



Solar PV Mounting System Solutions :



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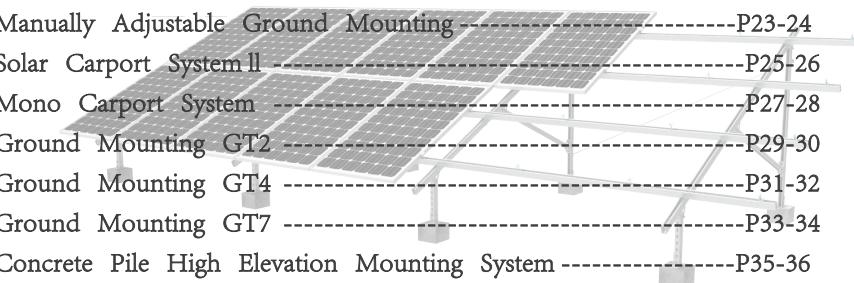
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Tile Roof Solar PV Mounting System

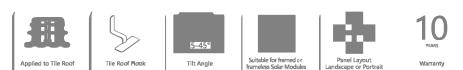


Technical Parameters

System Name	Tile Hook	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof		International Building Code IBC 2009,
Foundation	Tile, Flat Tile, Slate Tile, Asphalt Shingle Tile		California Building Code CBC 2010
Tilt Angle	5-45°	Hook Material	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m ²	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10 Years

Overview

Tile Roof Hook Solar PV Mounting System is applied to tile roof residential and commercial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Pre-assembled kits save the installation time and cost onsite.



Advantages

- **Applicable for Different Tile Roofs**
Design project by project, selecting configuration of mounting system components flexibly.
- **Save Installation Time and Cost**
Pre-assembled components and clear installation manuals are supplied to save the onsite installation time and cost, lead to better ROI.
- **Compatible to Different Types of Solar Modules**
Compatible to most kinds of framed 60-cell, 72-cell, half-cut cells modules and frameless modules.

Components



Optional Hook Type



SLNRANCE Balcony Solar Mounting System



Technical Parameters

System Name	Balcony Solar Mounting System	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Balcony		International Building Code IBC 2009,
Installation Base	Metal Railings, Wall, Concrete Roof		California Building Code CBC 2010
Mounting Angle	10°-30°	Material	Steel & AL6005-T5
Wind Load	≤30m/s	Fastener	SUS304
Snow Load	≤1.0KN/m ²	Small Components	AL6005-T5
Applicable Solar Module	Framed	Color	Natural Silver or Customized
Panel Layout	Horizontal	Warranty	10-Year Warranty

Overview

Balcony Solar Mounting System is a Solar Mounting System product installed on balcony railings, which can easily realize the construction of photovoltaic power plants on the balcony. The system is all bolted and fixed, eliminating the need for welding and drilling during installation.

The unique telescopic tube support leg design allows the angle of the panel to be adjusted at any time.



Advantages

- **Quick installation**
Installation and removal are very simple and fast, 1-2 people can complete the installation.
- **Adjustable angle**
The tilt angle of the panels can be flexibly adjusted according to the installation site to obtain the best power generation efficiency, with a maximum tilt angle of 30°.
- **No welding required**
The system is all bolted and fixed, eliminating the need for welding and drilling during installation.
- **Stable and reliable**
Optimized structural design and material selection ensure the strength and stability of the system, suitable for a variety of different climatic environments.

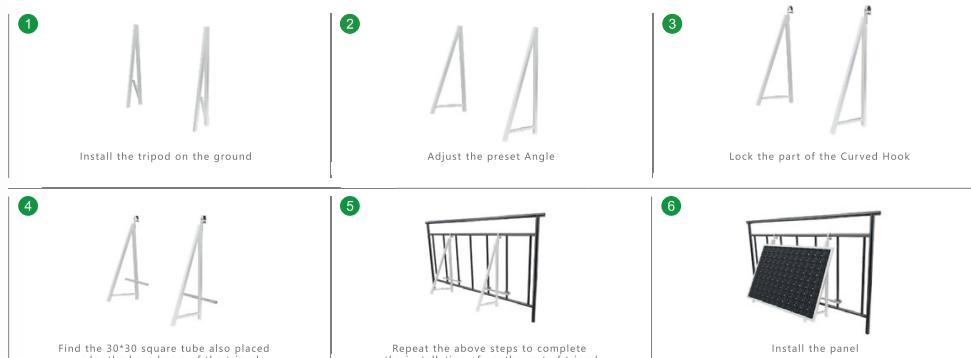
Structure

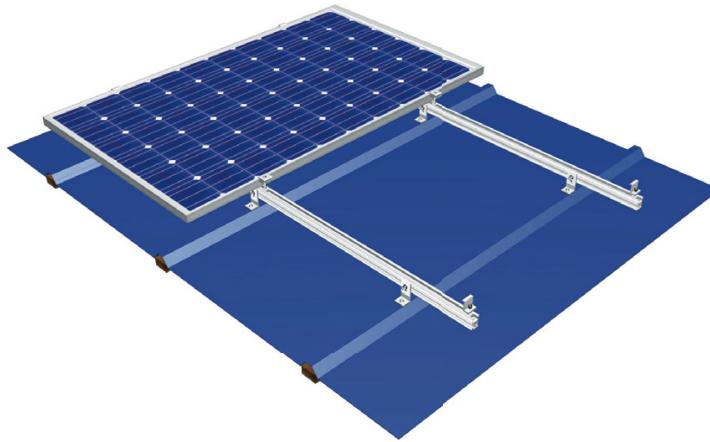


Component Details



Installation Guide




L Feet and Hanger Bolt Kit Metal Roof PV Mounting System


Overview

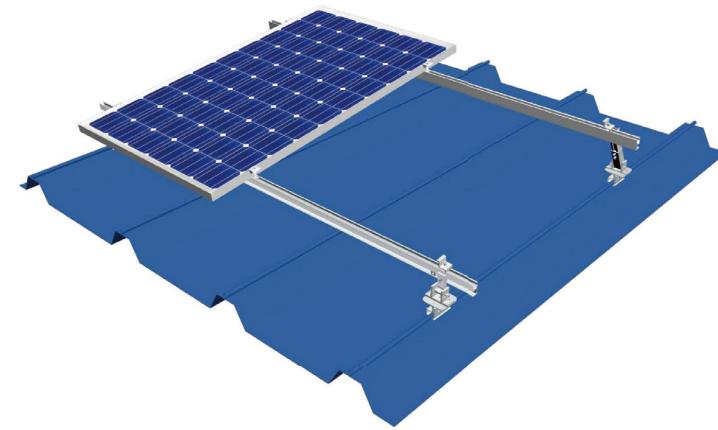
[L feet Kit and Hanger Bolt Kit](#) is applied in most Corrugated Metal Roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Pre-assembled kits save the installation time and cost on site.

