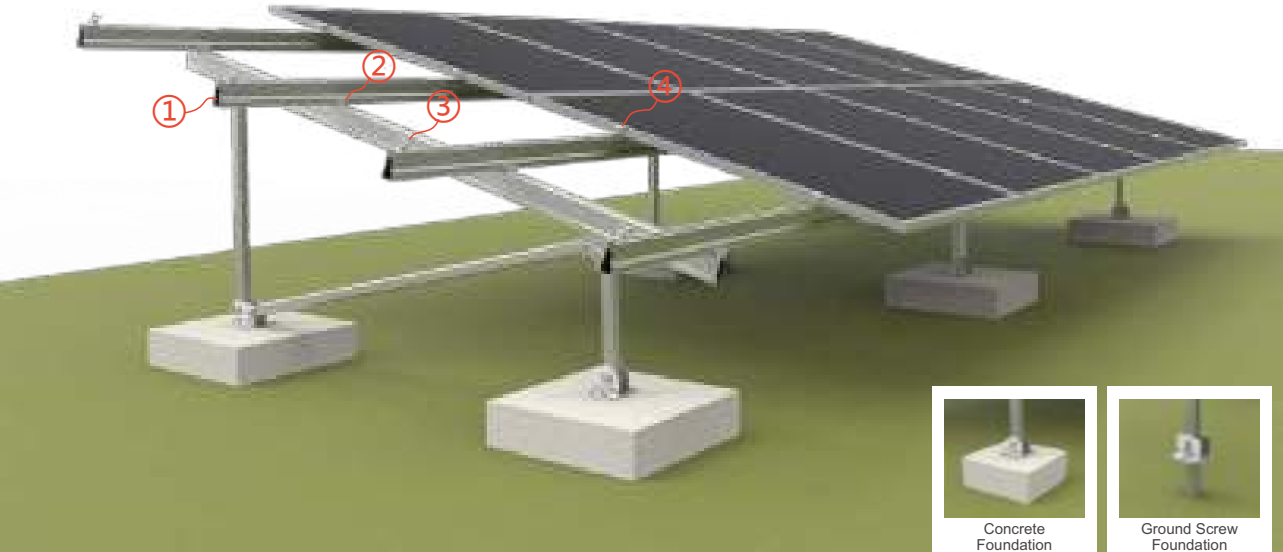


Component List

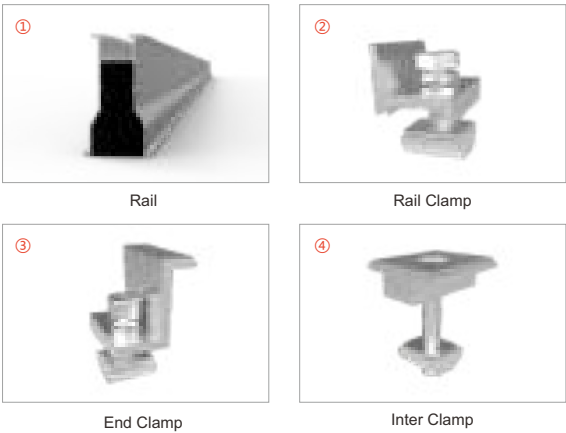
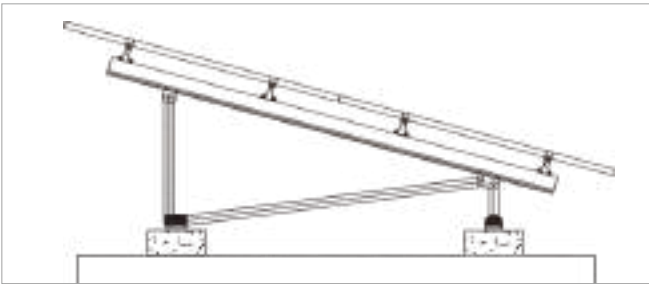
Description	Material	Specification	QTY
Rail	AL 6005-T5	3750mm	10 pcs
Rail	AL 6005-T5	2850mm	10 pcs
Rail Splice	AL 6005-T5	200mm	15 pcs
Rail Clamp	AL 6005-T5&SUS 304	40mm	50 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	36 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	24 pcs
Support Beam Kits	AL 6005-T5&SUS 304	4800mm	5 pcs
Tube	AL 6005-T5	700mm	5 pcs
Tube	AL 6005-T5	1200mm	5 pcs
Tube	AL 6005-T5	2810mm	5 pcs
Base	AL 6005-T5&SUS 304	100mm	5 pcs
Base	AL 6005-T5&SUS 304	130mm	5 pcs
Ground Screw	Q235	1600mm	10 pcs
Grounding Clip	SUS 304	34*34mm	24 pcs
Grounding Lug	SUS 304	20mm	2 pcs

N-Type Ground Mounting System

Portrait Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	1722*1134*30mm	Clearance	500mm
Module Power	410W	North-south Span	1925mm
Module Inclination (in degree)	15 deg	East-west Span	3000mm
Module arrangement	2 rows, 6 columns	Capacity	4920W
Number of installations	12 pcs	Maximum wind speed	34m/s

Arrangement



Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	3500mm	8 pcs
Rail Splice	AL 6005-T5	200mm	4 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	24 pcs
Inter Clamp	AL 6005-T5&SUS 304	30mm	20 pcs
End Clamp	AL 6005-T5&SUS 304	30mm	8 pcs
Support Beam Kits	AL 6005-T5&SUS 304	2800mm	3 pcs
Tube	AL 6005-T5	410mm	3 pcs
Tube	AL 6005-T5	930mm	3 pcs
Tube	AL 6005-T5	1880mm	3 pcs
Base	AL 6005-T5&SUS 304	100mm	3 pcs
Base	AL 6005-T5&SUS 304	130mm	3 pcs
Grounding Clip	SUS 304	34*34mm	12 pcs
Grounding Lug	SUS 304	20mm	4 pcs

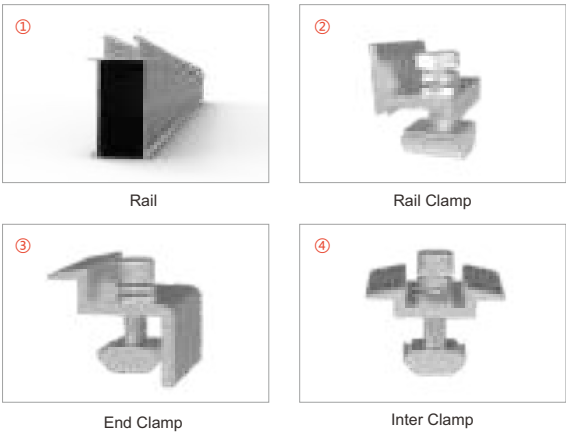
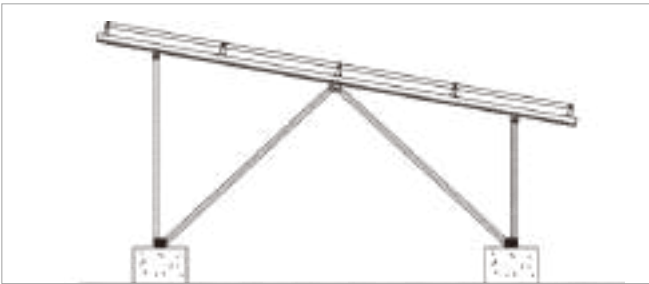


W-Type Ground Mounting System

Landscape Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*30mm	Clearance	1600mm
Module Power	555W	North-south Span	3470mm
Module Inclination (in degree)	10 deg	East-west Span	2500mm
Module arrangement	4 rows, 3 columns	Capacity	6660W
Number of installations	12 pcs	Maximum wind speed	36m/s

Arrangement



Component List

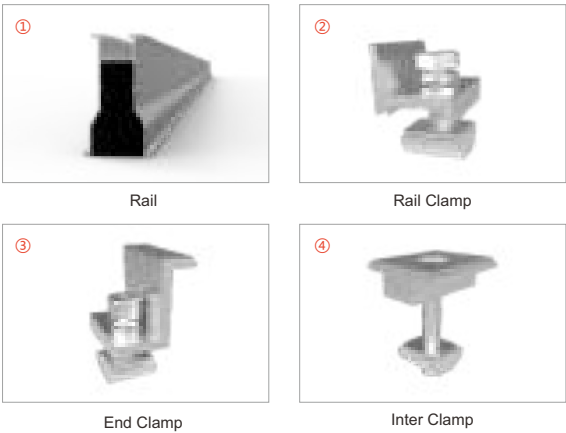
Description	Material	Specification	QTY
Rail	AL 6005-T5	3200mm	10 pcs
Rail Splice	AL 6005-T5	200mm	5 pcs
Rail Clamp	AL 6005-T5&SUS 304	40mm	30 pcs
Inter Clamp	AL 6005-T5&SUS 304	30mm	18 pcs
End Clamp	AL 6005-T5&SUS 304	30mm	12 pcs
Support Beam Kits	AL 6005-T5&SUS 304	4800mm	3 pcs
Tube	AL 6005-T5	1250mm	3 pcs
Tube	AL 6005-T5	2290mm	6 pcs
Tube	AL 6005-T5	1880mm	3 pcs
Base	AL 6005-T5&SUS 304	120mm	6 pcs
Grounding Clip	SUS 304	25*16*23mm	12 pcs
Grounding Lug	SUS 304	20mm	2 pcs

W-Type Ground Mounting System

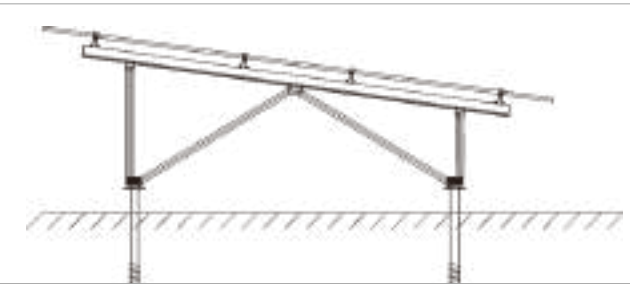
Portrait Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2279*1134*35mm	Clearance	700mm
Module Power	550W	North-south Span	2570mm
Module Inclination (in degree)	30 deg	East-west Span	2600mm
Module arrangement	2 rows, 5 columns	Capacity	5500W
Number of installations	10 pcs	Maximum wind speed	140km/h

Arrangement



Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	2950mm	8 pcs
Rail Splice	AL 6005-T5	200mm	4 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	24 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	14 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	8 pcs
Support Beam Kits	AL 6005-T5&SUS 304	3700mm	3 pcs
Tube	AL 6005-T5	640mm	3 pcs
Tube	AL 6005-T5	2200mm	3 pcs
Tube	AL 6005-T5	1850mm	3 pcs
Tube	AL 6005-T5	1880mm	3 pcs
Base	AL 6005-T5&SUS 304	160mm	6 pcs
Ground Screw	Q235	1600mm	6 pcs
Grounding Clip	SUS 304	34*34mm	8 pcs
Grounding Lug	SUS 304	20mm	2 pcs

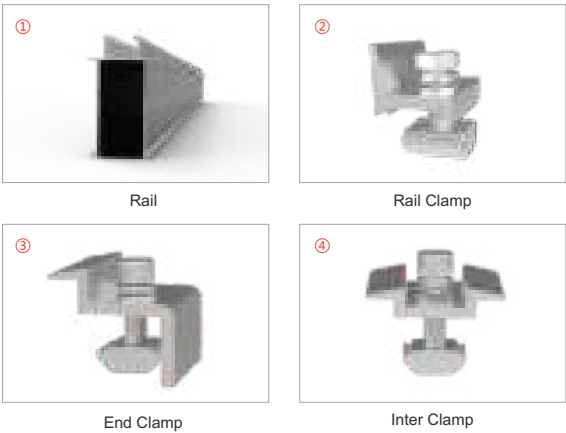


Non-leg Ground Mounting System

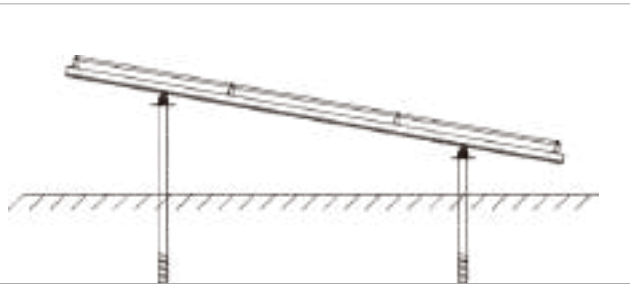
Landscape Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*30mm	Clearance	500mm
Module Power	570W	North-south Span	2410mm
Module Inclination (in degree)	10 deg	East-west Span	2600mm
Module arrangement	3 rows, 3 columns	Capacity	5130W
Number of installations	9 pcs	Maximum wind speed	36m/s

Arrangement



Component List

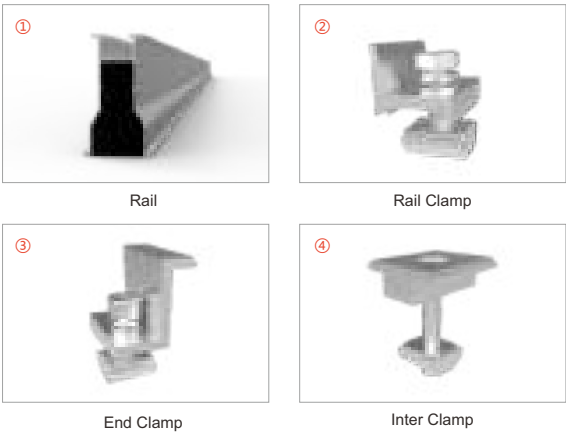
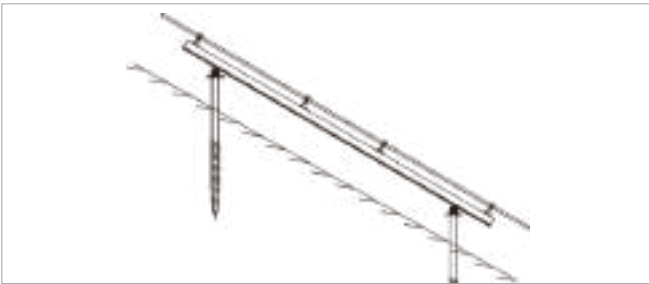
Description	Material	Specification	QTY
Rail	AL 6005-T5	3200mm	8 pcs
Rail Splice	AL 6005-T5	200mm	4 pcs
Rail Clamp	AL 6005-T5&SUS 304	40mm	24 pcs
Inter Clamp	AL 6005-T5&SUS 304	30mm	12 pcs
End Clamp	AL 6005-T5&SUS 304	30mm	12 pcs
Support Beam Kits	AL 6005-T5&SUS 304	3650mm	3 pcs
Base	AL 6005-T5&SUS 304	90mm	6 pcs
Ground Screw	Q235	1600mm	3 pcs
Ground Screw	Q235	2000mm	3 pcs
Grounding Clip	SUS 304	25*16*23mm	12 pcs
Grounding Lug	SUS 304	20mm	2 pcs

Non-leg Ground Mounting System

Portrait Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Pre-assembly



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2279*1134*35mm	Clearance	700mm
Module Power	550W	North-south Span	2570mm
Module Inclination (in degree)	30 deg	East-west Span	2600mm
Module arrangement	2 rows, 5 columns	Capacity	5500W
Number of installations	10 pcs	Maximum wind speed	140km/h

Arrangement



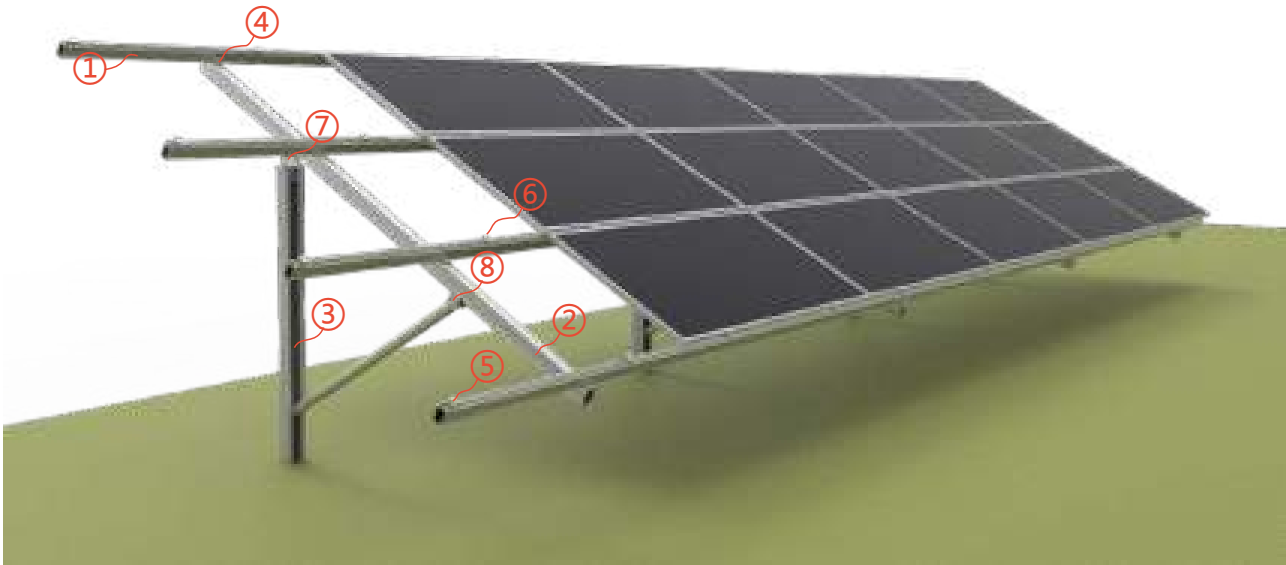
Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	2950mm	8 pcs
Rail Splice	AL 6005-T5	200mm	4 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	24 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	14 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	8 pcs
Support Beam Kits	AL 6005-T5&SUS 304	3700mm	3 pcs
Base	AL 6005-T5&SUS 304	160mm	6 pcs
Ground Screw	Q235	1600mm	6 pcs
Grounding Clip	SUS 304	34*34mm	8 pcs
Grounding Lug	SUS 304	20mm	2 pcs

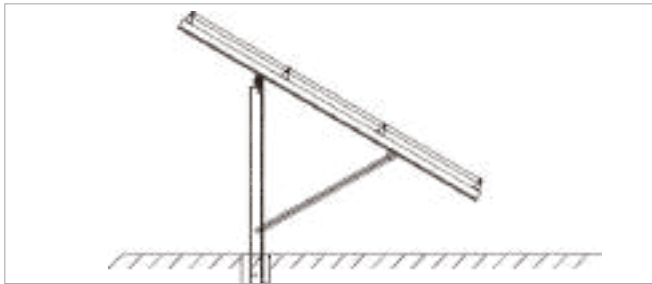


Single Column Piling Ground Mounting System

Landscape Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-45°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
C-shaped steel material	Carbon steel SS400
Color	Silver or customized
Surface Treatment	Aluminum alloy anodizing Carbon steel hot-dip galvanizing
Foundation	Concrete Pre-buried Foundation C-shaped Pile Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2256*1133*35mm	Clearance	500mm
Module Power	540W	North-south Span	2757mm
Module Inclination (in degree)	10 deg	East-west Span	3600mm
Module arrangement	3 rows, 6 columns	Capacity	9720W
Number of installations	18 pcs	Maximum wind speed	37m/s

Arrangement

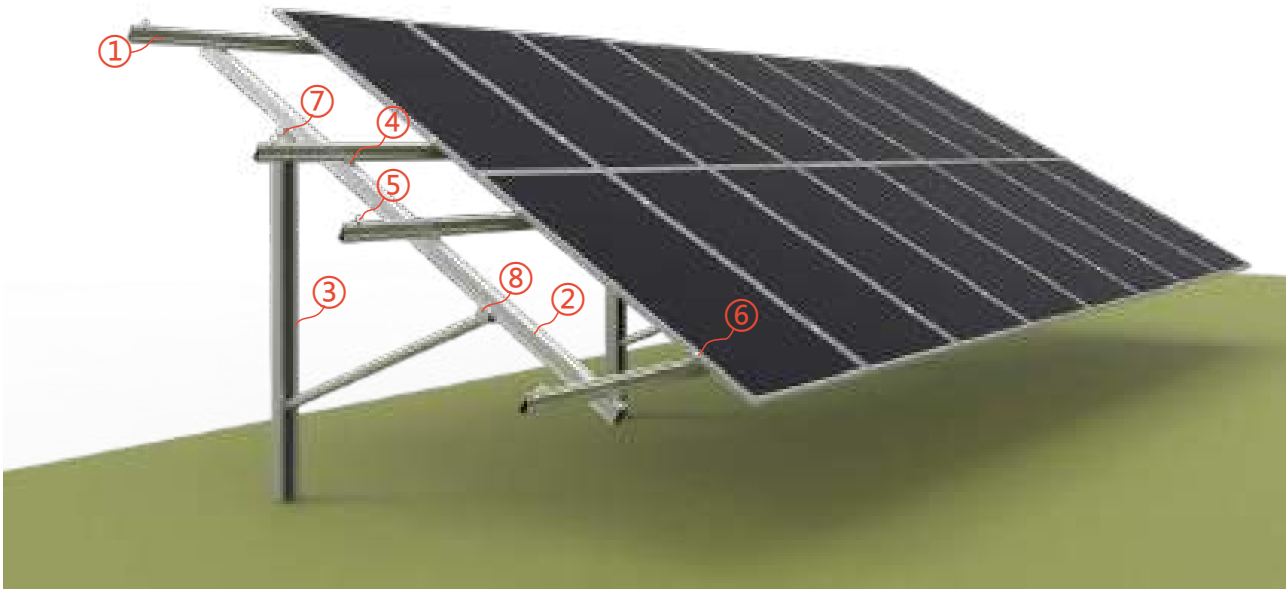


Component List

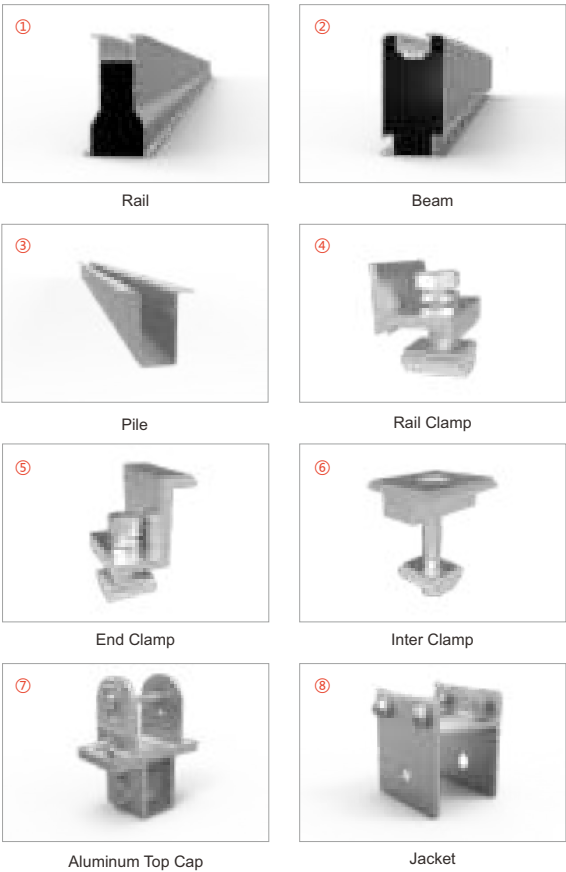
Description	Material	Specification	QTY
Rail	AL 6005-T5	4600mm	8 pcs
Rail	AL 6005-T5	3600mm	4 pcs
Rail Splice	AL 6005-T5	200mm	8 pcs
Rail Clamp	AL 6005-T5&SUS 304	40mm	16 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	24 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	24 pcs
Beam	AL 6005-T5&SUS 304	3600mm	4 pcs
Aluminum Top Cap	AL 6005-T5&SUS 304	150*120*80mm	8 pcs
Tube	AL 6005-T5	1640mm	4 pcs
Open post	Q235	3550mm	4 pcs
Grounding Clip	SUS 304	34*34mm	24 pcs
Grounding Lug	SUS 304	20mm	2 pcs

Single Column Piling Ground Mounting System

Portrait Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-45°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
C-shaped steel material	Carbon steel SS400
Color	Silver or customized
Surface Treatment	Aluminum alloy anodizing Carbon steel hot-dip galvanizing
Foundation	Concrete Pre-buried Foundation C-shaped Pile Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2187*1102*35mm	Clearance	500mm
Module Power	495W	North-south Span	2220mm
Module Inclination (in degree)	30 deg	East-west Span	3000mm
Module arrangement	2 rows, 9 columns	Capacity	8910W
Number of installations	18 pcs	Maximum wind speed	37m/s

Arrangement

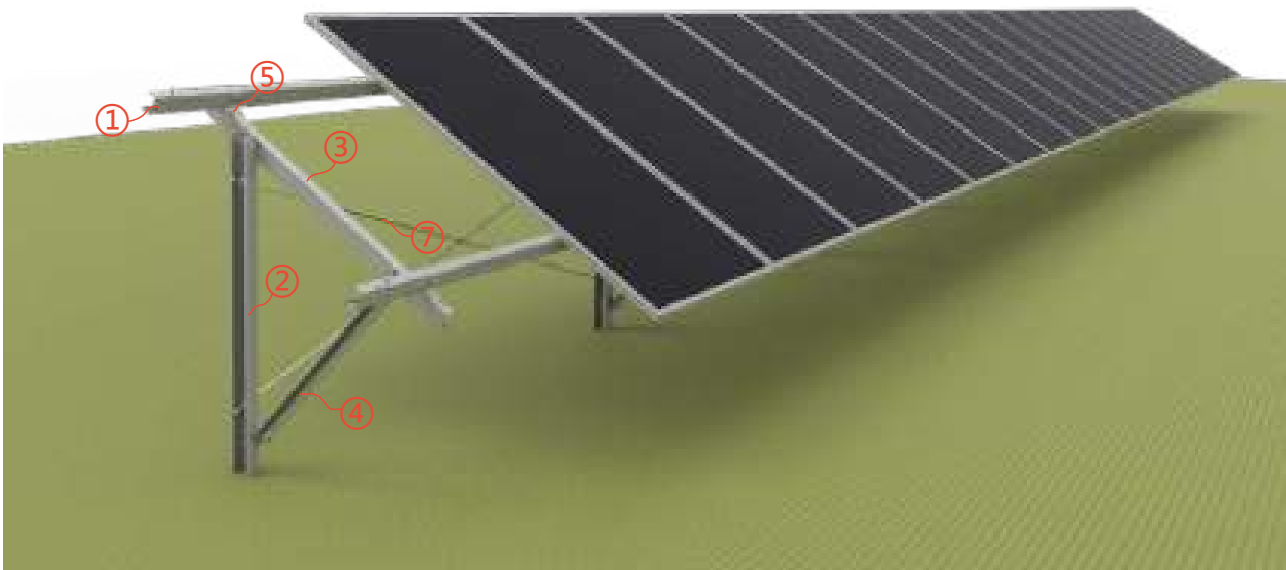


Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	3400mm	12 pcs
Rail Splice	AL 6005-T5	200mm	8 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	32 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	32 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	8 pcs
Beam	AL 6005-T5&SUS 304	3800mm	4 pcs
Aluminum Top Cap	AL 6005-T5&SUS 304	150*120*80mm	8 pcs
Tube	AL 6005-T5	1810mm	4 pcs
Open post	Q235	3550mm	4 pcs
Grounding Clip	SUS 304	34*34mm	20 pcs
Grounding Lug	SUS 304	20mm	4 pcs







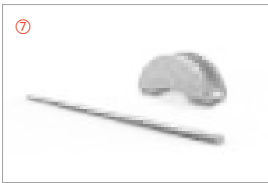
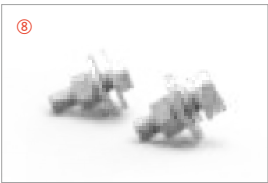
Single Column Piling Ground Mounting System

Portrait Placement (Carbon steel )



Installation site	Ground
Inclination	0-45°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	Carbon steel & Alloy steel
Color	Silver or customized
Surface Treatment	Hot-dip galvanized or Aluminium-Zinc-Magnesium coated
Foundation	Concrete Foundation Ground Screw Foundation Pile Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



	
Purlin	Column
	
Beam	Brace
	
Support Beam Splice	Purlin Connector
	
Steel Rod Kits	Bolts kits

Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*35mm	Clearance	700mm
Module Power	550W	North-south Span	/
Module Inclination (in degree)	30 deg	East-west Span	2800mm
Module arrangement	1 rows, 20 columns	Capacity	11000W
Number of installations	20 pcs	Maximum wind speed	25m/s

Arrangement



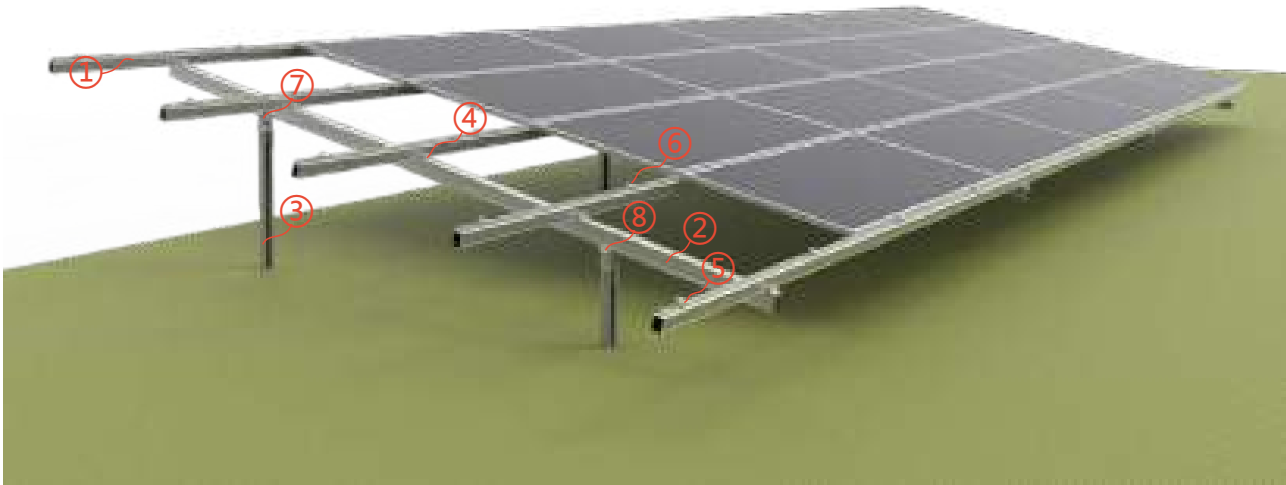
Component List

Description	Material	Specification	QTY
Column	Q355B	3116mm	9 pcs
Beam	S420GD-ZM275	1430mm	9 pcs
Brace	S420GD-ZM275	1083mm	9 pcs
Purlin	S420GD-ZM275	5660mm	4 pcs
Purlin	S420GD-ZM275	3960mm	4 pcs
Purlin	S420GD-ZM275	3920mm	2 pcs
Purlin Connector	Q235B	L80*40*3*210mm	8 pcs
Support Beam Splice	Q235B	L75*50*5*50mm	18 pcs
Support Chip	Q235B	100*150*4mm	9 pcs
Steel Rod	Q235B	φ10*3100mm	4 pcs
Semicircular Gasket	AL Q235B304	50*20*3*25mm	8 pcs
Bolts to Module	SUS304 ( A2-70 )	M8*20	80 pcs
Bolts kits	Class 8.8	M10*30	100 pcs
Bolts kits	Class 8.8	M12*40	45 pcs

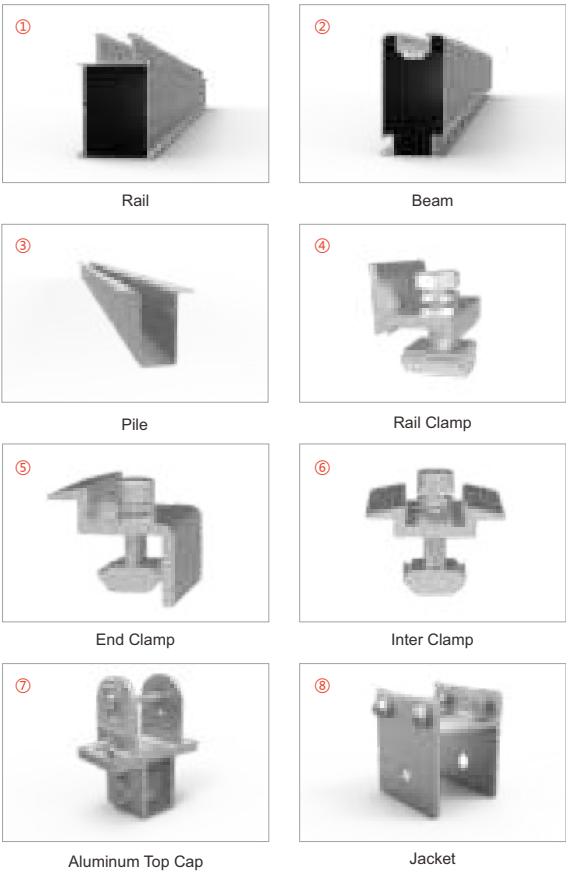
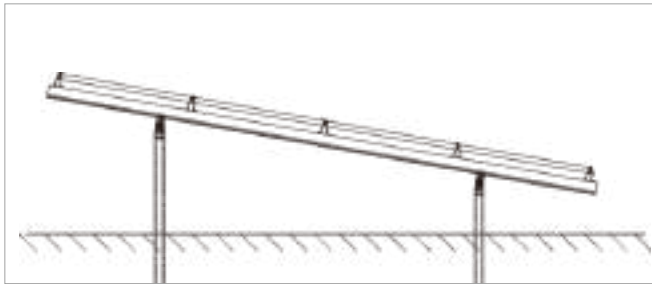


Double Column Piling Ground Mounting System

Landscape Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-45°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
C-shaped steel material	Carbon steel SS400
Color	Silver or customized
Surface Treatment	Aluminum alloy anodizing Carbon steel hot-dip galvanizing
Foundation	Concrete Pre-buried Foundation C-shaped Pile Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2256*1133*35mm	Clearance	500mm
Module Power	540W	North-south Span	2757mm
Module Inclination (in degree)	10 deg	East-west Span	3600mm
Module arrangement	4 rows, 6 columns	Capacity	12960W
Number of installations	24 pcs	Maximum wind speed	37m/s

Arrangement

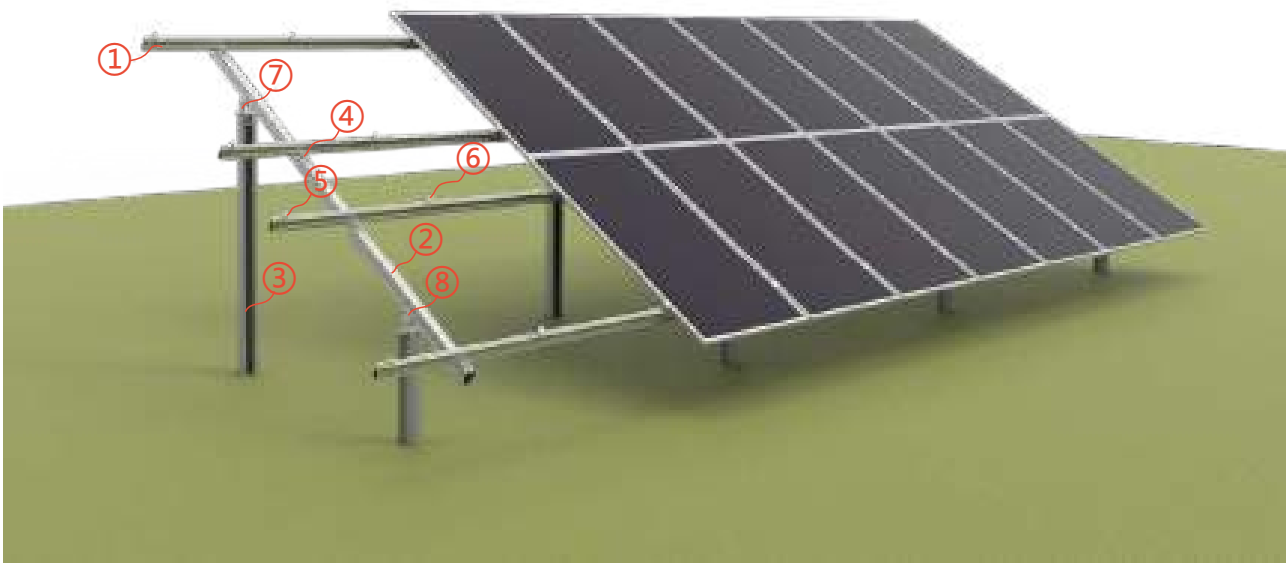


Component List

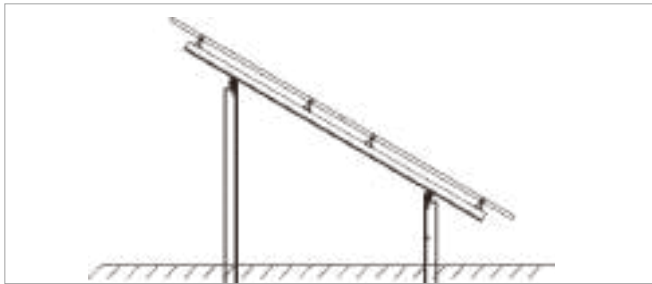
Description	Material	Specification	QTY
Rail	AL 6005-T5	4600mm	10 pcs
Rail	AL 6005-T5	3600mm	5 pcs
Rail Splice	AL 6005-T5	200mm	10 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	20 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	36 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	24 pcs
Beam	AL 6005-T5&SUS 304	4800mm	4 pcs
Aluminum Top Cap	AL 6005-T5&SUS 304	60mm	8 pcs
Open post	Q235	2000mm	4 pcs
Open post	Q235	2500mm	4 pcs
Grounding Clip	SUS 304	34*34mm	24 pcs
Grounding Lug	SUS 304	20mm	2 pcs

Double Column Piling Ground Mounting System

Portrait Placement ( Aluminum alloy )



Installation site	Ground
Inclination	0-45°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
C-shaped steel material	Carbon steel SS400
Color	Silver or customized
Surface Treatment	Aluminum alloy anodizing Carbon steel hot-dip galvanizing
Foundation	Concrete Pre-buried Foundation C-shaped Pile Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2187*1102*35mm	Clearance	500mm
Module Power	495W	North-south Span	2220mm
Module Inclination (in degree)	30 deg	East-west Span	3000mm
Module arrangement	2 rows, 9 columns	Capacity	8910W
Number of installations	18 pcs	Maximum wind speed	37m/s