Technical Parameters

System Name	L Feet Kit & Hanger Bolt Kit	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof		International Building Code IBC 2009,
Foundation	Trapezoidal Roof		California Building Code CBC 2010
Tilt Angle	0°	Material	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m ²	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Component Details



Adjustable Support Kit Solar PV Mounting System


Overview

[Adjustable Support Kit Solar PV Mounting System](#) is applied in most Corrugated Metal Roof and Flat Roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Adjustable angles can reduce the stock SKU and flexible for onsite installation. Pre-assembled kits save the installation time and cost onsite.

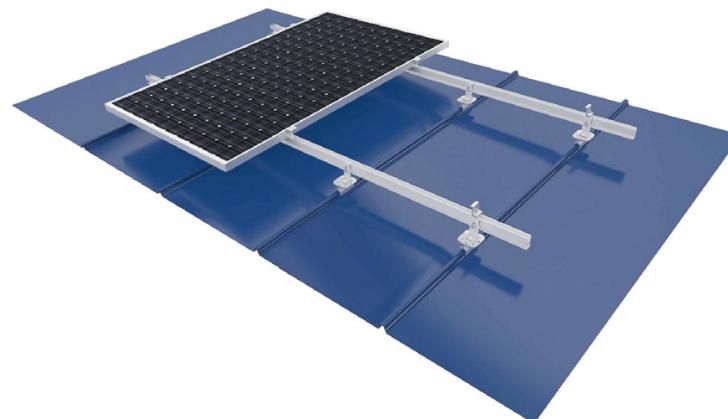
Technical Parameters

System Name	Adjustable Support	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof		International Building Code IBC 2009,
Foundation	Metal Roof		California Building Code CBC 2010
Tilt Angle	10-60°	Rail	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m ²	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Landscape or Portrait	Warranty	10-Year Warranty

Component Details



SLNRANCE Kliplok Metal Roof Mounting System



Technical Parameters

System name	Kliplok	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof		International Building Code IBC 2009,
Foundation	Trapezoidal Metal Roof Support		California Building Code CBC 2010
Tilt Angle	0-15°	Material	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m ²	Small Components	AL6005-T5(Anodized)
Applicable Module	Framed or Frameless	Color	Silver or Customized
Panel Orientation	Portrait or Landscape	Warranty	10 Years

Overview

Kliplok is mainly applied to metal roofs, and its material is AL6005-T5. With its professional design, it can realize the perfect connection between roof support and roof to meet customer installation requirement. Professional solution and structure design can save your installation time and cost. Moreover, patented and unique design can bring you a good installation experience.



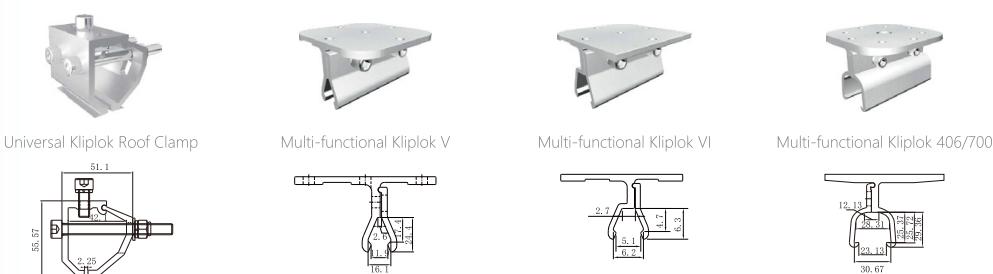
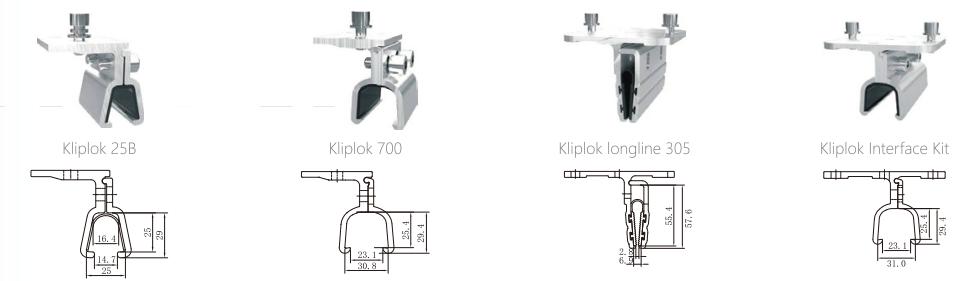
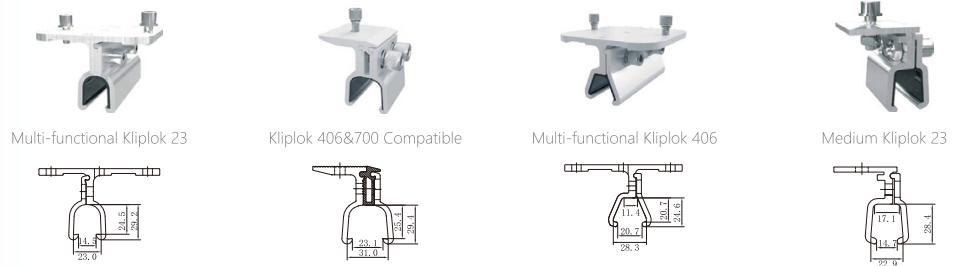
Advantages

- **Applicable for different metal roofs**
According to customer requirement, choose different roof mounting system flexibly;
- **Save installation time and cost**
Save the installation time and cost by offering installation manual and solution;
- **Compatible with different types of solar modules**
Free and flexible to choose different types of solar modules.