Arrangement



Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	3400mm	12 pcs
Rail Splice	AL 6005-T5	200mm	8 pcs
Rail Clamp	AL 6005-T5&SUS 304	60mm	32 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	32 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	8 pcs
Beam	AL 6005-T5&SUS 304	3800mm	4 pcs
Aluminum Top Cap	AL 6005-T5&SUS 304	150*120*80mm	8 pcs
Open post	Q235	2300mm	4 pcs
Open post	Q235	3550mm	4 pcs
Grounding Clip	SUS 304	34*34mm	20 pcs
Grounding Lug	SUS 304	20mm	4 pcs







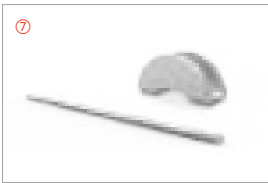
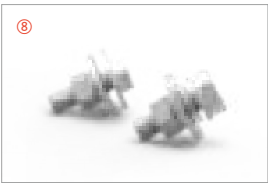
Double Column Piling Ground Mounting System

Portrait Placement ( Carbon steel )



Installation site	Ground
Inclination	0-45°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	Carbon steel & Alloy steel
Color	Silver or customized
Surface Treatment	Hot-dip galvanized or Aluminium-Zinc-Magnesium coated
Foundation	Concrete Foundation Ground Screw Foundation Pile Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years

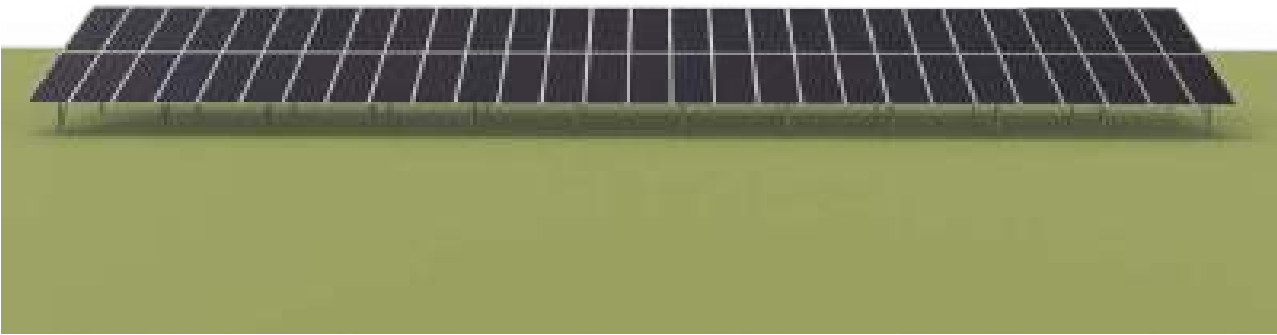


	
Purlin	Column
	
Beam	Brace
	
Support Beam Splice	Purlin Connector
	
Steel Rod Kits	Bolts kits

Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*35mm	Clearance	800mm
Module Power	540W	North-south Span	2619mm
Module Inclination (in degree)	25 deg	East-west Span	2850mm
Module arrangement	2 rows, 28 columns	Capacity	30240W
Number of installations	56 pcs	Maximum wind speed	28m/s

Arrangement



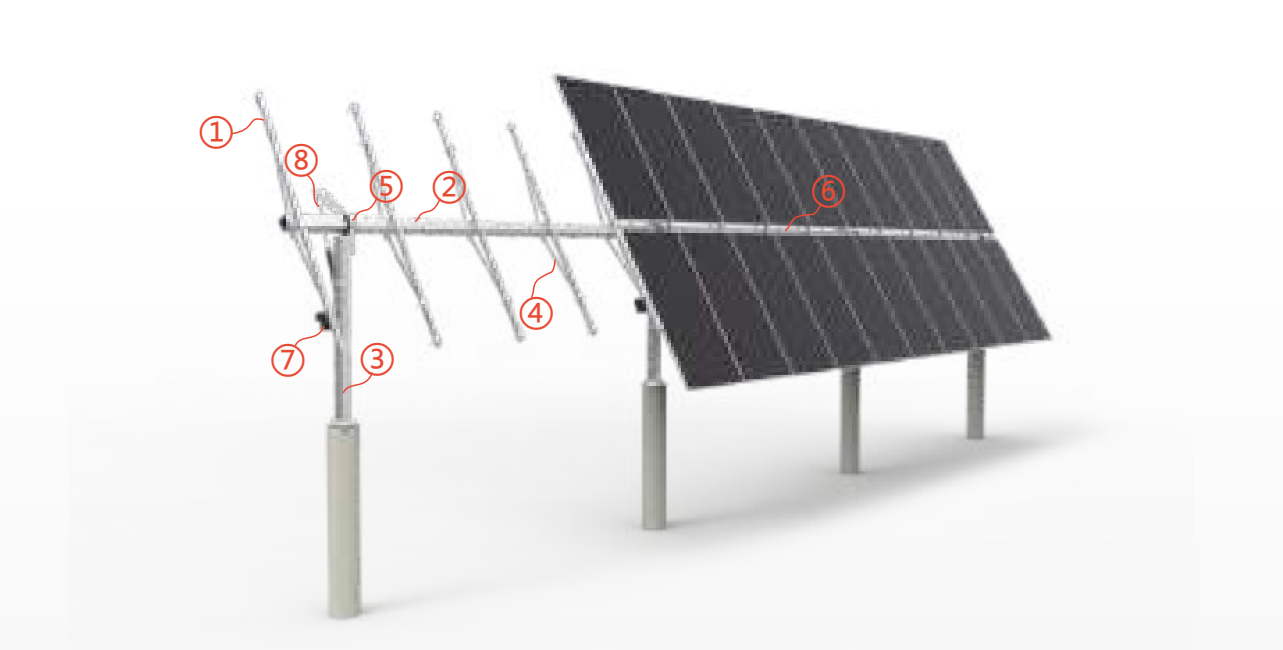
Component List

Description	Material	Specification	QTY
Column	Q355B	2559mm	12 pcs
Column	Q355B	4080mm	12 pcs
Beam	S420GD-ZM275	3730mm	12 pcs
Brace	S420GD-ZM275	1613mm	12 pcs
Brace	S420GD-ZM275	1859mm	12 pcs
Purlin	S420GD-ZM275	5500mm	8 pcs
Purlin	S420GD-ZM275	5690mm	12 pcs
Purlin	S420GD-ZM275	4292mm	4 pcs
Purlin Connector	Q235B	L80*40*3*210mm	20 pcs
Support Beam Splice	Q235B	L75*50*5*50mm	48 pcs
Support Chip	Q235B	100*150*4mm	24 pcs
Steel Rod	Q235B	φ10*3430mm	6 pcs
Semicircular Gasket	AL Q235B304	50*20*3*25mm	12 pcs
Bolts to Module	SUS304 ( A2-70 )	M8*20	224 pcs
Bolts kits	Class 8.8	M10*30	256 pcs
Bolts kits	Class 8.8	M12*40	120 pcs

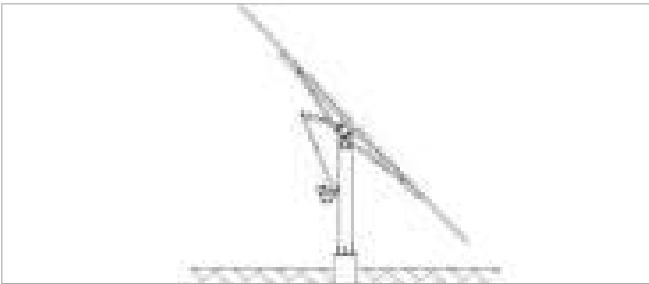










Adjustable Ground Mounting System

Portrait Placement ( Carbon steel )



Installation site	Ground
Inclination	5-55°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	Q355B, S350GD
Color	Silver or customized
Surface Treatment	Hot-dip galvanized Aluminium-Zinc-Magnesium coated
Foundation	Concrete Pre-buried Foundation C-shaped Pile Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years

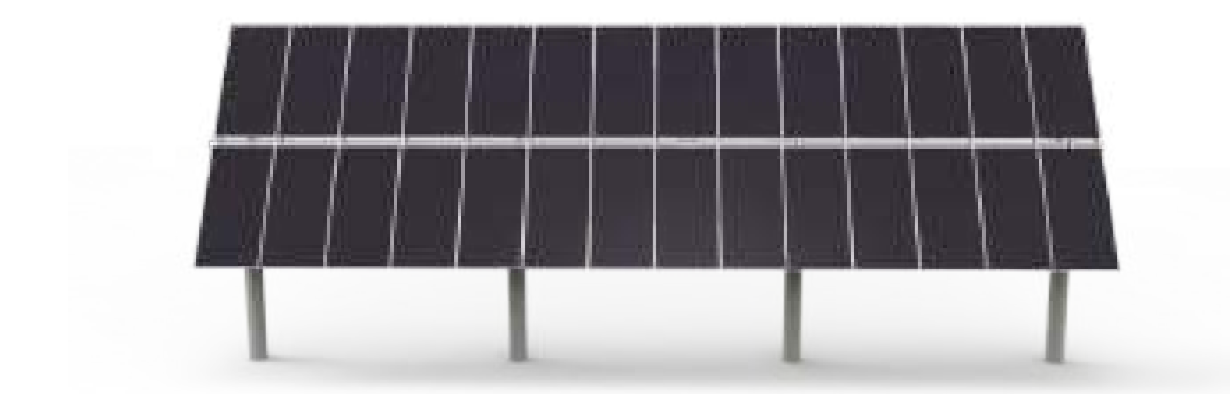


	
Purlin	Tube
	
Column	Brace
	
Bearing support	Tube Connector
	
Motor	Push Rod

Project Information

PV MODULE INFORMATION		DESIGN CONDITION	
Size	2278*1134*35mm	Clearance	500mm
Module Power	550W	North-south Span	/
Module Inclination (in degree)	5-55 deg	East-west Span	5000mm
Module arrangement	2 rows, 14 columns	Capacity	15400W
Number of installations	28 pcs	Maximum wind speed	60m/s

Arrangement



Component List

Description	Material	Specification	QTY
Column	Q355B	1800mm	4 pcs
Bearing support	Q355B	284*285*60mm	4 pcs
Bearing Cover	Q355B	R97.5*285*60mm	4 pcs
Tube Plastic Bearing	POM	122mm	8 pcs
Tube	S350GD-ZM275	9000mm	1 pcs
Tube	S350GD-ZM275	7250mm	1 pcs
Tube Connector	Q355B	300mm	2 pcs
Push Rod Arm	Q355B	600mm	4 pcs
Push Rod Base	Q355B	125*110*80mm	4 pcs
Push Rod Base	Q355B	58*110*80mm	4 pcs
Linear Actuator	-	Stroke Length 500mm	4 pcs
Purlin	S350GD-ZM275	2900mm	15 pcs
Brace	S350GD-ZM275	1100mm	30 pcs
Brace Connector	Q355B	200mm	15 pcs
Purlin Spacer	Q235B	180mm	15 pcs
Middle Plate	Q235B	84mm	52 pcs
Side Plate	Q235	40mm	8 pcs
Wireless Adjustment Tool	-	-	4 pcs
Inclinometer	-	-	1 pcs
Remote Control	-	-	1 pcs

**GS-SMART**

CARPORT MOUNTING SYSTEM

PV Mounting System Solution



Easy to assemble



Convenient  
maintenance



Safe and reliable



Nice appearance

**The first in China! Photovoltaic carport  
Aluminum alloy profiles obtained JIS H  
4100 certificate**

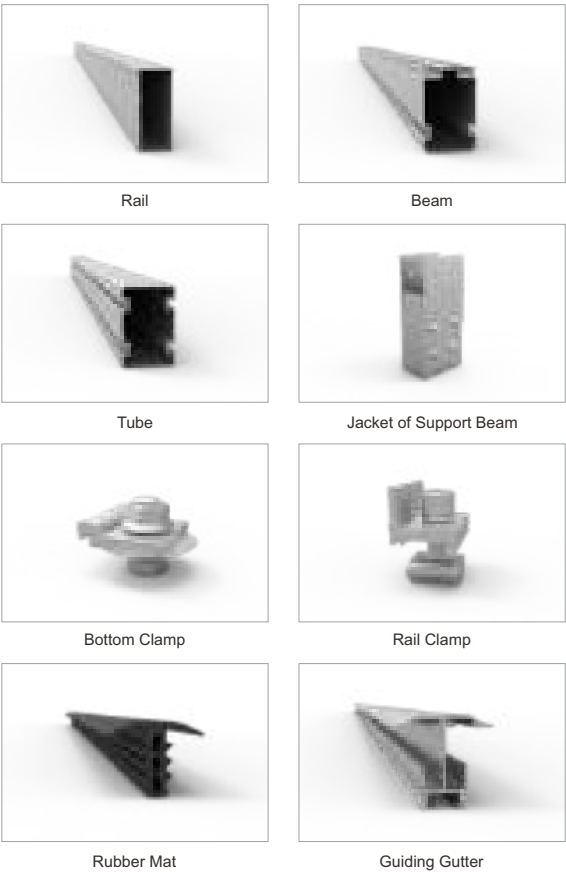
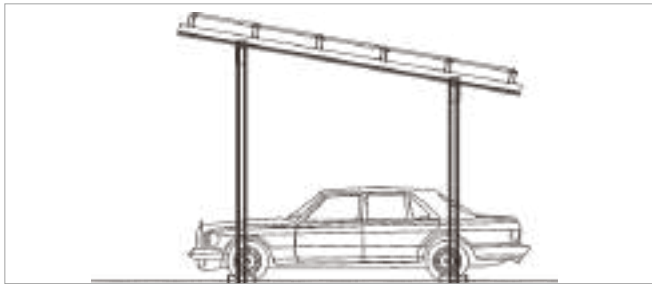


Type II Carport Mounting System

Aluminum alloy



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION		PV MODULE INFORMATION	
Size	1722*1134*30mm	Module Inclination (in degree)	5 deg
Module arrangement	5 rows, 7 columns	Module Power	415W
Number of installations	35 pcs	Capacity	14525W

Arrangement



Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	5300mm	12 pcs
Rail Splice	AL 6005-T5	500mm	6 pcs
Girder Clamp	AL 6005-T5&SUS 304	40mm	72 pcs
Inter Clamp	AL 6005-T5&SUS 304	30mm	56 pcs
End Clamp	AL 6005-T5&SUS 304	30mm	28 pcs
Beam	AL 6005-T5	4800mm	3 pcs
Jacket of Support Beam	AL 6005-T5&SUS 304	350mm	6 pcs
Tube	AL 6005-T5	3250mm	3 pcs
Tube	AL 6005-T5	3530mm	3 pcs
Support Beam Cap	Q235	100mm	6 pcs
T Roof 840	Cold Rolled Steel	5000mm	15 pcs
T Hex Screw kit	SUS 304	M10*35	24 pcs
Grounding Clip	SUS 304	34*34mm	24 pcs
Grounding Lug	AL 6005-T5 & SUS 304	20mm	6 pcs

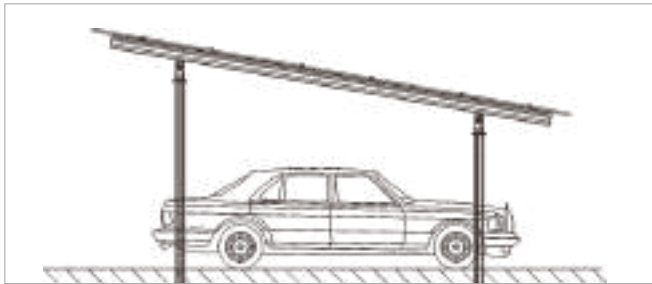


Double Column Waterproof Carport Mounting System

Aluminum alloy



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION	
Size	2278*1134*35mm
Module arrangement	3 rows, 10 columns
Number of installations	30 pcs

PV MODULE INFORMATION	
Module Inclination (in degree)	5 deg
Module Power	545W
Capacity	16350W

Arrangement



Component List

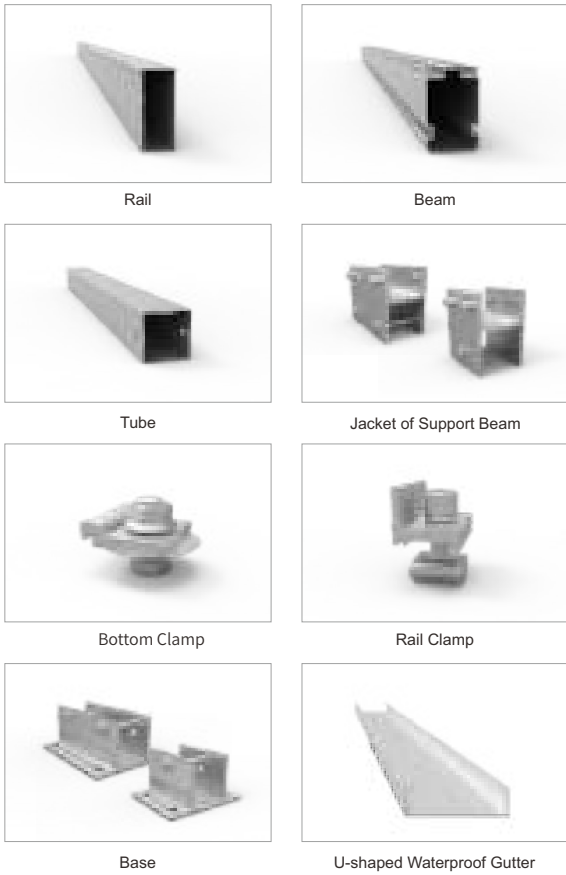
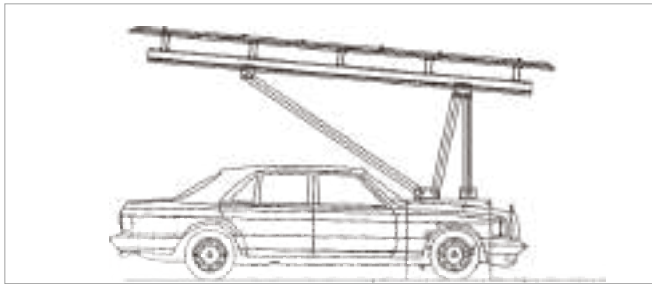
Description	Material	Specification	QTY
Waterproof Rail	AL 6005-T5	6300mm	11 pcs
U-shaped Waterproof Gutter	AL 6005-T5	1064mm	20 pcs
Rail Clamp	AL 6005-T5&SUS 304	40mm	88 pcs
Inter Clamp	AL 6005-T5&SUS 304	35mm	54 pcs
End Clamp	AL 6005-T5&SUS 304	35mm	12 pcs
Beam	AL 6005-T5	5900mm	4 pcs
Support Beam Splice	AL 6005-T5	300mm	4 pcs
Head Base	AL 6005-T5&SUS 304	90mm	6 pcs
Bottom Connector	AL 6005-T5&SUS 304	60mm	6 pcs
Open post	Q235	2700mm	3 pcs
Open post	Q235	3450mm	3 pcs
Grounding Clip	SUS 304	25*16*23mm	54 pcs
Grounding Lug	SUS 304	20mm	2 pcs

CAR Waterproof Carport Mounting System

Aluminum alloy



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION		PV MODULE INFORMATION	
Size	1722*1134*30mm	Module Inclination (in degree)	10 deg
Module arrangement	3 rows, 14 columns	Module Power	425W
Number of installations	42 pcs	Capacity	17850W

Arrangement



Component List

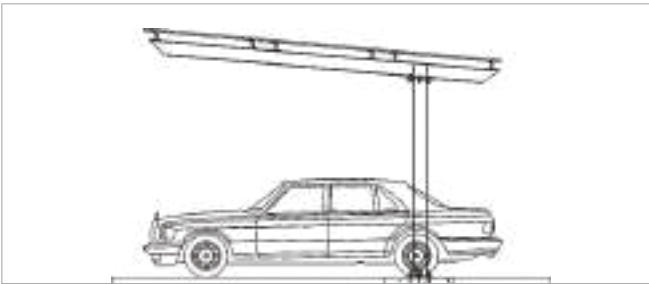
Description	Material	Specification	QTY
Rail	AL 6005-T5	5600mm	10 pcs
Rail	AL 6005-T5	5300mm	5 pcs
Rail Splice	AL 6005-T5	500mm	10 pcs
Waterproof Rail	AL 6005-T5	5300mm	15 pcs
U-shaped Waterproof Gutter	AL 6005-T5	1064mm	28 pcs
Bottom Clamp	AL 6005-T5&SUS 304	60mm	150 pcs
Inter Clamp	AL 6005-T5&SUS 304	30mm	78 pcs
End Clamp	AL 6005-T5&SUS 304	30mm	12 pcs
Rail Clamp	AL 6005-T5&SUS 304	40mm	80 pcs
D-Module	AL 6005-T5	20mm	170 pcs
Beam	AL 6005-T5	4800mm	4 pcs
Jacket 1#	AL 6005-T5&SUS 304	150mm	4 pcs
Jacket 2#	AL 6005-T5&SUS 304	220mm	4 pcs
Tube	AL 6005-T5	2670mm	4 pcs
Tube	AL 6005-T5	1310mm	4 pcs
Tube	AL 6005-T5	1260mm	4 pcs
Front and Bottom Base	AL 6005-T5&SUS 304	200mm/300mm	4 pcs
Grounding Clip	SUS 304	25*16*23mm	42 pcs
Grounding Lug	SUS 304	20mm	7 pcs

Single Column Carport Mounting System

Carbon steel



Installation site	Ground
Inclination	0-60°
Construction height	<9m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	Carbon steel & alloy steel
Color	Silver or customized
Surface Treatment	Hot-dip galvanized Aluminium-Zinc-Magnesium coated
Foundation	Concrete Foundation Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION		PV MODULE INFORMATION	
Size	1719*1134*30mm	Module Inclination (in degree)	5 deg
Module arrangement	3 rows, 5 columns	Module Power	415W
Number of installations	15 pcs	Capacity	6225W

Arrangement



Component List

Description	Material	Specification	QTY
H-shaped Steel Column	Q235B	2850mm	2 pcs
Base Plate	Q235B	370*125*25mm	2 pcs
T Roof	Q235B	370*125*25mm	2 pcs
Ribbed Plate	Q235B	100*50*10 mm	12 pcs
H-shaped Steel Beam	Q235B	5100mm	2 pcs
Ribbed Plate	Q235B	180*45*10mm	8 pcs
L Base	Q235B	110*70*6*100mm	12 pcs
Purlin	Q235B	6100mm	6 pcs



# GS-SMART

## FARM MOUNTING SYSTEM

PV Mounting System Solution



Easy to assemble



Convenient  
maintenance



Safe and reliable

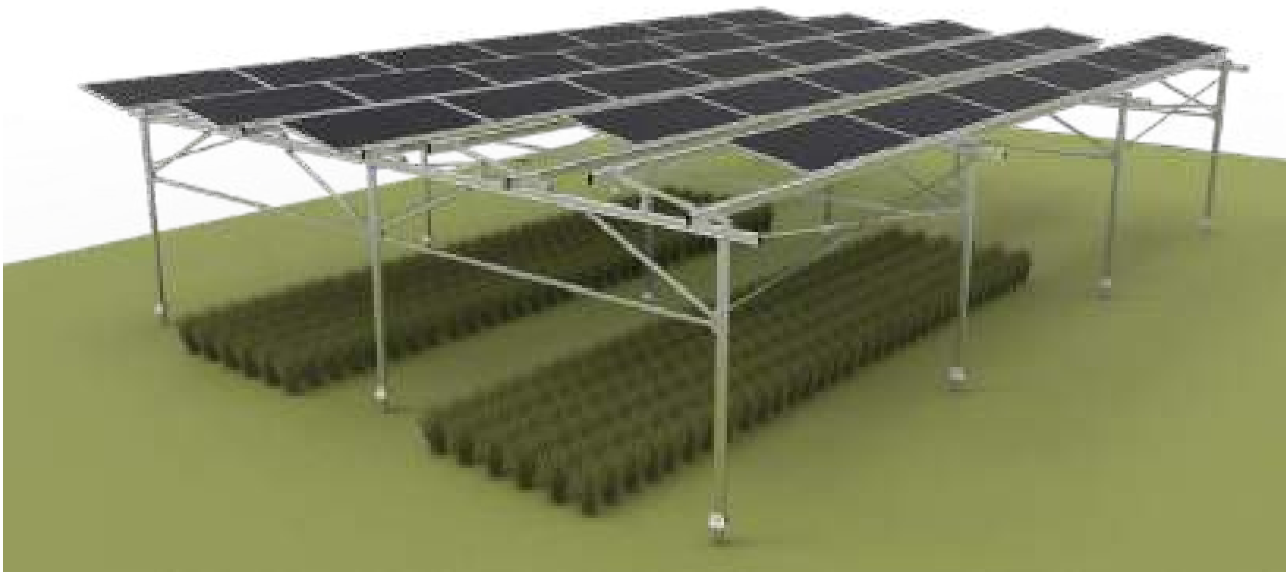


Nice appearance

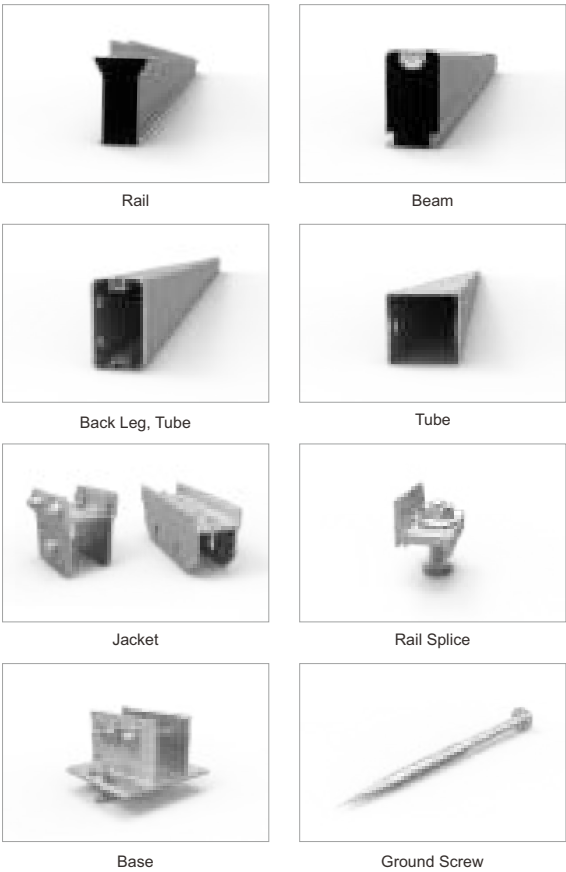
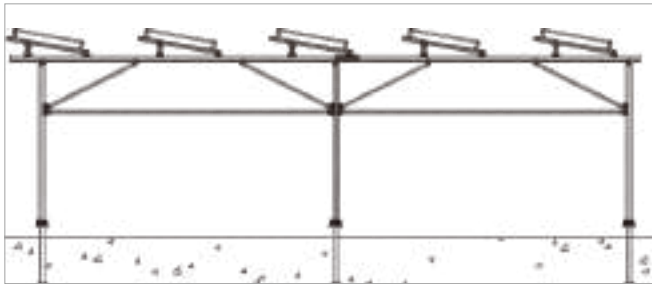
**HIGH EFFICIENCY  
HIGH QUALITY  
HIGH INCOME**

Flat Type Farm Mounting System

Aluminum alloy



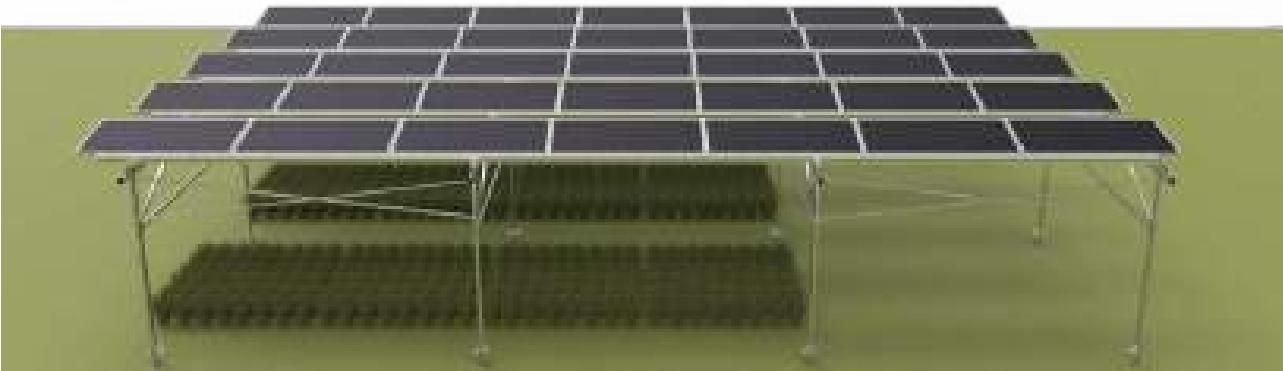
Installation site	Ground
Inclination	0-60°
Construction height	<4m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION		PV MODULE INFORMATION	
Size	2278*1134*35mm	Module Inclination (in degree)	10 deg
Module arrangement	5 rows, 7 columns	Module Power	555W
Number of installations	35 pcs	Capacity	19425W

Arrangement



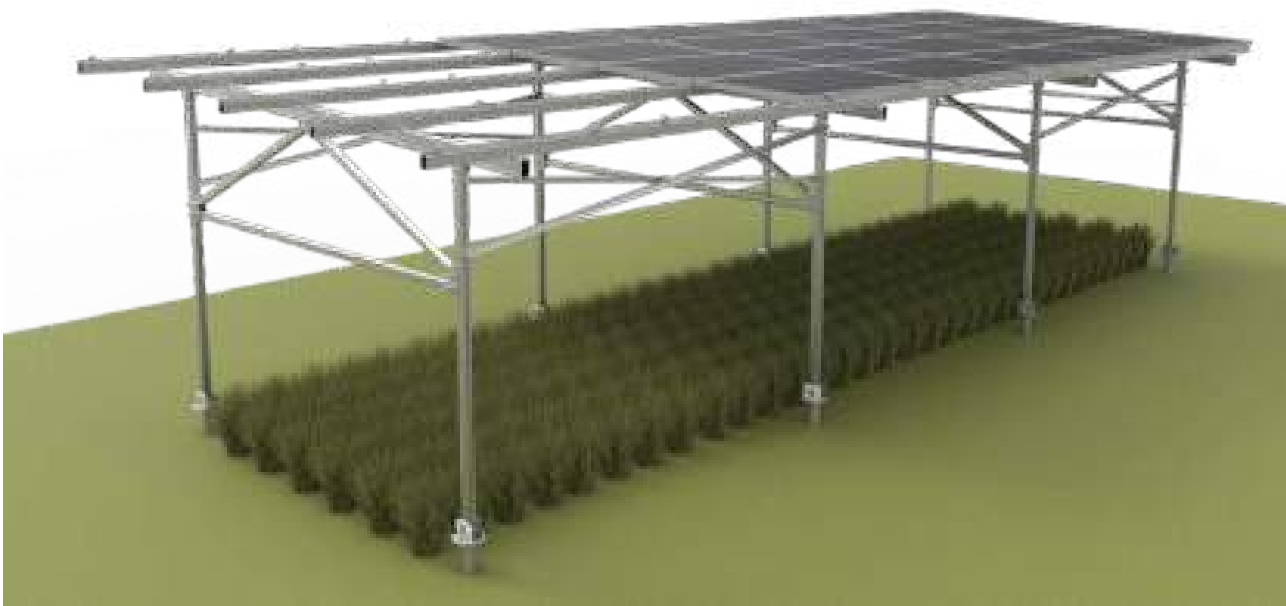
Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	5200 mm	20 pcs
Rail	AL 6005-T5	5000 mm	10 pcs
Rail Splice	AL 6005-T5	300 mm	20 pcs
Rail Clamp	AL 6005-T5&SUS 304	60 mm	80 pcs
End Clamp	AL 6005-T5&SUS 304	35 mm	140 pcs
Triangle Bracket	AL 6005-T5&SUS 304	10 mm	20 pcs
Jacket 1#	AL 6005-T5&SUS 304	80 mm	40 pcs
Beam	AL 6005-T5	5750 mm	4 pcs
Jacket 2#	AL 6005-T5&SUS 304	80 mm	12 pcs
Jacket 3#	AL 6005-T5&SUS 304	120 mm	16 pcs
Beam	AL 6005-T5	5000 mm	4 pcs
Support Beam Splice	AL 6005-T5	400 mm	4 pcs
Tube	AL 6005-T5	1700 mm	16 pcs
Tube	AL 6005-T5	4850 mm	8 pcs
Jacket 4#	AL 6005-T5	200 mm	16 pcs
Back Leg, Tube	AL 6005-T5	2740 mm	12 pcs
Bolts kits	SUS 304	M8*30	60 pcs
Base	AL 6005-T5&SUS 304	180 mm	12 pcs
Ground Screw	Q235	89*2000*T4*2	12 pcs
Al Angel Brace	AL 6005-T5	5060 mm	12 pcs
Module	AL 6005-T5	100*60*2*50	6 pcs
Grounding Clip	SUS 304	25*16*23	70 pcs
Grounding Lug	SUS 304	20 mm	5 pcs

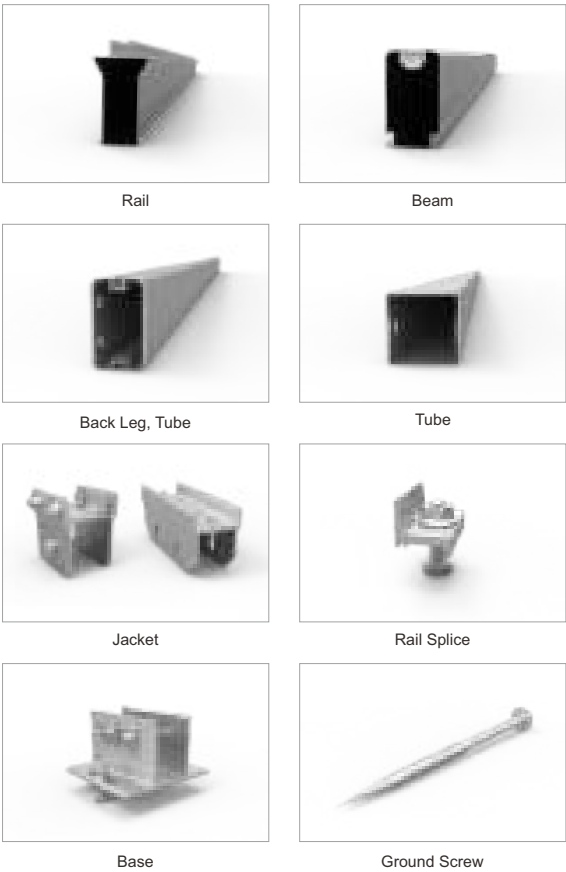
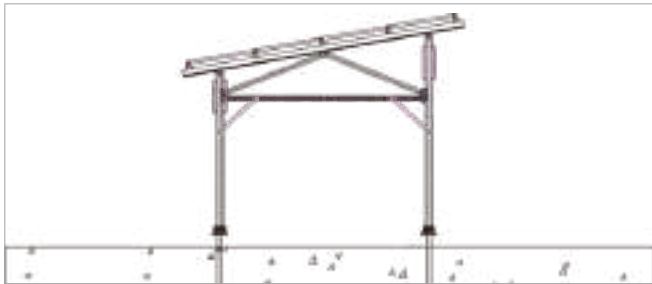


Slope Type Mounting System

Aluminum alloy



Installation site	Ground
Inclination	0-60°
Construction height	<4m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	High-strength aluminum alloy & A2-70
Surface Treatment	Anodizing or electrophoresis
Color	Silver or customized
Foundation	Concrete Foundation
	Ground Screw Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years



Project Information

PV MODULE INFORMATION	
Size	2278*1134*35mm
Module arrangement	4 rows, 7 columns
Number of installations	28 pcs

PV MODULE INFORMATION	
Module Inclination (in degree)	10 deg
Module Power	555W
Capacity	15540W

Arrangement



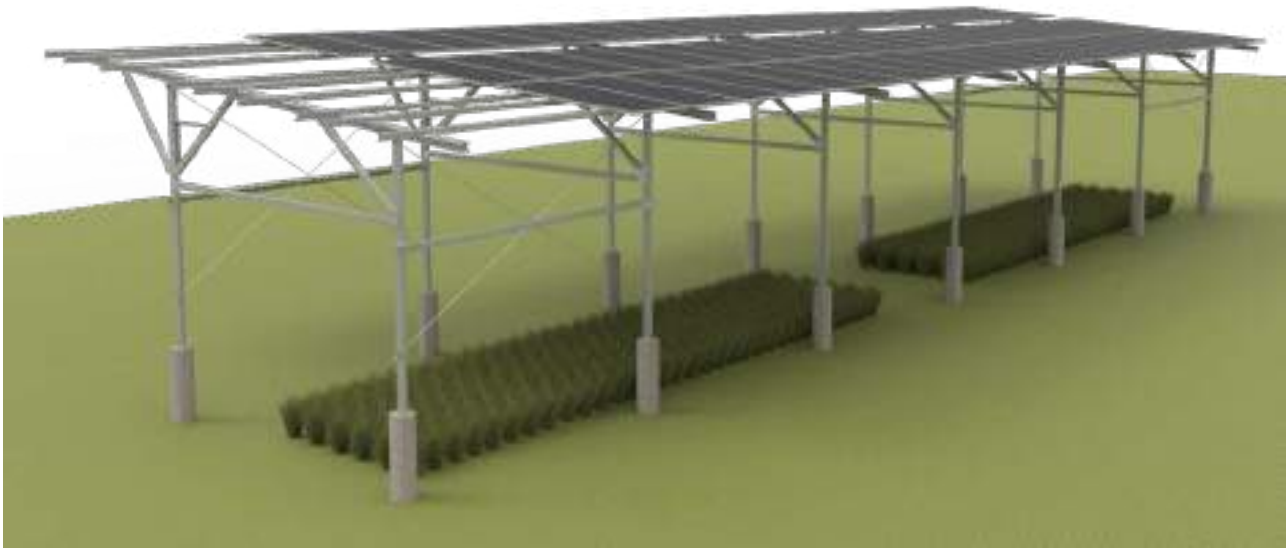
Component List

Description	Material	Specification	QTY
Rail	AL 6005-T5	5200 mm	10 pcs
Rail	AL 6005-T5	5000 mm	5 pcs
Splice	AL 6005-T5	300 mm	10 pcs
Rail Clamp	AL 6005-T5&SUS 304	60 mm	40 pcs
End Clamp	AL 6005-T5&SUS 304	35 mm	28 pcs
Inter Clamp	AL 6005-T5&SUS 304	35 mm	42 pcs
Beam	AL 6005-T5	5750 mm	4 pcs
Jacket 2#	AL 6005-T5&SUS 304	80 mm	8 pcs
Jacket 3#	AL 6005-T5&SUS 304	120 mm	4 pcs
Tube	AL 6005-T5	1700 mm	8 pcs
Tube	AL 6005-T5	4850 mm	4 pcs
Jacket 4#	AL 6005-T5	200 mm	8 pcs
Back Leg, Tube	AL 6005-T5	2740 mm	4 pcs
Back Leg, Tube	AL 6005-T5	3620 mm	4 pcs
Bolts kits	SUS 304	M8*30	24 pcs
Base	AL 6005-T5&SUS 304	180 mm	8 pcs
Ground Screw	Q235	89*2000*T4*2	8 pcs
Al Angel Brace	AL 6005-T5	5060 mm	8 pcs
Module	AL 6005-T5	100*60*2*50	4 pcs
Grounding Clip	SUS 304	25*16*23	42 pcs
Grounding Lug	SUS 304	20 mm	2 pcs