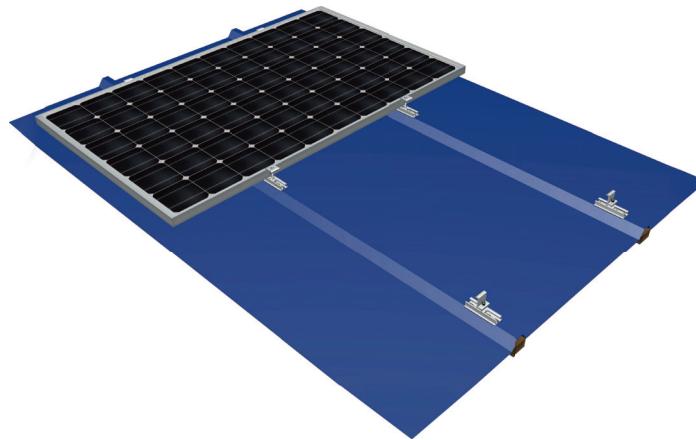
Components



Applicable Kliplok Roof Support



SLNRANCE Mini-Rail Kit Metal Roof PV Mounting System



Technical Parameters

System Name	Mini-Rail Kit	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof		International Building Code IBC 2009,
Roof Type	Trapezoidal Roof		California Building Code CBC 2010
Tilt Angle	0°	Material	Q235B(Hot-Dip Galvanized) & AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m ²	Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscap	Warranty	10-Year Warranty

Overview

Mini-Rail Kit is mainly applied to Trapezoidal Metal Roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Pre-assembled kits save the installation time and cost onsite.



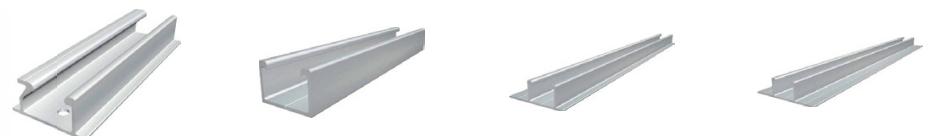
Advantages

- **Applicable for Different Metal Roofs**
Design project by project, selecting configuration of mounting system components flexibly.
- **Save Installation Time and Cost**
Pre-assembled components and clear installation manuals are supplied to save the onsite installation time and cost, lead to better ROI.
- **Compatible to Different Types of Solar Modules**
Compatible to most kinds of framed 60-cell, 72-cell, half-cut cells modules and frameless modules.

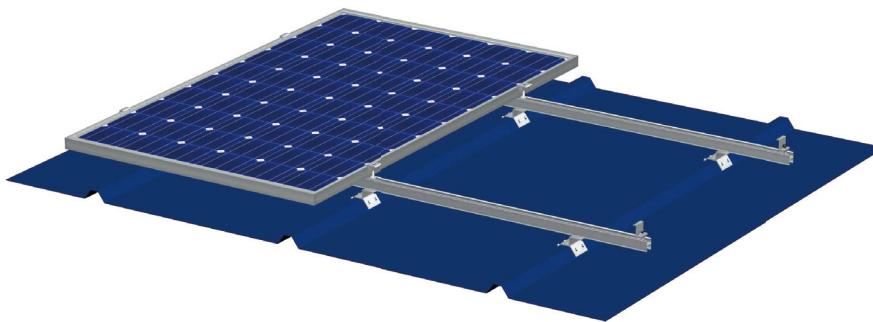
Components



Optional



SUNRANCE Trapezoidal Metal Roof Solar PV Mounting System



Technical Parameters

System Name	Trapezoidal Metal	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof		International Building Code IBC 2009,
Foundation	Trapezoidal Metal Roof Support		California Building Code CBC 2010;
Tilt Angle	0-15°	Material	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m ²	Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Overview

Trapezoidal Metal Roof Clamp Solar PV Mounting System is mainly applied to metal roof, and its main material is aluminium alloy. With its professional design, it can realize the perfect connection between kliploks and roof to meet customer installation requirement. Professional solution and structure design can save your installation time and cost. Moreover, Patented and unique design can bring you a good and fast installation experience.



Advantages

- **Applicable for different metal roofs**
According to different metal roof types, making professionally design and achieve perfectly connection between the kliploks and roof tiles.
- **Save installation time and cost**
Patented structure design and system solutions will reduce on-site installation time and cost.
- **Compatible to different types of solar modules**
By its independent researched clamps, it is compatible to various solar modules in the market.
- **Excellent structure design**
Professional structure design will meet components installation requirements of tiled or with angle, as well as the installation in landscape and portrait orientation.

Components



Applicable Kliplok Roof Support



Trimdeck Roof Hook-07-A Trimdeck Roof Hook Trimdeck Roof Hook-07-B Trimdeck Roof Clamp



Trapezoidal Roof Support E Trapezoidal Roof Support F Trapezoidal Roof Support G Trapezoidal Roof Support I

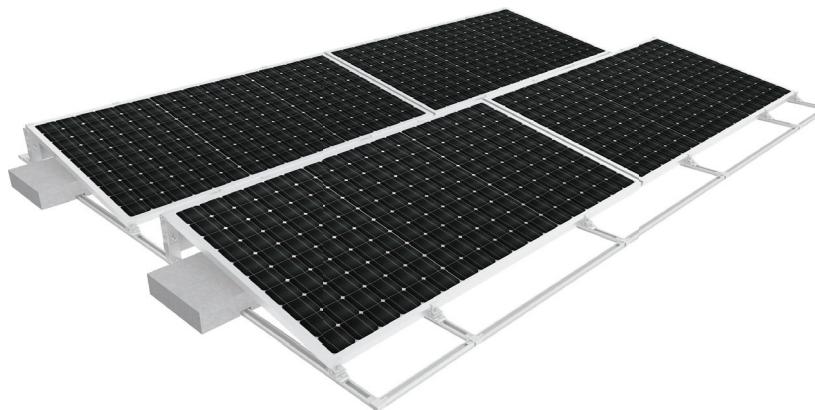


Trapezoidal Roof Support J Trapezoidal Roof Support K Trapezoidal Roof Support L Trapezoidal Roof Support N



Trapezoidal Roof Support M Trapezoidal Roof Support P Adjustable Trapezoidal Roof Support Trapezoidal Roof Support A