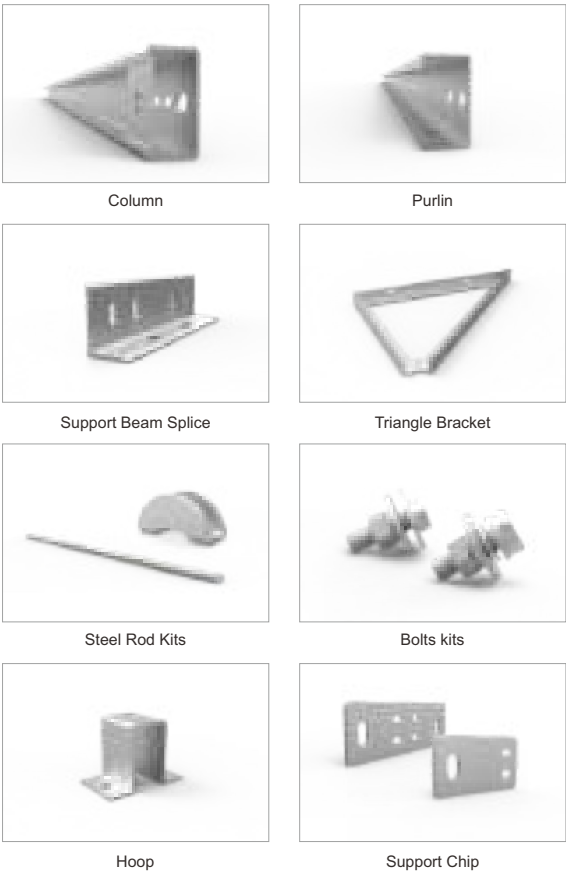


Slope Type Mounting System

Carbon steel



Installation site	Ground
Inclination	0-20°
Construction height	<4m
Maximum wind speed	<60m/s
Maximum snow cover	<200cm
Material	Carbon steel & Alloy steel
Color	Silver or customized
Surface Treatment	Hot-dip galvanized or Aluminium-Zinc-Magnesium coated
Foundation	Concrete Foundation Ground Screw Foundation Pile Foundation
Reference Standards	ASCE7-10   EN1991   AS/NZS1170   Other
Warranty	10 Years

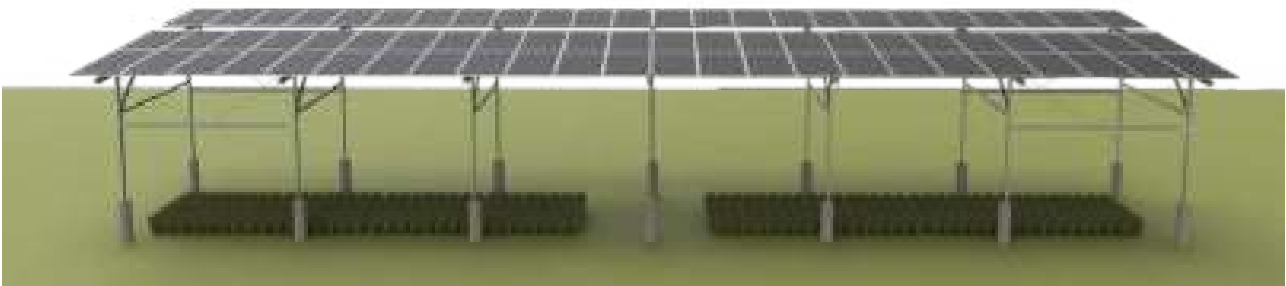


Project Information

PV MODULE INFORMATION	
Size	2384*1096*30mm
Module arrangement	3 rows, 24 columns
Number of installations	72 pcs

PV MODULE INFORMATION	
Module Inclination (in degree)	5 deg
Module Power	540W
Capacity	38880W

Arrangement

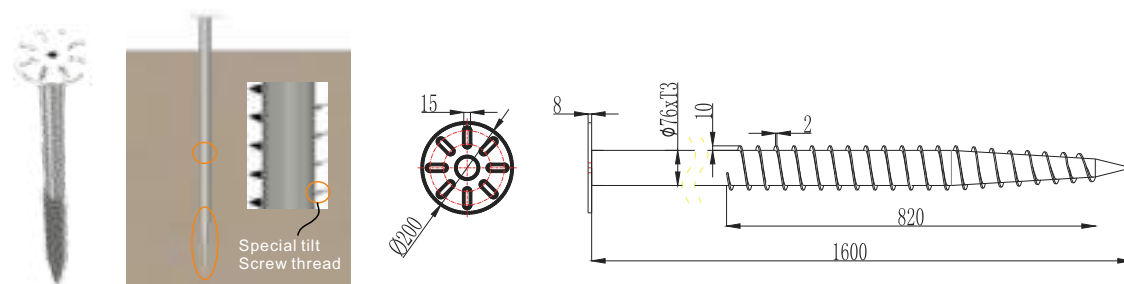


Component List

Description	Material	Specification	QTY
Column	Q235B	4515mm	7 pcs
Column	Q235B	4903mm	7 pcs
Beam	S420GD-ZM350	7500mm	14 pcs
Brace	S420GD-ZM350	1740mm	21 pcs
Brace	S420GD-ZM350	4264mm	7 pcs
Purlin	S420GD-ZM350	4960mm	20 pcs
Purlin	S420GD-ZM350	4230mm	40 pcs
Support Beam Splice	Q235B	L75*50*T5*280mm	63 pcs
Support Chip	Q235B	100*310*6mm	7 pcs
Support Chip	Q235B	100*180*6mm	21 pcs
Steel Rod	Q235B	φ 10*4440mm	8 pcs
Semicircular Gasket	Q235B	50*20*3.0*25mm	16 pcs
Hoop	Q235B	U170*120*53.25*5.0*100mm	8 pcs
Hot Rolled Angle Steel	Q235B	L100*63*6.0*280mm	8 pcs
Support Brace	S420GD-ZM350	C80*40*15*2.0*4020mm	4 pcs
Triangle Bracket	Q235B	L50*50*T4	7 pcs
Bolts kits	SUS 316	M6*25	144 pcs
Bolts kits	SUS 316	M8*25	288 pcs
Bolts kits	SUS 316	M10*35	654 pcs
Bolts kits	SUS 316	M20x45	35 pcs
Bolts kits	SUS 316	M20x110	35 pcs

## GS-Smart Ground Mounting System Solution

### Ground Screw



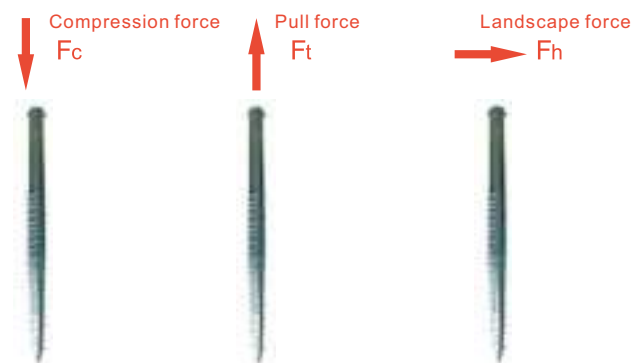
The conical shape ensures the safety and stability of the ground screw.

#### • Product introduction

GS ground screw is a new foundation in the ground mounting system for solar power generation, because it is widely adopted for environmental protection. The installation is convenient, the installation time is shortened, and the construction cost is greatly saved. It uses a special inclined screw tooth design to ensure its safety and stability.

#### • Product parameter

- Number: GS-F76C-1600-T3
- Material: Iron. IS0630 Fe360A
- Surface treatment: Galvanized ISO 1461
- Length: 1600mm
- External diameter: 76mm
- Internal diameter: 70mm
- Flange diameter: 200mm



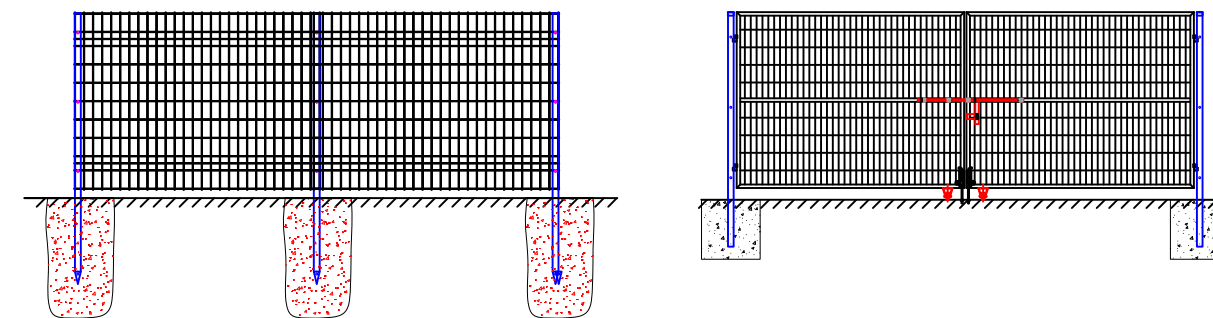
Number	Pipe diameter mm	Pipe thickness mm	Fc KN	Ft KN	Fh KN
GS-76C-1600-T3	76	3.0	32	20	8.5

- The length of the numbered ground screw can be customized.
- Commonly used ground screw lengths are : 1200mm, 1600mm, 1800mm, 2000mm, 2500mm.



## GS-Smart Ground Mounting System Solution

### Fence and Gate



#### • Description

- Legal regulations: Japanese laws require that power plants with a capacity of 50KW or more must be fenced.
- Anti-crime countermeasures and insurance requirements: The insurance costs for the presence or absence of fences are different.
- Prevent accidents caused by children intruding nearby: the combiner box may cause electric shock.

#### • Advantages

- It can be installed not only on flat terrain, but also on terrain with a certain angle.
- As a simple protective fence, it has obvious advantages in strength, durability and ease of construction, ensuring the best quality. The cost can also control low cost.
- In the field of ground solar power generation, it is selected by many megawatt-level cases.
- Directly buried, concrete foundation and ground screw foundation are available.
- The fence door is a pre-assembled finished product, which eliminates complicated assembly operations on site.





**GS-ENERGY**

ROOF MOUNTING SYSTEM

PV Mounting System Solution

**SELF-SUFFICIENCY,  
SURPLUS POWER GRID CONNECTED  
TO GENERATE INCOME**



Easy to assemble



Convenient  
maintenance



Safe and reliable



High durability



Tile Roof Mounting System

Solar Roof Mounting System

The GS Tile Roof Mounting System Solution is designed for a wide range of roofs, including asphalt shingle, slate tiles and Roman concrete roof tile. Grace designs different types of hooks for different styles of roof tiles. When installing the system, the hooks are fixed on the purlins by bolting (drilling) or clamping (no drilling), and then rails are installed to support the solar panels to form a photovoltaic roof system. By adjusting the span of the hook, it can resist different wind and snow loads and has great flexibility. Moreover, the overall construction is easy and low maintenance costs.

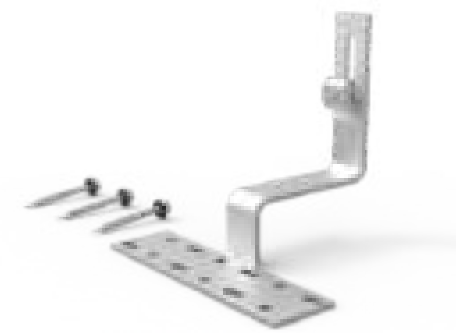
Installation site	Residential Roof		
Angle	Parallel roof ( 10-60deg )	Material	High-strength aluminum alloy & Stainless steel
Building height	Below 20m	Color	Silver or customized
Maximum wind speed	<60m/s	Surface treatment	Anodizing & Stainless steel
Maximum snow cover	<1.4KN/m <sup>2</sup>	Quality assurance	10-year quality assurance
Reference standards	AS/NZS 1170 & EN1991 & Other	Usage time	More than 20 years



● Pitched Roof ( Residential Roof )

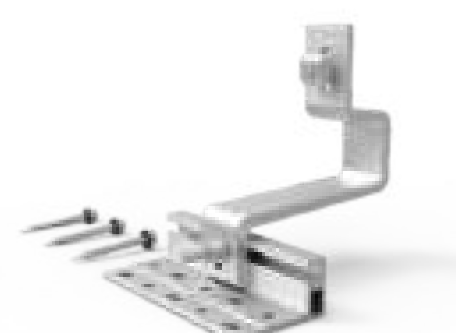


The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-01

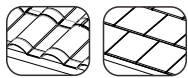
Item No.	Description	Size(mm)	Package
GS-IK-01	Stainless Steel Hook 1# Kit	166*105*30*5	10 kits/box 4 boxes/CTN
GS-IK-01-ND	Stainless Steel Hook 1# Kit (without tilt module)	166*105*30*5	10 kits/box 4 boxes/CTN



GS-AIK-01

Item No.	Description	Size(mm)	Package
GS-AIK-01	Aluminum Roof Hook 1# Kit	188*150*173	12 kits/box 4 boxes/CTN

● Pitched Roof ( Residential Roof )



The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.

Note: Products can be customized according to the project needs.



GS-IK-02

Item No.	Description	Size(mm)	Package
GS-IK-02	Stainless Steel Hook 2# Kit	286*166*30*5	30 kits/box 2# 2 boxes 2#/CTN
GS-IK-02-ND	Stainless Steel Hook 2# Kit (without tilt module)	286*166*30*5	30 kits/box 2# 2 boxes 2#/CTN



GS-IK-02-A

Item No.	Description	Size(mm)	Package
GS-IK-02-A	Stainless Steel Hook 2# A type	317.5*167*30*5	10 kits/box 2# 2 boxes 2#/CTN

● Pitched Roof ( Residential Roof )



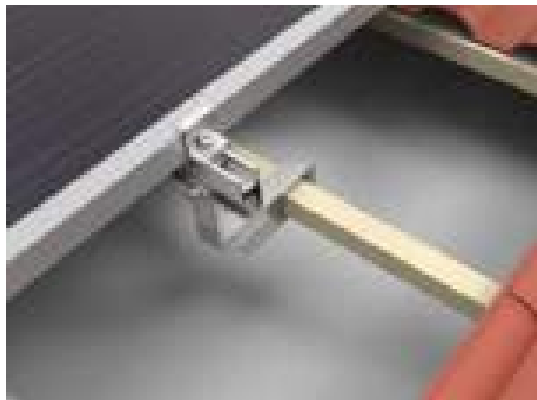
The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.

Note: Products can be customized according to the project needs.



GS-IK-02-C

Item No.	Description	Size(mm)	Package
GS-IK-02-C	Stainless Steel Hook 2# C type	286*166*30*5	30 kits/box 2# 2 boxes 2#/CTN



GS-AIK-02

Item No.	Description	Size(mm)	Package
GS-AIK-02-ST	Aluminum Roof Hook 2# Kit (with self tapping screw)	168*40	10 kits/box 4 boxes/CTN
GS-AIK-02	Aluminum Roof Hook 2# Kit	168*40	10 kits/box 4 boxes/CTN

● Pitched Roof ( Residential Roof )



The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.

Note: Products can be customized according to the project needs.



GS-IK-04

Item No.	Description	Size(mm)	Package
GS-IK-04	Stainless Steel Hook 4# Kit	200*120*30	20 kits/box 4 boxes/CTN



GS-IK-04-A

Item No.	Description	Size(mm)	Package
GS-IK-04-A	Stainless Steel Hook 4# A type	225*115*30*5	10 kits/box 4 boxes/CTN

● Pitched Roof ( Residential Roof )



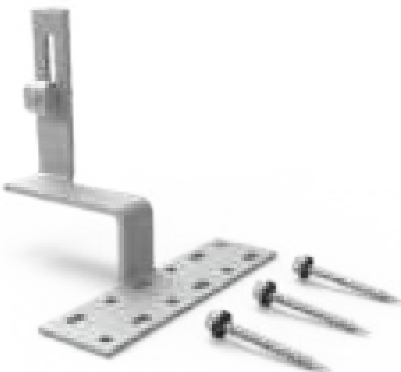
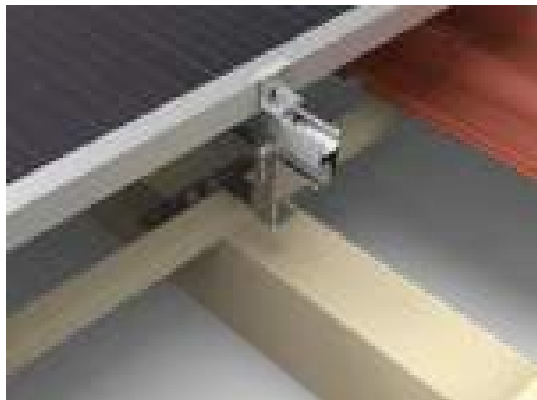
The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.

Note: Products can be customized according to the project needs.



GS-IK-04-C

Item No.	Description	Size(mm)	Package
GS-IK-04-C	Stainless Steel Hook 4# B type	200*120*30	10 kits/box 4 boxes/CTN



GS-IK-06

Item No.	Description	Size(mm)	Package
GS-IK-06	Stainless Steel Hook 6# Kit	166*105*30*5	10 kits/box 4 boxes/CTN



● Pitched Roof ( Residential Roof )



The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-12

Item No.	Description	Size(mm)	Package
GS-IK-12	Stainless Steel Hook 12# Kit	166*105*30*5	10 kits/box 4 boxes/CTN



GS-IK-14

Item No.	Description	Size(mm)	Package
GS-IK-14	Stainless Steel Hook 14# Kit	259*105*30*5	10 kits/box 4 boxes/CTN

● Pitched Roof ( Residential Roof )

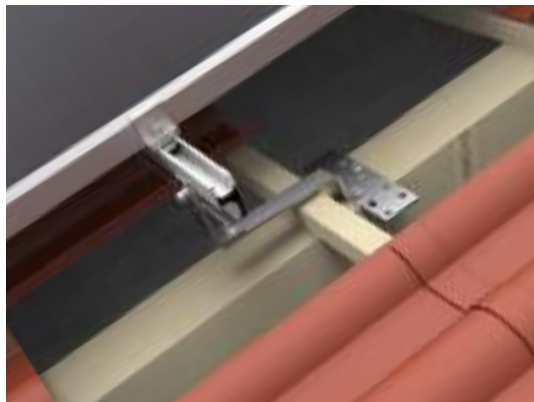


The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-15

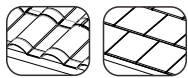
Item No.	Description	Size(mm)	Package
GS-IK-15	Adjustable Stainless Steel Hook 15# Kit	165.5*147*140	10 kits/box 4 boxes/CTN



GS-IK-16

Item No.	Description	Size(mm)	Package
GS-IK-16	Stainless Steel Hook 16# Kit	220*180*153	8 kits/box 4 boxes/CTN

● Pitched Roof ( Residential Roof )



The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-ER-S01

Item No.	Description	Size(mm)	Package
GS-ER-S01	ER Stainless Hook 1# Kit	140*165*132	5 kits/box 4 boxes/CTN



GS-ER-S02

Item No.	Description	Size(mm)	Package
GS-ER-S02	ER Stainless Hook 2# Kit	170*158	5 kits/box 4 boxes/CTN

● Pitched Roof ( Residential Roof )

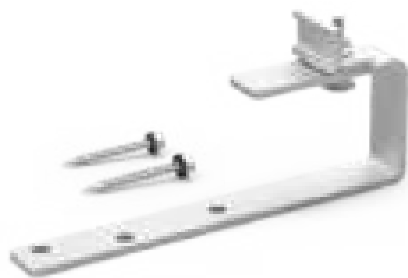


The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-ER-S03

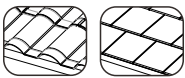
Item No.	Description	Size(mm)	Package
GS-ER-S03	ER Stainless Hook 3# Kit	139.5*162.5	10 kits/box 4 boxes/CTN



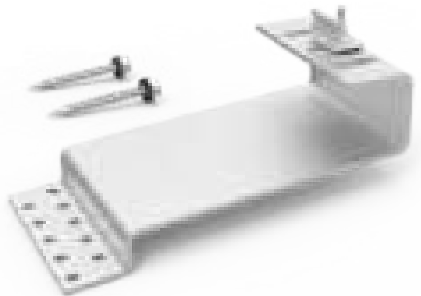
GS-ER-S04

Item No.	Description	Size(mm)	Package
GS-ER-S04	ER Stainless Hook 4# Kit	30*235*75	15 kits/box 4 boxes/CTN

● Pitched Roof ( Residential Roof )



The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-ER-S05

Item No.	Description	Size(mm)	Package
GS-ER-S05	ER Stainless Hook 5# Kit	136*290	5 kits/box 2# 2 boxes 2#/CTN



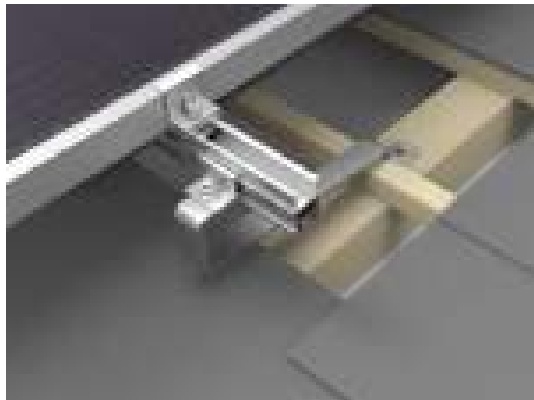
GS-ER-S06

Item No.	Description	Size(mm)	Package
GS-ER-S06	ER Stainless Hook 6# Kit	30*60*135	5 kits/box 2# 2 boxes 2#/CTN

● Pitched Roof ( Residential Roof )



The GS Tile Roof hook series are suitable for building roofs with different tile types (asphalt shingle, slate and Roman concrete roof etc), thicknesses, shapes and purlin structures, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-ER-S07

Item No.	Description	Size(mm)	Package
GS-ER-S07	ER Stainless Hook 7# Kit	30*315*125	18 kits/box 2# 2 boxes 2#/CTN



GS-ER-S08

Item No.	Description	Size(mm)	Package
GS-ER-S08	ER Stainless Hook 8# Kit	30*240*132	24 kits/box 2# 2 boxes 2#/CTN



Tin Roof Mounting System

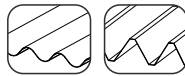
Solar Roof Mounting System

The GS Metal Roof Mounting System is suitable for trapezoidal, corrugated and other metal roofs. Grace can provide different types of clamping solutions according to project requirements. The brackets are installed by fixing the clamps on the purlins or fixing the clamps with metal. Rail and Rail-less solutions are available for different loads, and spans are adjusted by metal type to meet different project requirements. Applied to common aluminium framed and frameless solar panels, parallel mounted on sloping roofs. Raise and angle adjustments are available for special demands. Construction is economical and convenient for the design and planning of commercial and industrial rooftop solar systems.

Installation site	Commercial roof		
Angle	Parallel roof ( 10-60deg )	Material	High-strength aluminum alloy & Stainless steel
Building height	Below 20m	Color	Silver or customized
Maximum wind speed	<60m/s	Surface treatment	Anodizing & Stainless steel
Maximum snow cover	<1.4KN/m <sup>2</sup>	Quality assurance	10-year quality assurance
Reference standards	AS/NZS 1170 & EN1991 & Other	Usage time	More than 20 years



● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.

Note: Products can be customized according to the project needs.



GS-IK-05-ST

Item No.	Description	Size(mm)	Package
GS-IK-05-ST	Aluminum Tin interface Kit 5#	80*40*40*7	50 kits/box 4 boxes/CTN
GS-IK-05-ST-AR	Aluminum Tin interface Kit 5# (with Arc rubber pad)	80*40*40*7	50 kits/box 4 boxes/CTN



GS-IK-05-ST-GD

Item No.	Description	Size(mm)	Package
GS-IK-05-ST-GD	Aluminum Tin interface Kit 5# (with D-module)	40*80	36 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-H01-AL

Item No.	Description	Size(mm)	Package
GS-IK-H01-AL	Hanger Bolt Hook 1#	M10*200	20 kits/box 4 boxes/CTN



GS-IK-H04

Item No.	Description	Size(mm)	Package
GS-IK-H04	Hanger Bolt Hook 4#	M10*200	20 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-H06

Item No.	Description	Size(mm)	Package
GS-IK-H06	Hanger Bolt Hook 6#	M12*200	20 kits/box 4 boxes/CTN



GS-IK-L155-ST

Item No.	Description	Size(mm)	Package
GS-IK-L155-ST	Aluminum Tin interface Kit 5# (155mm)	155*40*40*8	50 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-UTK-01

Item No.	Description	Size(mm)	Package
GS-UTK-01	Universal Trapezoid Metal Roof Hook 1#	80*80*41	25 kits/box 4 boxes/CTN



GS-IK-07

Item No.	Description	Size(mm)	Package
GS-IK-07	Stainless Steel Hook 7#	100*66*4	40 kits/box 2 boxes/CTN 2#

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-07-A

Item No.	Description	Size(mm)	Package
GS-IK-07-A	Stainless Steel Hook 7# A	100*66*4	40 kits/box 2 boxes/CTN 2#



GS-IK-07-B

Item No.	Description	Size(mm)	Package
GS-IK-07-B	Stainless Steel Hook 7# B	100*66*4	40 kits/box 2 boxes/CTN 2#



● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS01-IK-A07

Item No.	Description	Size(mm)	Package
GS01-IK-A07-G024	7# AL-Hook 90	90	30 kits/box 4 boxes/CTN
GS02-IK-A07-G024	7# AL-Hook 90	90	30 kits/box 4 boxes/CTN



GS-IK-A07

Item No.	Description	Size(mm)	Package
GS-IK-A07	7# AL-Hook	90	30 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-TIK-A01

Item No.	Description	Size(mm)	Package
GS-TIK-A01	Trapezoid Metal Roof Hook	100*100*49	16 kits/box 4 boxes/CTN



GS-TIK-08

Item No.	Description	Size(mm)	Package
GS-TIK-08	Trapezoid Metal Roof Hook	80*122*147*5	6 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.

Note: Products can be customized according to the project needs.



GS-JIK-WG19

Item No.	Description	Size(mm)	Package
GS-JIK-WG19	Colar Plate Hook	100*100	4 kits/box 4 boxes/CTN



GS-TIK-09

Item No.	Description	Size(mm)	Package
GS-TIK-09	Trapezoid Metal Roof Hook #9	60*200*5	12 kits/box 4 boxes/CTN
GS-TIK-10	Trapezoid Metal Roof Hook #10	78*200*5	12 kits/box 4 boxes/CTN
GS-TIK-11	Trapezoid Metal Roof Hook #11	88*200*5	12 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



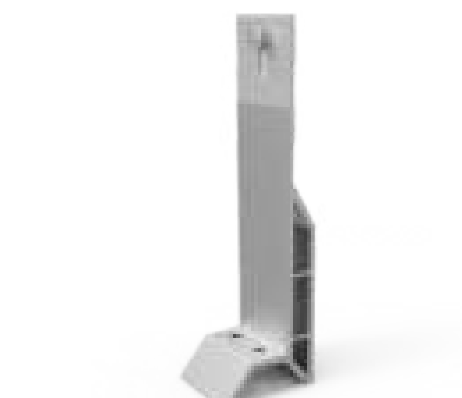
The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.

Note: Products can be customized according to the project needs.



GS-TIK-L01-20HA2

Item No.	Description	Size(mm)	Package
GS-TIK-L01-20HA2	Trapezoid Metal Roof L-type Hook (with 20μm Composite film thickness +sus304 bolt)	60	12 kits/box 4 boxes/CTN



GS-TIK-L02-20HA2

Item No.	Description	Size(mm)	Package
GS-TIK-L02-20HA2	Trapezoid Metal Roof L-type+ Concave shape Hook (with 20μm Composite coating +sus304 bolt)	60	12 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.

Note: Products can be customized according to the project needs.



GS-UIK-A01

Item No.	Description	Size(mm)	Package
GS-UIK-A01	R Flat Hook 800mm	40	76 kits/box 4 boxes/CTN



GS-TKT-01

Item No.	Description	Size(mm)	Package
GS-TKT-01	Adjustable Trapezoidal Hook	50	90 kits/box 4 boxes/CTN
GS-TKT-L-50	Trapezoidal Adjustable Hook 50mm + L feet	39	18 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.

Note: Products can be customized according to the project needs.



GS-WIK-A01

Item No.	Description	Size(mm)	Package
GS-WIK-A01	Corrugated roof Hook 1# (AL)	45	40 kits/box 4 boxes/CTN



GS-IK-UR-01

Item No.	Description	Size(mm)	Package
GS-IK-UR-01	UR Flat Hook	200*28*30	50 kits/box 4 boxes/CTN
GS-IK-UR-02	R Flat Hook 400mm(with 4 self-tapping screw and pads)	400*28*30	50 kits/box 2# 2 boxes 2#/CTN



● Pitched Roof ( Industry · Commercial Roof )

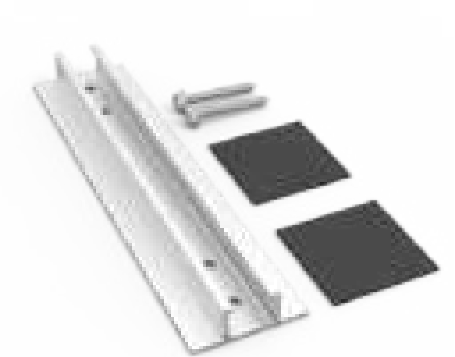


The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-FR-ST

Item No.	Description	Size(mm)	Package
GS-IK-FR-ST	FB Rail Hook	120*60*21.2	40 kits/box 4 boxes/CTN



GS-IK-FR-02-60RP

Item No.	Description	Size(mm)	Package
GS-IK-FR-02-60RP	FB Rail Hook Kit 2#	250*60*21.2	25 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series are suitable for various trapezoidal, corrugated and other metal roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-FR2-A

Item No.	Description	Size(mm)	Package
GS-IK-FR2-A	Rail Bracket	250*80*70	4 kits/box 4 boxes/CTN



GS-IK-FR-03-60RP

Item No.	Description	Size(mm)	Package
GS-IK-FR-03-60RP	FB Rail Hook Kit 3#	250*60*71.2	10 kits/box 4 boxes/CTN

Standing Seam Roof Mounting System

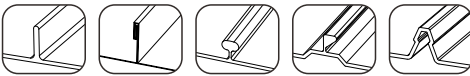
Solar Roof Mounting System

The GS Metal Roof Mounting System (no drilling) is suitable for metal roofs such as standing seam roofs, and Grace can provide different types of fixture solutions based on project needs, allowing great flexibility in selection. The brackets are installed by fixing the clamps with metal. In addition, for different loads, Grace provides two solutions - rail and rail-less to choose from. During installation, the span can be adjusted according to the metal type to adapt to different project requirements. This system applies common aluminum frame and frameless solar panels, mounted parallel to pitched roofs. Elevation and angle adjustments can also be accepted under special needs. The construction is economical and convenient, and it is suitable for the design and planning of industrial and commercial rooftop solar systems.

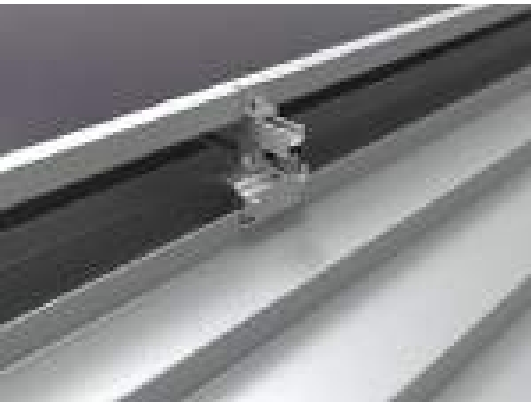
Installation site	Commercial roof		
Angle	Parallel roof ( 10-60deg )	Material	High-strength aluminum alloy & Stainless steel
Building height	Below 20m	Color	Silver or customized
Maximum wind speed	<60m/s	Surface treatment	Anodizing & Stainless steel
Maximum snow cover	<1.4KN/m <sup>2</sup>	Quality assurance	10-year quality assurance
Reference standards	AS/NZS 1170 & EN1991 & Other	Usage time	More than 20 years



● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series metal roofs such as standing seam roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-S01

Item No.	Description	Size(mm)	Package
GS-IK-S01	Stand Seam Roof Hook 1#	110	15 kits/box 4 boxes/CTN



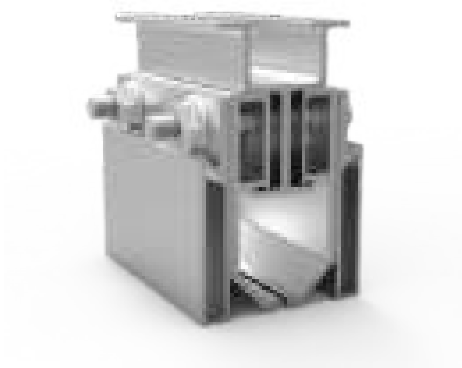
GS-SIK-A01

Item No.	Description	Size(mm)	Package
GS-SIK-A01	Stand Seam Universal Tin roof Hook #1	38.2*38.2*60	30 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )

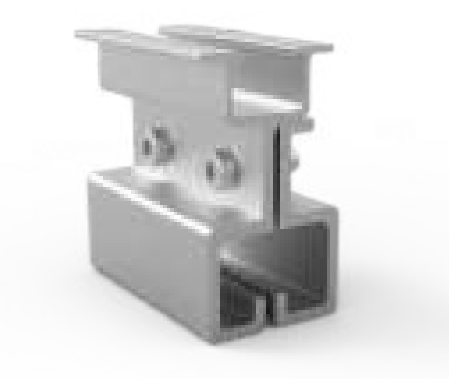


The GS Metal Roof clamp series metal roofs such as standing seam roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-JIK-L01

Item No.	Description	Size(mm)	Package
GS-JIK-L01	JIK#1 Roof Hook	80*86.5*45	15 kits/box 4 boxes/CTN



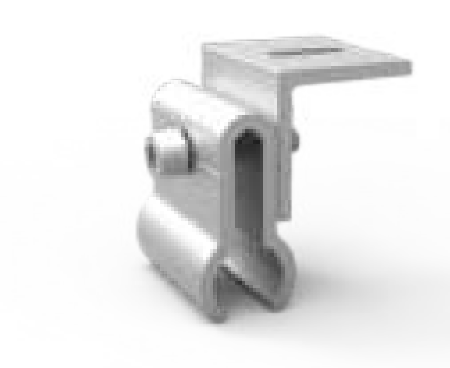
GS-JIK-S01

Item No.	Description	Size(mm)	Package
GS-JIK-S01	Stand Seam Roof Hook	80	15 kits/box

● Pitched Roof ( Industry · Commercial Roof )

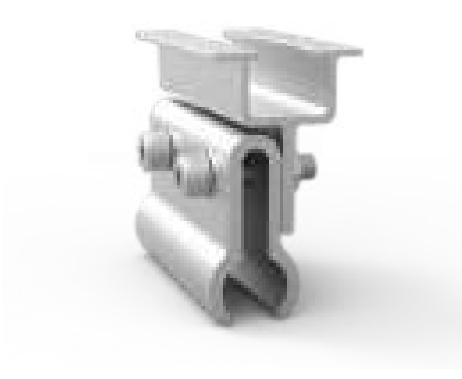


The GS Metal Roof clamp series metal roofs such as standing seam roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-S02

Item No.	Description	Size(mm)	Package
GS-IK-S02	Stand Seam Roof Hook 2#	50	20 kits/box 4 boxes/CTN



GS-IK-S02-A

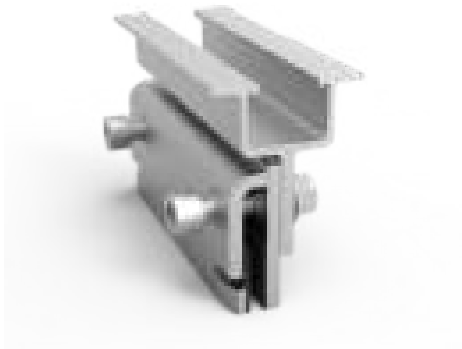
Item No.	Description	Size(mm)	Package
GS-IK-S02-A	Stand Seam Roof Hook 2# A type	80	15 kits/box 4 boxes/CTN



● Pitched Roof ( Industry · Commercial Roof )

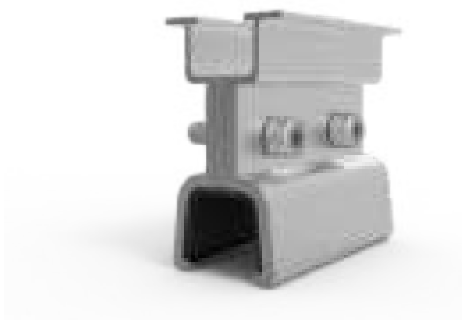


The GS Metal Roof clamp series metal roofs such as standing seam roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-S04

Item No.	Description	Size(mm)	Package
GS-IK-S04	Stand Seam Roof Hook 4#	110	15 kits/box 4 boxes/CTN



GS01-IK-S07-A

Item No.	Description	Size(mm)	Package
GS01-IK-S07-A	Standing Seam Roof Hook S07-A	45*53*80	20 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )

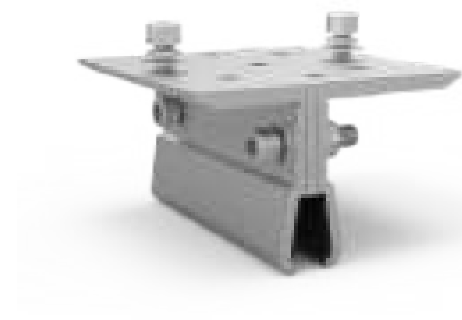
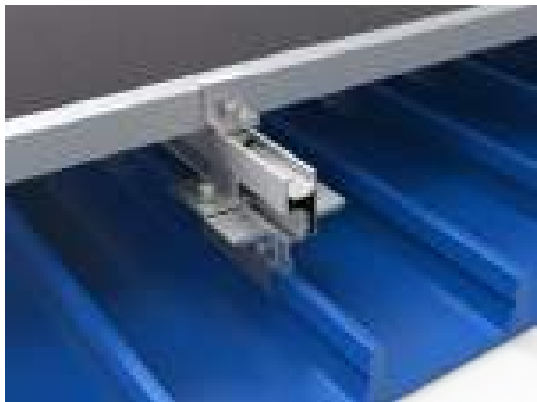


The GS Metal Roof clamp series metal roofs such as standing seam roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS01-IK-S11-A

Item No.	Description	Size(mm)	Package
GS01-IK-S11-A	Kliplock clamp (35mm width, 80mm length + smaller rail)	35*80	18 kits/box 4 boxes/CTN



GS-IK-SK7-110

Item No.	Description	Size(mm)	Package
GS-IK-SK7-110	Stand Seam Roof Hook K7 (with bolt kits)	110	10 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series metal roofs such as standing seam roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-IK-S08

Item No.	Description	Size(mm)	Package
GS-IK-S08	New Kliplok700 Roof Hook	60	30 kits/box 4 boxes/CTN



GS-IK-S09

Item No.	Description	Size(mm)	Package
GS-IK-S09	New Kliplok 406Roof Hook406	60	30 kits/box 4 boxes/CTN

● Pitched Roof ( Industry · Commercial Roof )



The GS Metal Roof clamp series metal roofs such as standing seam roofs, and are easy to install.  
Note: Products can be customized according to the project needs.