SLNRANCE Ballasted Roof Solar PV Mounting System - Single Side



Technical Parameters

System Name	Roof Solar PV Mounting System RM-Ad	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Flat Concrete roof, Flat ground, Membrane roof		International Building Code IBC 2009,
Roof Type	Concrete Ballast		California Building Code CBC 2010
Tilt Angle	0~30°	Material	Q235B(Hot-Dip Galvanized) AL6005-T5(Anodized)
Wind Load	≤44m/s	Fastener	SUS304, Hot Dip Galvanized, Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6kN/m ²	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed/Frameless, Any width panel	Color	Silver or Customized
Panel Layout	Landscape	Warranty	10-Year Warranty

Overview

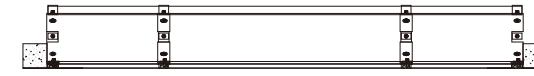
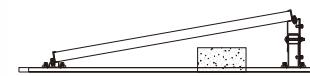
Roof Solar PV Mounting System RM-Ad is a non-penetration solution for flat rooftop, to meet different tilt angles installation. It is applicable to the roof areas with medium wind load. Quick installation and stable structure are assured by the modular patented design.



Advantages

- **High Durability Ensure the Structure Strength**
Professional structure design and high-density aluminum material ensure the stability and strength of the structure.
- **Unique Matrix Design**
The matrix design further assures the stability of the whole system, and flexibly compatible with concrete block or ballast foundation.
- **Reasonable Installation and Package Design**
Simplified components configuration lead to quicker installation and smaller package size, saving installation cost and freight.

Structure



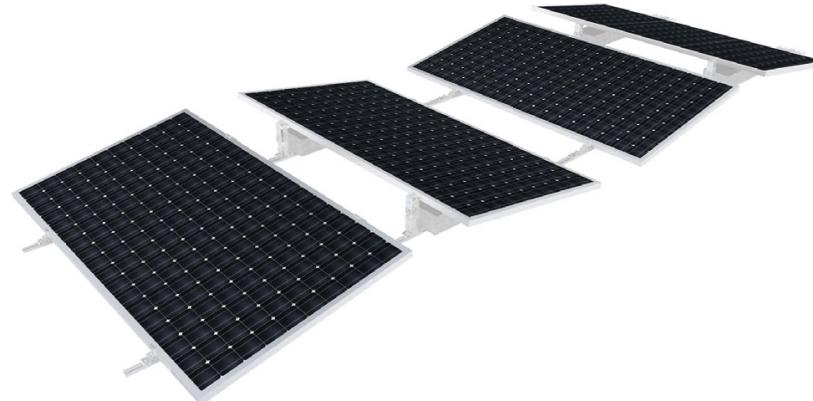
Component Details

1		GM Rail	Specification : L1350,L2700 Material : AL6005-T5(Anodized)
2		Front Support Plate (Nut)	Specification : L50 Material : AL6005-T5(Anodized)
3		Rear Support Plate(Upper) (10°)	Specification : L50 Material : AL6005-T5(Anodized)
4		Rear Support Plate(Down) (10°)	Specification : L50 Material : AL6005-T5(Anodized)
5		GM Rail's Two Way Connector	Specification : L65 Material : PP
6		GM Rail's Three Way Connector	Specification : L90 Material : PP
7		Corrugated Gasket Anchor Kit M8*75	Specification : L60 Material : AL6005-T5(Anodized)
8		End Clamp Kit	Components : End Clamp Spring Washer M8 Hexagon Socket Bolt
9		C Clamp Kit	Components : C Clamp Cross Module Spring Washer M8 Hex Socket Head Bolt

Installation Guide

1		Connect the GM rail with connector.
2		Install the front support plate.
3		Install the rear support plate.
4		Put the cement pier.
5		Install the wind deflectors.
6		Install the panel, then the installation is done.

SUNRANCE Ballasted Roof Solar Mounting System - East West / Two-Side



Technical Parameters

System Name	E/W Matrix Solar Roof Mounting System	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Flat Concrete roof, Flat ground, Membrane roof		International Building Code IBC 2009, California Building Code CBC 2010
Roof Type	Concrete Ballast		Al6005-T5(Anodized)
Tilt Angle	10°	Material	SUS304, Hot Dip Galvanized, Zinc-Nickel Alloy Electroplated Steel
Wind Load	≤44m/s	Fastener	AL6005-T5(Anodized)
Snow Load	≤1.6KN/m ²	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed/Frameless, Any width panel	Color	Silver or Customized
Panel Layout	Landscape	Warranty	10-Year Warranty

Overview

E/W Matrix Solar Roof Mounting System is a non-penetration solution for flat rooftop, to meet different tilt angles installation. It is applicable to the roof areas with medium wind load. Quick installation and stable structure are assured by the modular patented design.



Advantages

- **High Durability Ensure the Structure Strength**
Professional structure design and high-density aluminum material ensure the stability and strength of the structure.
- **Unique Matrix Design**
The matrix design further assures the stability of the whole system, and flexibly compatible with concrete block or ballast foundation.
- **Reasonable Installation and Package Design**
Simplified components configuration lead to quicker installation and smaller package size, saving installation cost and freight.

Structure



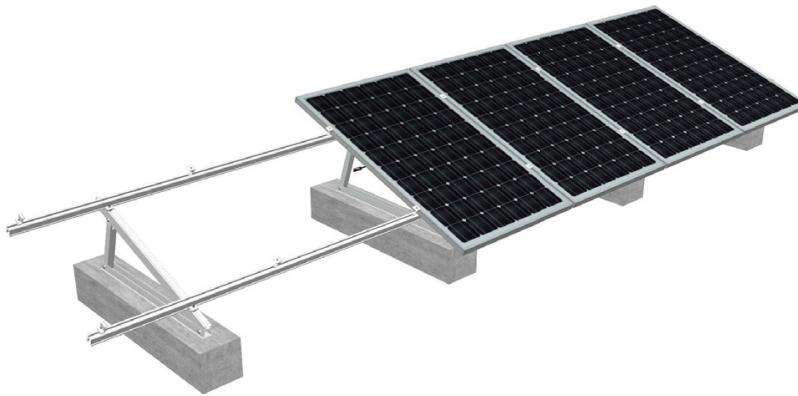
Component Details

	GM Rail Material : AL6005-T5(Anodized)
	Front Support Plate (Nut) Specification : L50 Material : AL6005-T5(Anodized)
	Rear Support Plate(Upper) (10°) Specification : L50 Material : AL6005-T5(Anodized)
	Rear Support Plate(Down) (10°) Specification : L50 Material : AL6005-T5(Anodized)
	C Clamp Kit Components : C Clamp, Cross Module, Spring Washer M8, Hex Socket Head Bolt
	End Clamp Kit Components : End Clamp, Spring Washer M8, Hexagon Socket Bolt