GS-TRB-VRC-15AO

Item No.	Description	Size(mm)	Package
GS-TRB-VRC-15AO	Metal roof Clamp (with D-module+ 20bolts and 15μm oxide coating)	50	40 kits/box 4 boxes/CTN



GS-VSW-VRC

Item No.	Description	Size(mm)	Package
GS-VSW-VRC	Stand Seam Roof Hook (with D module)	50	45 kits/box 4 boxes/CTN

Adjustable Tilt Mounting System

Solar Roof Mounting System

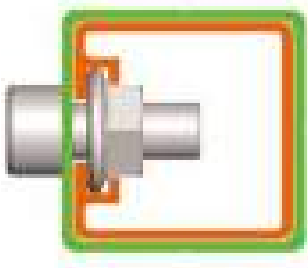
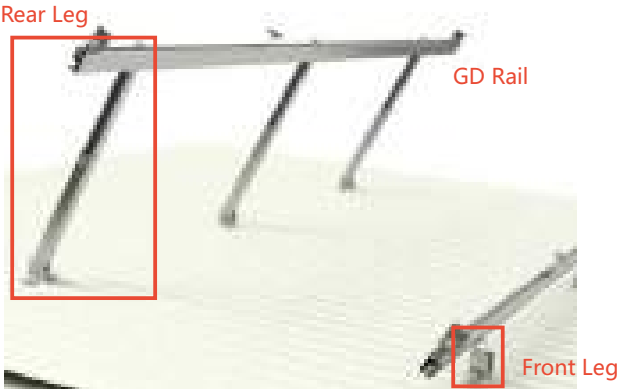
The GS adjustable roof mounting system is suitable for fixing various common framed solar panels at a specific angle of the roof. The system can be used for a fixed angle or an adjustable angle such as 10~15 degrees, 15~30 degrees or 30~60 degrees. Reliable high corrosion resistance, structural strength and aesthetics. The pre-assembly makes installation easy and fast, saving you labor costs and installation time.

Installation site	Commercial roof		
Angle	Parallel roof ( 10-60deg )	Material	High-strength aluminum alloy & Stainless steel
Building height	Below 20m	Color	Silver or customized
Maximum wind speed	<60m/s	Surface treatment	Anodizing & Stainless steel
Maximum snow cover	<1.4KN/m <sup>2</sup>	Quality assurance	10-year quality assurance
Reference standards	AS/NZS 1170 & EN1991 & Other	Usage time	More than 20 years



• Pitched Roof ( Industry · Commercial Roof )

Adjustable Tilt System



Telescope Solution

Solar Panels Size 1722*1134*35	Rail GS-DR-L	Front Leg GS-AD-FL	Rear Leg GS-AD-RL_	Inter Clamp GS-IC-F35	End Clamp GS-EC-F35	Rail Splice GS-DR-SP
Adjustable 10/15 4Panels installation	2 pcs	4	4	6	4	2
Adjustable 15/30 4Panels installation	2 pcs	4	4	6	4	2
Adjustable 30/60 4Panels installation	2 pcs	4	4	6	4	2

Feature

- Main Material: Anodized Al6005-T5  
·Fasten Material: SUS A2-70  
·Wood Screw: 2pcs M6x80
- Patent Telescope solution can adjust the angle  
·Anti-Slip and Anti-out design



GS-AD-FL-LD

can be choosen



GS-AD-RL\_

Item No.	Description	Leg Length	Package
GS-AD-FL-LD	AD Front Leg	-----	50pcs/box, 4 boxes/CTN
GS-AD-RL10/15-LD	AD Rear Leg 10/15 deg	240~360mm	30pcs/CTN
GS-AD-RL15/30-LD	AD Rear Leg 15/30 deg	340~680mm	25pcs/CTN
GS-AD-RL30/60-LD	AD Rear Leg 30/60 deg	700~1200mm	25pcs/CTN III



Triangle Bracket Mounting System

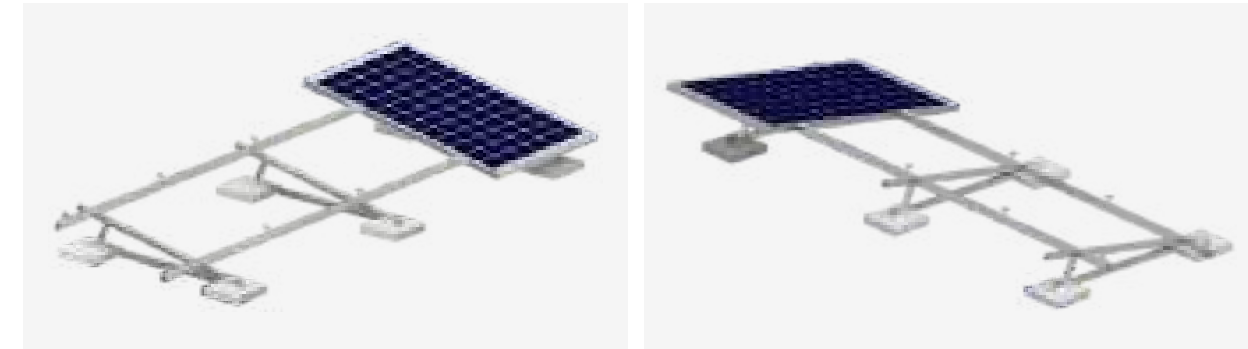
Solar Roof Mounting System

GS's latest triangle system is suitable for Roof and Ground with certain angles. This latest triangle system is light, flexible and strong. It is easy to assemble and can be done with one tool. It can also be folded during packaging, and can be used together with other products of our company.

Installation site	Commercial and Residential Roof		
Angle	Parallel roof ( 10-60deg )	Material	High-strength aluminum alloy & Stainless steel
Building height	Below 20m	Color	Silver or customized
Maximum wind speed	<60m/s	Surface treatment	Anodizing & Stainless steel
Maximum snow cover	<1.4KN/m <sup>2</sup>	Quality assurance	10-year quality assurance
Reference standards	AS/NZS 1170 & EN1991 & Other	Usage time	More than 20 years

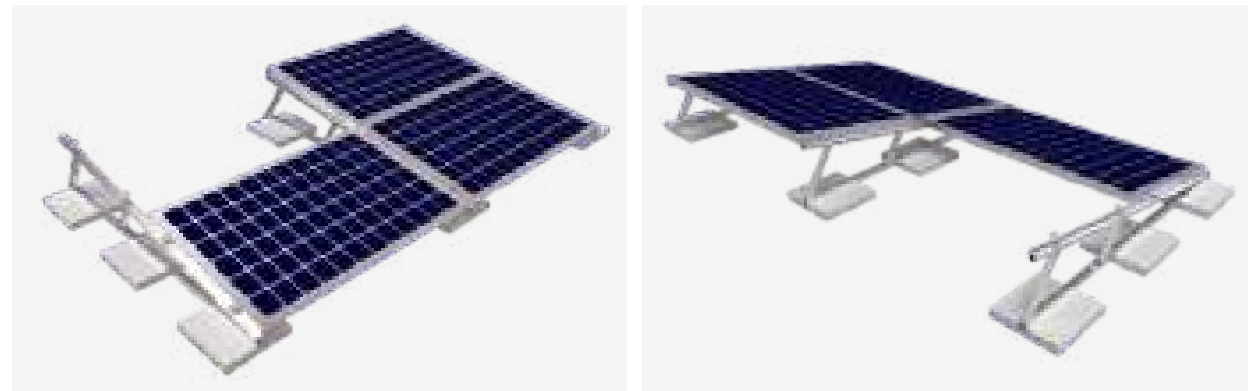
- Flat Roof ( Industry · Commercial · Residential Roof )

NT Triangle Bracket



Solar Panels Size 1722*1134*35	Rail GS-DR-L	Bracket GS-NT01-C10	Rail Clamp GS-RC-D	Inter Clamp GS-IC-F35	End Clamp GS-EC-F35
Angle: 10 deg Array: 1x4	2 pcs	3 pcs	6 pcs	6 pcs	4 pcs
Solar Panels Size 2278*1134*35	Rail GS-DR-L	Bracket GS-NT03-C10	Rail Clamp GS-RC-D	Inter Clamp GS-IC-F35	End Clamp GS-EC-F35
Angle: 10 deg Array: 1x4	2 pcs	3 pcs	6 pcs	6 pcs	4 pcs

KNT Triangle Bracket

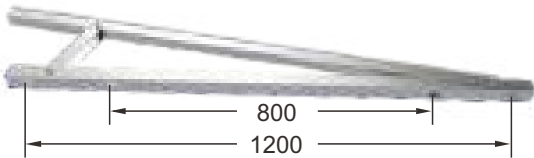


Solar Panels Size 1722*1134*35	Bracket GS-KNT2000-C10	Inter Clamp GS-KIC-F35	End Clamp GS-KEC-F35
Angle: 10 deg Array: 2x2	3 pcs	4 pcs	8 pcs



• Flat Roof ( Industry · Commercial · Residential Roof )

NT Triangle Bracket



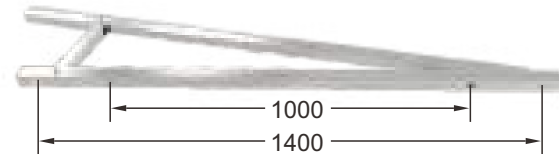
GS-NT01-XX

- For module length less than 1700mm



GS-NT02-XX

- For module length less than 1200mm

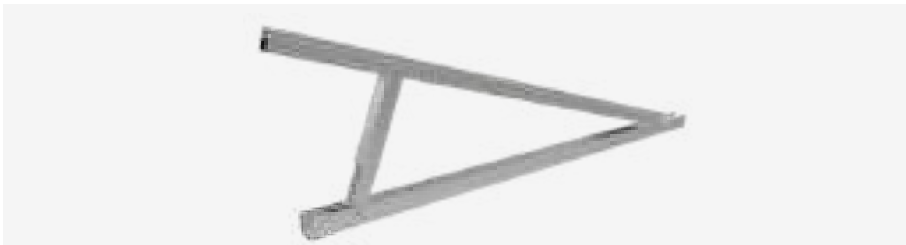


GS-NT03-XX

- For module length less than 2300mm

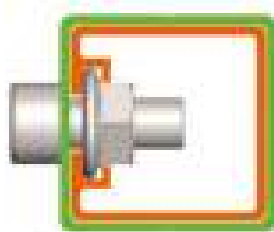
Feature

- Main material: Anodized Al6005-T5
- Fasten material: SUS A2-70
- Fixed angle from 5~60deg



GS-NT03-C12/20

- For module length less than 2300mm
- Angle is adjustable from 12 to 20deg



GS-NT03-C15/30

- For module length less than 2300mm
- Angle is adjustable from 15 to 30deg

Telescope Solution

Item No.	Description	Angle
GS-NT01-C10	NT Tri-angle Bracket 01, 10deg	10deg
GS-NT02-C10	NT Tri-angle Bracket 02, 10deg	10deg
GS-NT03-C12/20	AD NT Tri-angle Bracket 03, 12-20deg	12-20deg
GS-NT03-C15/30	AD NT Tri-angle Bracket 03, 15-30deg	15-30deg

GS-RC-D	GD Rail Clamp
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GS-RC-D

- Clamp the GD Rail on the NT Tri-angle bracket

• Flat Roof ( Industry · Commercial · Residential Roof )

KNT Triangle Bracket



Solar Panels Size 1722*1134*35	Bracket GS-KNT800-C10	Inter Clamp GS-KIC-F35	End Clamp GS-KEC-F35
Angle: 10 deg Array: 1x2	3 pcs	2 pcs	4 pcs

Installation Guide



a. Fixed the bottom base with concrete foundation



b. Place the modules



c. Fasten the module



Item No.	Description	Placement	Angle
GS-KNT2000-C10	KNT Bracket 2000-10deg	2x2, landscape	Fixed 10deg



Ballast Bracket Mounting System

Solar Roof Mounting System

The GS Ballast Bracket is an excellent engineering solution to secure the array of solar panels on flat roofs without damaging the roof. It is compatible with most types of solar panels on the market and requires virtually no drilling on the roof.

Installation site	Commercial and Residential Roof		
Angle	Parallel roof ( 5,10,15,20 deg )	Material	High-strength aluminum alloy & Stainless steel
Building height	Below 20m	Color	Silver or customized
Maximum wind speed	<60m/s	Surface treatment	Anodizing & Stainless steel
Maximum snow cover	<1.4KN/m <sup>2</sup>	Quality assurance	10-year quality assurance
Reference standards	AS/NZS 1170 & EN1991 & Other	Usage time	More than 20 years



- Flat Roof ( Industry · Commercial · Residential Roof )

BM3 Ballast System ( One-way Design )

The BM3 ballast system is suitable for flat roofs with a certain angle installation required which is flexible and easy to install. And the wind-shielding structure improves the wind resistance of the entire system.



Component List

Item No.	Description	QTY	Material
GS-BM3-T10	BM3 Bracket, 10deg	12 pcs	AL6005-T5
GS-KIC-F35/40	Inter Clamp 35-40	12 pcs	AL6005-T5
GS-KEC-F40	End Clamp 40	12 pcs	AL6005-T5
GS-BM-CT-400	Landscape Link tube, 400	12 pcs	AL6005-T5
GS-BM2-V450	Portrait Link tube, 450	12 pcs	AL6005-T5
GS-BM2-WA 1720	Wind Deflection, 1720mm	12 pcs	Q235
GS-BM2-A01	Accessories	12 pcs	A2-70



• Flat Roof ( Industry · Commercial · Residential Roof )

BM4 Ballast System ( One-way Design )

The BM4 ballast system is suitable for flat roofs with certain angle requirements. The system adopts a front and rear support foot structure, which makes installation more convenient and effectively reduces material and installation costs.



Component List (2\*4)

Item No.	Description	QTY	Material
GS-BM4-FL-10-Q01	BM4 ballasted 10deg front support kit	12 pcs	AL6005-T5
GS-BM4-RL-10-Q01	BM4 ballasted 10deg rear support kit	12 pcs	AL6005-T5
GS-AC-TH-G-Q01	Inter-end integrated clamp 30/46 assembly (with spring + ground clip)	12 pcs	AL6005-T5
GS-AC-Q01	Inter-end integrated clamp kit 30/46 kit	12 pcs	AL6005-T5
GS-BM4-MB-1200-Q01	BM4 ballast bottom beam 132*1200	12 pcs	AL6005-T5
GS-BM4-MB-SP-500-Q01	BM4 ballast bottom beam connector L500	9 pcs	AL6005-T5
GS-BM4-MB-SP-90-Q01	BM4 ballast bottom beam connector L90	6 pcs	AL6005-T5
GS-BM4-WD-10-2350-Q01	BM4 Ballast Wind Deflection 10deg	8 pcs	Q235
GS-KYR-GL-Q01	KYR copper wire connector kit (with self-tapping screws)	4 pcs	AL6005-T5
GS-A502-B8-2350-Q01	BM4 ballast bar 50*2.5*2350	16 pcs	AL6005-T5
GS-FA-T825-H18	T-bolt M8*25 (head length 18) + M8 flange nut assembly	32 pcs	SUS304
GS-BM4-SWD-10-Q01	BM4 ballast side wind deflection 10 deg	8 pcs	Q235
GS-F-T625-Q01	Self-tapping bolt 410 St6.3*25 (passivated)	24 pcs	SUS410

• Flat Roof ( Industry · Commercial · Residential Roof )

BM4 Ballast System ( East-west Design )

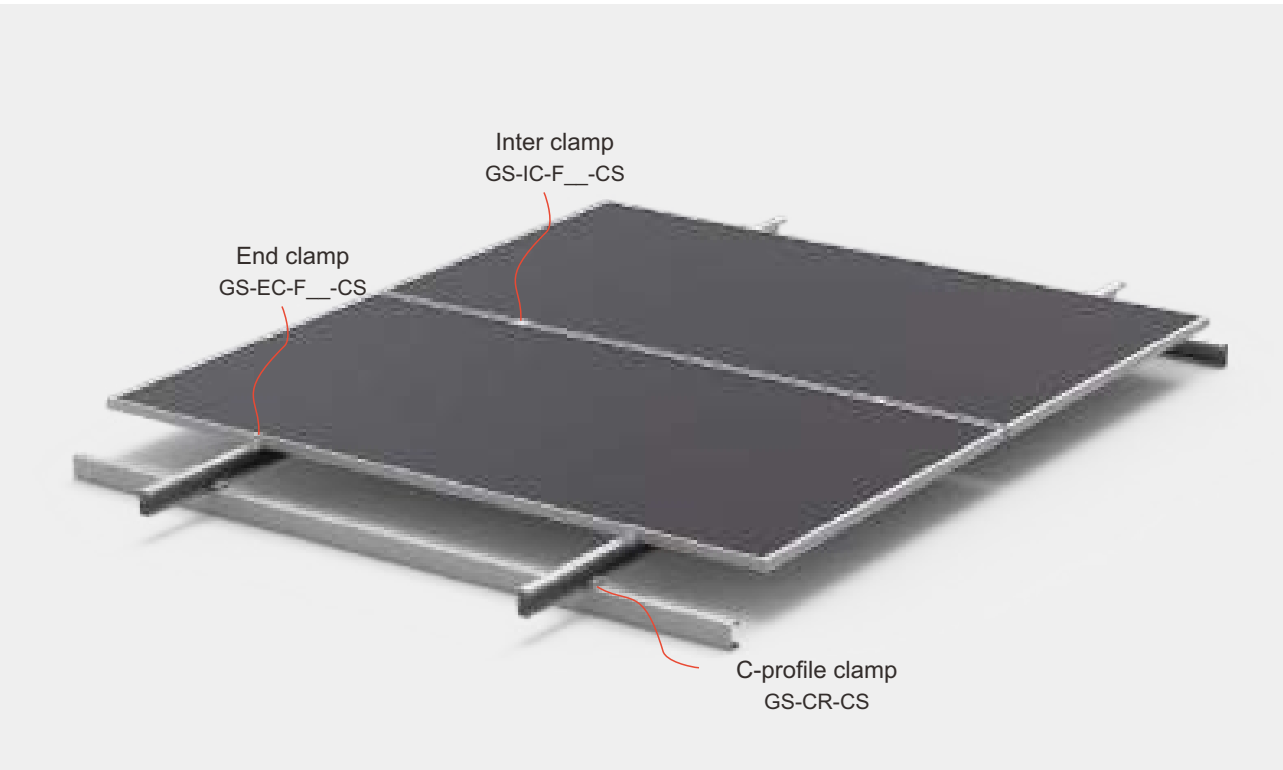
The BM4 ballast system is suitable for flat roofs with certain angle requirements. The system adopts a front and rear support foot structure, which makes installation more convenient and effectively reduces material and installation costs.