Installation Guide



SLNRANCE Roof Solar PV Mounting System Matrix II



Technical Parameters

System Name	RMII	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Flat Roof, Pitched Roof		International Building Code IBC 2009,
Roof Type	Concrete Roof, Metal Roof		California Building Code CBC 2010
Tilt Angle	0-60°	Material	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m ²	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Overview

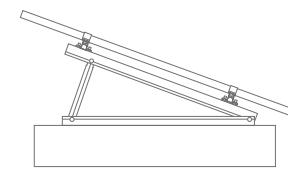
Roof Solar PV Mounting System Matrix II is derived from RM I to meet different roof projects demands. Solar modules can be arranged with single or double rows of landscape or portrait orientation. Quick installation and stable structure are assured by the modular Patented design.



Advantages

- System Compatibility**
Components mostly pre-assembled in factory to assure quick and reliable installation on site. Suitable for different flat rooftop, and compatible to different types of solar modules.
- Unique Mudsill Design**
The mudsill can be fixed to flat roof or pitched roof with concrete foundation or steel foundation.
- Solar Module Layout Flexibility**
Both landscape and portrait solar module layout are suitable. Both single row and double rows layout can be achieved separately or combined.
- Adjustability**
Tilt angle can be adjustable

Structure



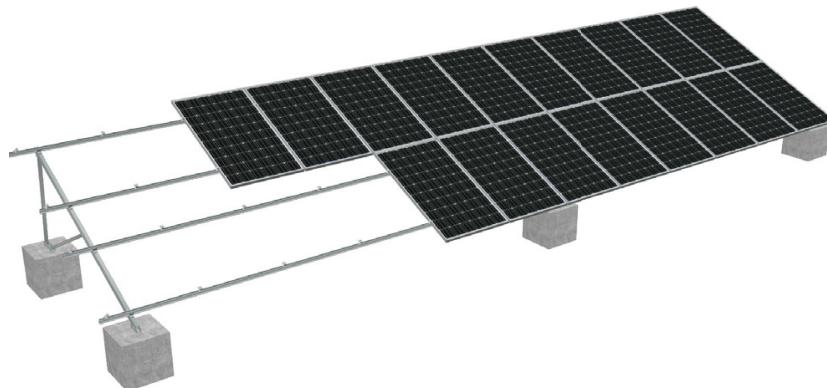
Component Details

1		Pro Rail 50 Specification : 3100, 4100, 5100mm Material : AL6005-T5(Anodized)
2		Splice for Pro Rail 50 Specification : Standard length 260mm Flange Head Self-taping Screw ST6.3*19 Material : AL6005-T5(Anodized)
3		End Clamp Kit Components : End Clamp, Cross Module, Spring Washer M8, Hex Socket Head Bolt
4		Inter Clamp Kit Components : Inter Clamp, Cross Module, Spring Washer M8, Hex Socket Head Bolt
5		C Clamp Kit Components : C Clamp, Cross Module, Spring Washer M8, Hex Socket Head Bolt
6		Angle Aluminum Tripod Support Components : Angle Aluminum Beam, Angle Aluminum Mudsill, Angle Aluminum Side Beam, flat washerM8, spring washerM8, Hexagon Bolt M8*2.5
7		Single Tripod Support Components : Tripod Support Beam, Tripod Support Mudsill, Tripod Support SquareTubeA, H Jointer, Flat Washer M10, Spring Washer M10, Hexagon Bolt M10*65
8		Double Tripod Support Components : Tripod Support Beam, Tripod Support Mudsill, Tripod Support Square Tube A/B, H Jointer, Flat Washer M10, Spring Washer M10, Hexagon Bolt M10*65
9		Adjustable Tripod Components : Tripod Support Beam, Tripod Support Mudsill, Tripod Support Square Tube A, H Jointer, Flat Washer M10, Spring Washer M10

Installation Guide

1		Place the concrete base at the position indicated on the solution drawings
2		Fasten the preassembled supports on the expansion bolts by C Clamps
3		Install splices
4		Fasten the rails by C Clamp Kits
5		Install modules on the rails
6		Fasten modules by Inner Clamp Kits
7		Fasten modules by End Clamp Kits
8		Complete installation

SUNRANCE Double-row Tripod Base-beam-free RMIV



Technical Parameters

System Name	Double-row Tripod Base-beam-free RMIV	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Flat roof, ground		International Building Code IBC 2009,
Roof Type	Concrete foundation, steel foundation		California Building Code CBC 2010
Tilt Angle	0-60°	Material	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m ²	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Overview

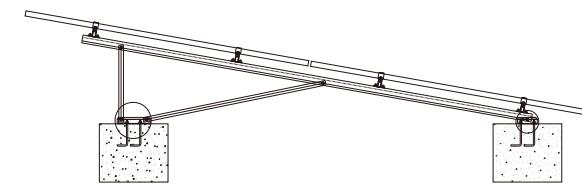
Double-row Tripod Base-beam-free RMIV is derived from RM II to meet different roof projects demands. Solar modules can be arranged with single or double rows of landscape or portrait orientation. Quick installation and stable structure are assured by the modular Patented design.



Advantages

- System Compatibility**
Components mostly pre-assembled in factory to assure quick and reliable installation on site. Suitable for different flat rooftop, and compatible to different types of solar modules.
- Unique Mudsill Design**
The mudsill can be fixed to flat roof or pitched roof with concrete foundation or steel foundation.
- Solar Module Layout Flexibility**
Both landscape and portrait solar module layout are suitable. Both single row and double rows layout can be achieved separately or combined.
- Adjustability**
Tilt angle can be adjustable

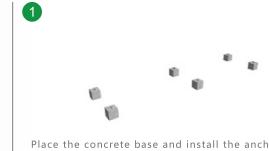
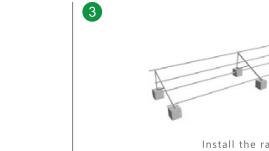
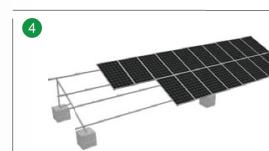
Structure



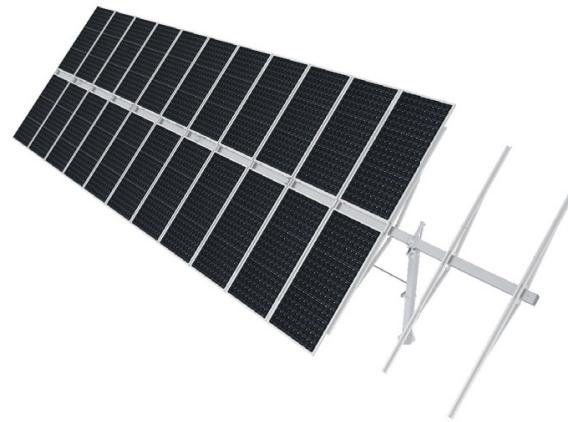
Component Details

	MA Rail Specification : 3100, 4100, 5100mm Material : AL6005-T5(Anodized)
	Splice kit for MA Rail Specification : L200 Material : AL6005-T5(Anodized)
	End clamp kit(MA) Components : End Clamp Cross Module Spring Washer M8 Hex Socket Head Bolt
	Inter Clamp Kit(MA) Components : Inter Clamp Cross Module Spring Washer M8 Hex Socket Head Bolt
	Rail Clamp(MA) Material : AL6005-T5(Anodized)
	RMIV Back Base Material : Steel Q235B (Hot-Dip Galvanized)
	RMIV Front Base Material : Steel Q235B (Hot-Dip Galvanized)
	Pre-assembled Structure Material : AL6005-T5(Anodized)

Installation Guide

	1 Place the concrete base and install the anchor base
	2 Install pre-assembled structure
	3 Install the rail
	4 Install the panels.
	5 Complete installation

Manually Adjustable Ground Mounting



Technical Parameters

Installation Site	Ground	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Foundation	Concrete Base		International Building Code IBC 2009,
Tilt Angle	10-40°		California Building Code CBC 2010
Wind Load	≤40m/s	Material	Q235B(HDG) & Q355(HDG)
Snow Load	≤0.8KN/m ²	Fastener	SUS304 & Nickle-Zinc Alloy & Q355(HDG)
Ground Clearance	≤1000+mm	Small Components	Q235B(HDG)
Applicable Solar Module	Framed	Color	Silver or Customized
Panel Layout	Portrait	Warranty	10-Year Warranty

Overview

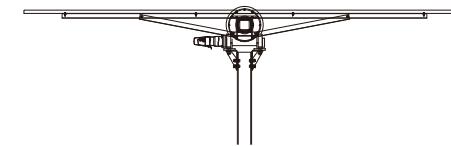
Manually Adjustable Ground Terrace is suitable for the installation of large-scale commercial and utility solar power stations. The product has a firm structure with strong stability. The main parts are made of carbon steel, which has good corrosion resistance. The product is flexible in design, and the angle of the panel can be adjusted manually, making the power generation more efficient and profitable. The optimized design of the structure effectively improves the installation time and greatly reduces the installation cost.



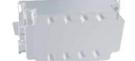
Advantages

- Strong adaptability to the environment, high power generation efficiency
Suitable for different ground environments.
- Professional structural design
It can ensure the overall stability and strength of the system. It was pre-assembled in the factory prior to delivery and the installation only needs to be fixed and spliced with fasteners on site.
- Adjustable angle design
The entire system can manually adjust the required angle, making power generation more efficient and more profitable.
- Fully compatible with different PV modules
It is compatible with various types of PV modules freely and flexibly.

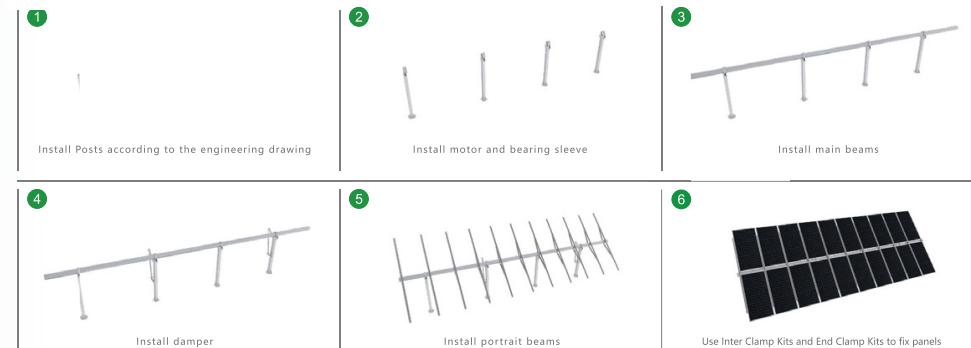
Structure



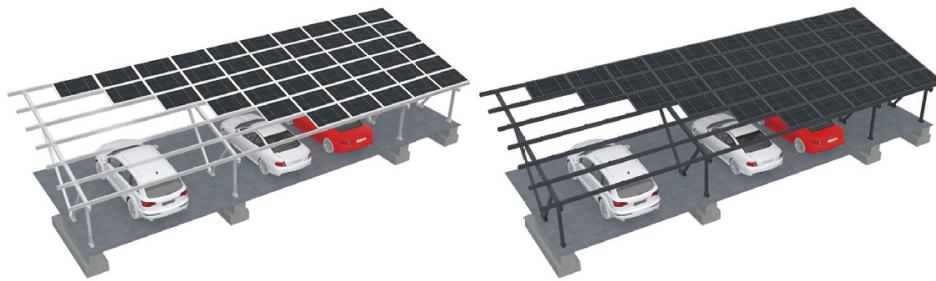
Component Details

	Square Steel Material: Steel Q235B (Hot-Dip Galvanized)		Angle Bar Material: Steel Q235B (Hot-Dip Galvanized)
	Control Box Material: Steel Q235B (Hot-Dip Galvanized)		Post Material: Steel Q235B (Hot-Dip Galvanized)
	Holder for Post of Push Rod Material: Steel Q235B (Hot-Dip Galvanized)		Bearing's Plate Material: Steel Q235B (Hot-Dip Galvanized)
	Bearing base Material: Steel Q235B (Hot-Dip Galvanized)		U-shape Bolt Material: Steel Q235B (Hot-Dip Galvanized)
	Electric Push Rod Material: Steel Q235B (Hot-Dip Galvanized)		Hoop Kit Material: Steel Q235B (Hot-Dip Galvanized)