Component List (2\*4)

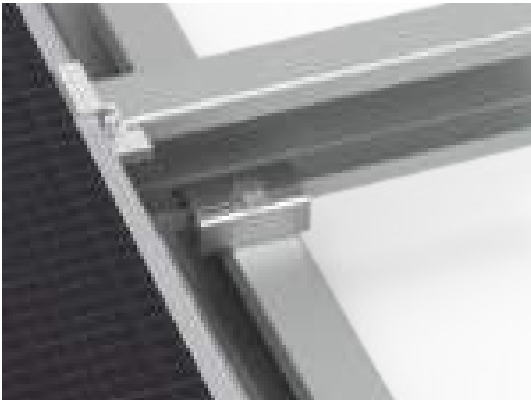
Item No.	Description	QTY	Material
GS-BM4-FL-10-Q01	BM4 ballasted 10deg front support kit	12 pcs	AL6005-T5
GS-BM4-RL-10-Q01	BM4 ballasted 10deg rear support kit	12 pcs	AL6005-T5
GS-AC-TH-G-Q01	Inter-end integrated clamp 30/46 assembly (with spring + ground clip)	12 pcs	AL6005-T5
GS-AC-Q01	Inter-end integrated clamp kit 30/46 kit	12 pcs	AL6005-T5
GS-BM4-MB-1200-Q01	BM4 ballast bottom beam 132*1200	12 pcs	AL6005-T5
GS-BM4-MB-SP-180-Q01	BM4 ballast bottom beam connector L180	9 pcs	AL6005-T5
GS-BM4-MB-SP-90-Q01	BM4 ballast bottom beam connector L90	6 pcs	AL6005-T5
GS-KYR-GL-Q01	KYR copper wire connector kit (with self-tapping screws)	4 pcs	AL6005-T5
GS-A502-B8-2350-Q01	BM4 ballast bar 50*2.5*2350	16 pcs	AL6005-T5
GS-FA-T825-H18	T-bolt M8*25 (head length 18) + M8 flange nut assembly	32 pcs	SUS304
GS-BM4-SWD-10-Q01	BM4 ballast side wind deflection 10 deg	8 pcs	Q235
GS-F-T625-Q01	Self-tapping bolt 410 St6.3*25 (passivated)	24 pcs	SUS 410

C-Profile Fixing Components



Fixing Clamps

C-profile Clamp Kit

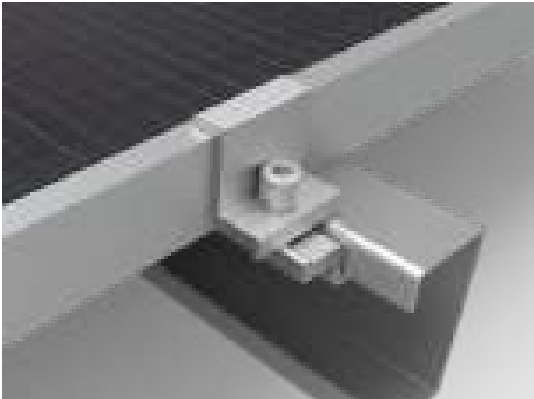


GS-CR-CS

Item No.	Description	Size(mm)	Package
GS-CR-CS	C-profile clamp	60	36 kits/box 4 boxes/CTN

Fixing Clamps

End Clamp



GS-EC-F\_\_-CS

Item No.	Description	Size(mm)	Package
GS-EC-F30-CS	30mm End clamp	40	48 kits/box 4 boxes/CTN
GS-EC-F35-CS	35mm End clamp	40	48 kits/box 4 boxes/CTN
GS-EC-F40-CS	40mm End clamp	40	48 kits/box 4 boxes/CTN

Inter Clamp









GS-IC-F\_\_-CS

Item No.	Description	Size(mm)	Package
GS-IC-F30-CS	30mm Inter clamp	40	90 kits/box 4 boxes/CTN
GS-IC-F35-CS	35mm Inter clamp	40	90 kits/box 4 boxes/CTN
GS-IC-F40-CS	40mm Inter clamp	40	90 kits/box 4 boxes/CTN







Rail

	Item No.	Name	Description	Package
	GS-DR-(length) Classical	DR Rail	Spec: 55*28mm Customized length	8pcs/bundle, 512pcs/pallet
	GS-SR-(length) Classical	SR Rail	Spec: 50*28mm Customized length	8pcs/bundle
	GS-10R-(length) Economy	GS 10# Rail	Spec: 46*28mm Customized length	8pcs/bundle, 512pcs/pallet
	GS-DR4-(length)	DR 4# Rail	Spec: 57*33mm Customized length	8pcs/bundle, 336pcs/pallet
	GS-DR5-(length)	DR 5# Rail	Spec: 55*49mm Customized length Cable Rail	8pcs/bundle, 336pcs/pallet
	GS-7R-(length)	GS 7# Rail	Spec: 38*36mm Customized length	8pcs/bundle, 560pcs/pallet
	GS-16R-(length)	GS 16# Rail	Spec: 42*27.4mm Customized length	8pcs/bundle
	GS-DWR-(length)	DWR Rail	Spec: 40*40mm Customized length	4pcs/bundle
	GS-ER-(length)	ER Rail	Spec: 39*33.2mm Customized length	8pcs/bundle
	GS-UR-(length)	UR Rail	Spec: 36*45mm Customized length	8pcs/bundle
	GS-HR-(length)	HR Rail	Spec: 55*28mm Customized length	8pcs/bundle, 340pcs/pallet
	GS-HR01-(length)	HR01 Rail	Spec: 37.6*27mm Customized length	8pcs/bundle
	GS01-IHR-(length)	IDH Rail	Spec: 38*29.4mm Customized length	8pcs/bundle
	GS-CRC-(length)	Cable Rail Cap	Customized length Cap of Cable Rail	8pcs/bundle

Rail Splice






	GS-DR-SP	DR Rail Splice Kit	Connect two pcs DR Rail Pre-assembly	50 kits/box 4 boxes/CTN
	GS-DR-SP-GW	DR Rail Splice with Ground Washer	Connect two pcs DR Rail with ground washer Pre-assembly	50 kits/box 4 boxes/CTN
	GS-DR4-SP	GS 4# Rail Splice Kit	Connect two pcs DR 4# Rail Pre-assembly	15 kits/box 4 boxes/CTN
	GS-7R-SP	GS 7# Rail Splice Kit	Connect two pcs GS 7# Rail Pre-assembly	50 kits/box 4 boxes/CTN
	GS-ER-SP	ER Rail Splice Kit	Connect two pcs ER Rail	55 kits/box 4 boxes/CTN
	GS-UR-SP	UR Rail Splice Kit	Connect two pcs UR Rail	100 kits/box 4 boxes/CTN

Accessories

	Item No.	Name	Description	Package
	GS-A-PC01	Plastic Cable Clip	Nylon 66, black connection 2 wires with GS Rail by side	1000 kits/box 4 boxes/CTN
	GS-A-DRC-SG	GS Rail Cap	Nylon 66, Silver Gray End Cap for GD Rail	1000 kits/box 4 boxes/CTN
	GS-SSCC-03	SS Cable Clip 3#	Stainless Steel connection 4 wires with the bottom of Frame Module	2000 kits/box 4 boxes/CTN
	GS-SSCC-05	SS Cable Clip 5#	Stainless Steel connection 2 wires with the bottom of Frame Module	1000 kits/box 4 boxes/CTN
	GS-CT-01	Cable Tie 1# 4.6x300	SUS304 with PVC Coat Tie the cable with Rail	1000 kits/box 4 boxes/CTN
	GS-DC-330-240	GS DC Isolator Box	AL5052,330x240mm With 2x D module Kits Enclosure for fixing the DC Isolator onto GS rail	20 kits/box 4 boxes/CTN








Module Clamp

	Item No.	Name	Description	Package
	GS-IC-F30	Inter Clamp Kit 30-32mm	Inter Clamp D- Module Socket Head Screw M8 Pre-assembly	100 kits/box 4 boxes/CTN
	GS-IC-F35	Inter Clamp Kit 35mm		
	GS-IC-F40	Inter Clamp Kit 40mm		
	GS-IC-F46	Inter Clamp Kit 46mm		
	GS-IC-F50	Inter Clamp Kit 50mm		
	GS-IC-F30-TH-G01	Inter Clamp Kit 30-32mm	Inter Clamp D- Module Socket Head Screw M8 Grounding Clip Spring Pre-assembly	100 kits/box 4 boxes/CTN
	GS-IC-F35-TH-G01	Inter Clamp Kit 35mm		
	GS-IC-F40-TH-G01	Inter Clamp Kit 40mm		
	GS-IC-F46-TH-G01	Inter Clamp Kit 46mm		
	GS-IC-F50-TH-G01	Inter Clamp Kit 50mm		
	GS-IC-F30-TH-G02	Inter Clamp Kit 30-32mm	Inter Clamp D- Module Socket Head Screw M8 Grounding Clip Spring Pre-assembly	100 kits/box 4 boxes/CTN
	GS-IC-F35-TH-G02	Inter Clamp Kit 35mm		
	GS-IC-F40-TH-G02	Inter Clamp Kit 40mm		
	GS-IC-F46-TH-G02	Inter Clamp Kit 46mm		
	GS-IC-F50-TH-G02	Inter Clamp Kit 50mm		
	GS-EC-F30	End Clamp Kit 30mm	End Clamp D- Module Socket Head Screw M8 Washer Pre-assembly	100 kits/box 4 boxes/CTN
	GS-EC-F35	End Clamp Kit 35mm		
	GS-EC-F40	End Clamp Kit 40mm		
	GS-EC-F46	End Clamp Kit 46mm		
	GS-EC-F50	End Clamp Kit 50mm		
	GS-IC-L80	Thin Film Inter Clamp Kit	Top and Bottom Clamp D- Module Socket Head Screw M8 Pre-assembly	40 kits/box 4 boxes/CTN
	GS-EC-L80	Thin Film End Clamp Kit		50 kits/box 4 boxes/CTN


Module Clamp

	Item No.	Name	Description	Package
	GS-EC-A02	GS Adjustable End Clamp 2#, 30~46mm	End Clamp D- Module Socket Head Screw M8 Washer Pre-assembly	100 kits/box 4 boxes/CTN
	GS01-EC-F35/F40	GS End Clamp Kit for 35 or 40mm		100 kits/box 4 boxes/CTN
	GS-AC	GS Universal modules Clamp Kit, 30~46mm	Clamp T- Module Socket Head Screw M8 Washer Pre-assembly can be as the inter or end clamp	50 kits/box 4 boxes/CTN
	GS-DEC	GS New End Clamp Kit 30~46mm	Clamp T- Module Socket Head Screw M8 Washer Pre-assembly	50 kits/box 4 boxes/CTN
	GS-DIC	GS New Inter Clamp Kit 30~46mm		50 kits/box 4 boxes/CTN
	GS-RC-D	GD Rail Clamp Kit	Clamp D- Module Socket Head Screw M8 Washer Pre-assembly	100 kits/box 4 boxes/CTN
	GS-7RC-D	7# Rail Clamp Kit	Clamp Socket Head Screw M8*25 Spring Washer,M8 Lock Washer,M8 Hexagon Nut, M8 Pre-assembly	100 kits/box 4 boxes/CTN
	GS-2RC-01	Adjustable-Rail Clamp Kit		100 kits/box 4 boxes/CTN
	GS-ER-RC	ER Rail Clamp Kit	Clamp Semi-round head square diameter bolt M8*25 Hexagonal flange nut M8 Pre-assembly	100 kits/box 4 boxes/CTN
	GS-ER-GD	Rail fixing module kit	Left fixing module, Right fixing module, Hexagon bolt M8*40, Spring washerM8, Disc springs M8, Spring 0.8*D10*H25 Pre-assembled	100 kits/box 4 boxes/CTN

Fasten

	Item No.	Name	Description	Package
	GS-F-S820	Socket Head Screw	Stainless Steel A2-70, M8*20	Package on request
	GS-F-S825	Socket Head Screw	Stainless Steel A2-70, M8*25	
	GS-F-S828	Socket Head Screw	Stainless Steel A2-70, M8*28	
	GS-F-S830	Socket Head Screw	Stainless Steel A2-70, M8*30	
	GS-F-S835	Socket Head Screw	Stainless Steel A2-70, M8*35	
	GS-F-S840	Socket Head Screw	Stainless Steel A2-70, M8*40	
	GS-F-S845	Socket Head Screw	Stainless Steel A2-70, M8*45	
	GS-F-S850	Socket Head Screw	Stainless Steel A2-70, M8*50	
	GS-F-S855	Socket Head Screw	Stainless Steel A2-70, M8*55	
	GS-F-S860	Socket Head Screw	Stainless Steel A2-70, M8*60	
	GS-F-S865	Socket Head Screw	Stainless Steel A2-70, M8*65	
	GS-F-AS820	Anti-Theft Screw	Stainless Steel A2-70, M8*20	
	GS-F-AS825	Anti-Theft Screw	Stainless Steel A2-70, M8*25	
	GS-F-AS828	Anti-Theft Screw	Stainless Steel A2-70, M8*28	
	GS-F-AS830	Anti-Theft Screw	Stainless Steel A2-70, M8*30	
	GS-F-AS835	Anti-Theft Screw	Stainless Steel A2-70, M8*35	
	GS-F-AS840	Anti-Theft Screw	Stainless Steel A2-70, M8*40	
	GS-F-AS845	Anti-Theft Screw	Stainless Steel A2-70, M8*45	
	GS-F-AS850	Anti-Theft Screw	Stainless Steel A2-70, M8*50	
	GS-F-AS855	Anti-Theft Screw	Stainless Steel A2-70, M8*55	
	GS-F-AS860	Anti-Theft Screw	Stainless Steel A2-70, M8*60	
	GS-F-AS865	Anti-Theft Screw	Stainless Steel A2-70, M8*65	
	GS-F-AB08	Anti-Theft Screw Bit	Tool for the anti-thief screw M8	
	GS-F-N108	Hexagon Nut, M8	Stainless Steel A2-70, M8	
	GS-F-N208	Serrated flange nut, M8	Stainless Steel A2-70, M8	
	GS-F-N210	Serrated flange nut, M10	Stainless Steel A2-70, M10	
	GS-F-N212	Serrated flange nut, M12	Stainless Steel A2-70, M12	

Fasten

	Item No.	Name	Description	Package
	GS-F-W108	Spring Washer, M8	Stainless Steel A2-70 M8	Package on request
	GS-F-W208	Lock Washer, M8 OD13	Stainless Steel A2-70, M8, OD13	
	GS-F-W308	Lock Washer, M8 OD18	Stainless Steel A2-70, M8, OD18	
	GS-F-T625	Self-tapping Screw	Stainless Steel 410 St6.3x25	
	GS-FS-W660	Wood Screw	Stainless Steel 410 St6.3x60 With Pad	
	GS-FS-W680	Wood Screw	Stainless Steel 410 St6.3x80 With Pad	60 kits/box 4 boxes/CTN
	GS-F-H020	Hanger Bolt	Stainless Steel A2-70 M10x200	
	GS-FA-H020	Hanger Bolt Assembly	Stainless Steel Hanger Bolt& 3xFlange Nuts & Rubber Pad M10x200	

Grounding System

	Item No.	Name	Description	Package
	GS-G-GC	Grounding Clip	Stainless Steel Plate	1000 kits/box 4 boxes/CTN
	GS-G-GL	Grounding Lug	Stainless Steel Plate Aluminum Lay-in Lug Fastens Pre-assembly	200 kits/box 2 boxes/ CTN II
	GS-G-BJ-A	Bonding Jumper	Braider copper wire Stainless Steel Plate Socket Head Screw Pre-assembly	100 kits/box 2 boxes/CTN II



SERVICE & SUPPORT



On-site investigation

Conduct on-site investigation and investigation to the project location to provide targeted technical solutions



Service response

24 hours a day to respond to and reply to customer questions



Technical solution

In-depth analysis of project requirements such as the topography of the project site, soil conditions, array layout, communication conditions, etc., and provide technical solutions that can meet technical and commercial requirements



Financial analysis

After comparing the economic benefits of different technical solutions, recommend the best design solutions to customers



On-site support

Go to the construction site to guide the construction staff to ensure the progress of the project



Various services

Provide on-site, Internet, teleconference and other forms of training for the installation, operation and maintenance of the bracket system



## GS-Light Intelligent Tracking System



South Africa: 78MW



Bulgaria: 2.4MW

## GS-Smart Ground Mounting System



Japan: 100MW



Japan: 47MW



GS-Smart Ground Mounting System



Japan: 22MW



Japan: 38MW

GS-Smart Ground Mounting System



Japan: 55MW



Japan: 6MW



GS-Smart Ground Mounting System



Japan: 36MW



Japan: 47MW

GS-Smart Ground Mounting System



Japan: 30MW



Japan: 46MW



GS-Smart Ground Mounting System



Thailand



Brunei

GS-Energy Roof Mounting System



China



Philippines



Slovenia



Australia



Norway



UK



GS-Energy Roof Mounting System



Metal Roof Hook



Hook + Triangle System

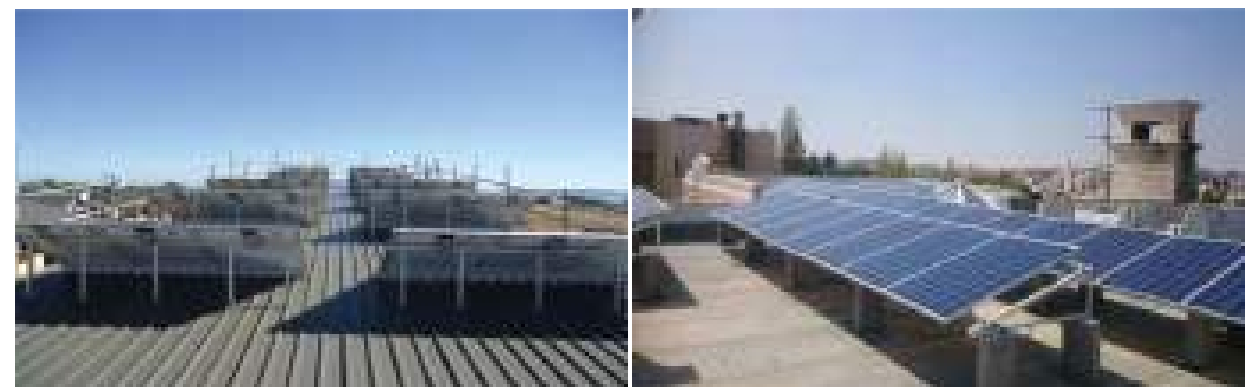
GS-Energy Roof Mounting System



Metal Roof Hook



Ballast Bracket System



Adjustable Tilt System

Triangle System



## GS-Smart Carport Mounting System



## GS-Smart Farm Mounting System