Installation Guide



SLNRANCE Solar Carport System II



Technical Parameters

Installation Site	Open Area	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Foundation	Concrete foundation		International Building Code IBC 2009,
Tilt Angle	5-15°		California Building Code CBC 2010
Wind Load	≤45m/s	Material	AL6005-T5(Anodized)
Snow Load	≤1.2KN/m ²	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Ground Clearance	≤2000mm+	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Overview

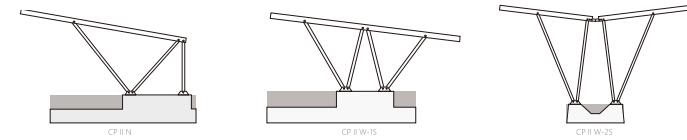
Solar Carport System II is a pre-assembled ground solar mounting system which is ideal for large commercial and utility-scale solar PV projects. The system has been developed for various photovoltaic modules and will be customized to fit into the parking lot or designed according to specific requirements. The Carport System can protect the cars to avoid damage from sunshine, wind, rain water, and snow. Mibet's engineers continue to optimize the design of system, the quality of product and service, and also provide the best solution for your Solar Carport System.



Advantages

- **Customized Solution**
Design case by case, making a good utilization of ground resource and pursuit for easy and quick installation.
- **High Waterproof**
The special waterproof conforms to the structure of system, which make the performance Stronger
- **Save Installation Time and Labor Cost on Site**
With installation manuals and system solution, the construction on site will be simple. Less construction time directly reduces project costs.
- **Compatible to Varied Solar Modules**
With Mrc module clamps, the system compatible with most kinds of framed and frameless modules.

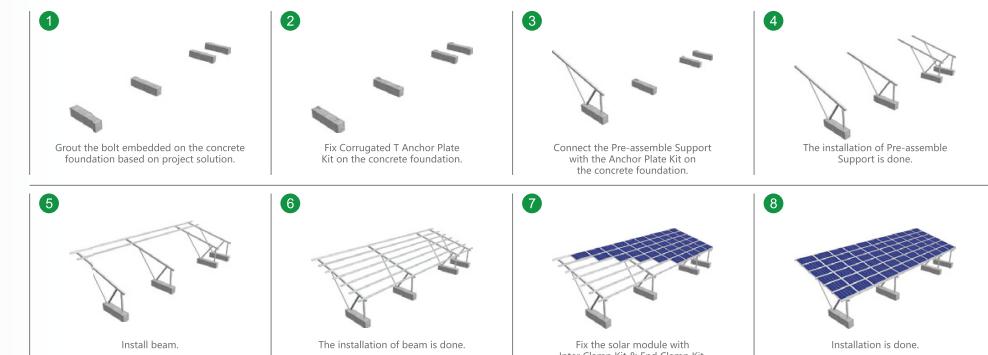
Structure



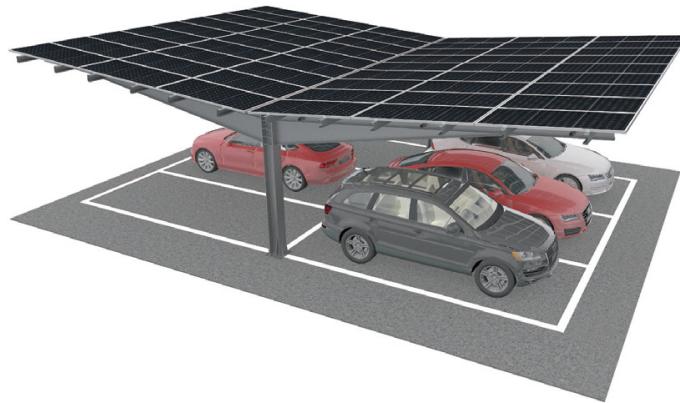
Component Details

1	Conical Symmetric Cross Beam 135 Specification : L*58*135 Standard Length: 300mm 5000mm
2	Splice for Conical Symmetric Cross Beam 135 Specification : L260mm Components : Hexa Self-Tapping Screw With EPDM Washer ST6.3*19
3	Beam 160 Specification : L*100*100 Material : AL6005-T5 (Anodized)
5	Wide End Clamp Kit Components : Wide End Clamp Symmetric Cross Module Spring Washer M8 Hexagon Socket Bolt
7	Anchor Plate for Carport (L250) Specification : 62*49*L250 Material : AL6005-T5 (Anodized)
9	Anchor Plate for Carport (L450) Specification : 62*49*L450 Material : AL6005-T5 (Anodized)
8	Square Tube Specification : L*100*100 Material : AL6005-T5 (Anodized)
10	Waterproof for Cross Beam Specification : L*100*100

Installation Guide



SUNRANCE Mono Carport System



Technical Parameters

Installation site	Open Area	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Foundation	Concrete Foundation		International Building Code IBC 2009,
Tilt Angle	5-15°		California Building Code CBC 2010
Wind Load	≤50m/s	Material	Zn-Al-Mg Coating Steel & HDG Steel
Snow Load	≤1.6kN/m ²	Fastener	Zn-Ni Alloy & SUS304 & HDG Steel
Ground Clearance	≤1800mm~3000mm	Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-year

Overview

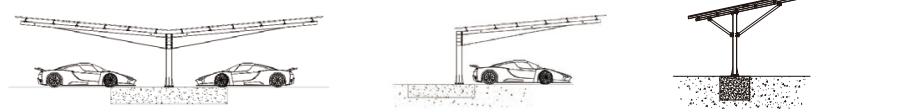
The Mono Carport System is mainly customized according to customer site requirements, which is convenient parking, beautiful appearance. PV carport not only has the function of ordinary carport, but also can generate electricity and income through solar power generation. Professional solutions bring you a simple and convenient installation experience, Mibet engineers have been committed to optimize the system design, products and service quality, and provide you with the best quality solutions of photovoltaic shed.



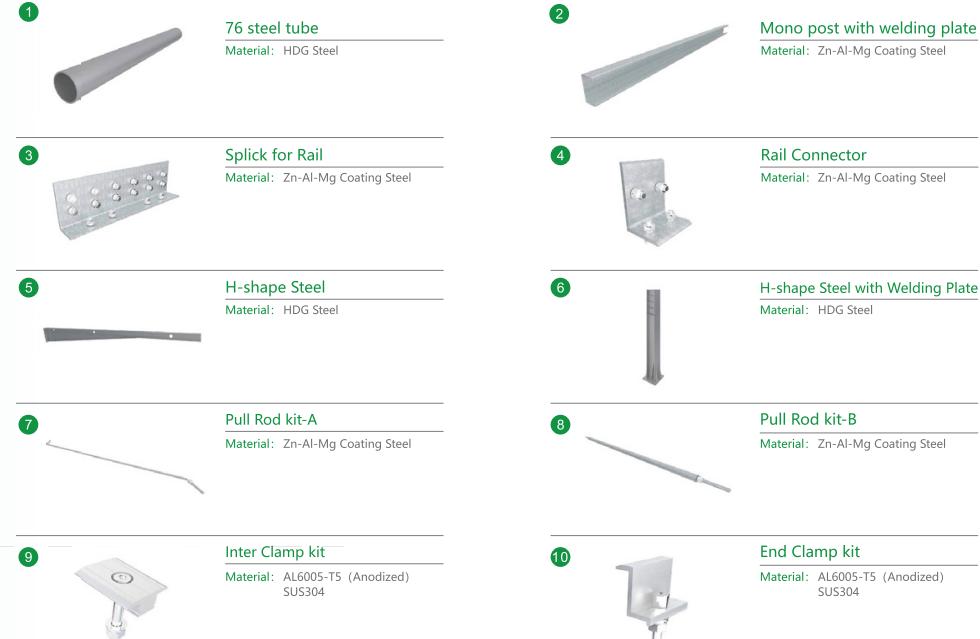
Advantages

- Customized Solution**
Design case by case, making a good utilization of ground resource and pursuit for easy and quick installation.
- Convenient parking and beautiful appearance**
The single column design makes the structure simpler, minimizes obstruction, and facilitates parking and access.
- Save Installation Time and Labor Cost**
Pre-assembled Components Save Onsite Installation Time
Solution design case by case, most components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.
- Compatible to Varied Solar Modules**
With MRC module clamps, the system compatible with most kinds of framed 60-cell, 72-cell.

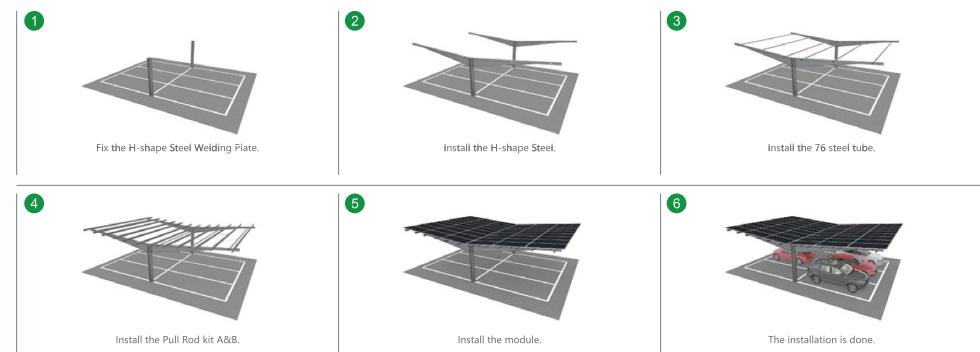
Structure



Component Details



Installation Guide



SUNRANCE Ground Mounting GT2



Technical Parameters

Installation Site	Ground	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Foundation	U Post		International Building Code IBC 2009,
Tilt Angle	0-60°		California Building Code CBC 2010
Wind Load	≤60m/s	Material	Steel Q235B(Hot-Dip Galvanized), AL6005-T5(Anodized)
Snow Load	≤1.6KN/m ²	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Ground Clearance	≤500-2000mm	Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Overview

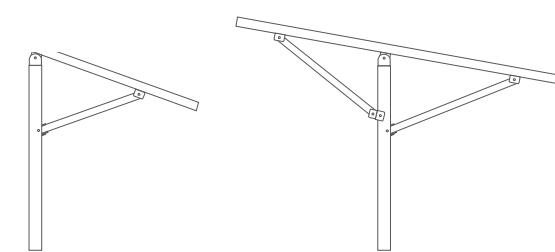
Ground Terrace GT2 is a highly pre-assembled ground mounting system, which can be applied to the installation of large commercial and utility scale solar PV projects. Made of high quality aluminum material, GT2 has excellent corrosion resistance performance. The single-pile patented structure design saves installation time and cost, with good compatibility to varied solar modules.



Advantages

- **Pre-assembled Components Save Onsite Installation Time**
Solution design case by case, most components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.
- **Single-Pile Design**
Single-pile design reduce half of the ramming time, saving the construction cost.
- **Structure Configuration Multi-Options**
Single or double embrace bars structure configuration available to meet varied projects requests.
- **Flexibility and Adjustability**
The structure can be adjusted with some tolerance with east-west, west-south and south-north directions, assuring flexible on-site installation to achieve best yield for solar modules.

Structure



Component Details

1		Rail 85 Specification : L*63.5*85 Standard Length : 3100mm 4100mm 5100mm
2		Splice for Rail 85 Specification : L260mm Components : Hexa Self-Tapping Screw With EPDM Washer ST6.3*19
3		GT2 Pre-assembled Support Components : U Beam, T Shape Jointer, C clamp Kit, Pre-Assembled Square Tube, Spring Washer M12, Washer M12, Hexagon Nut M12, Hexagon Bolt M12*95, Hexagon Bolt M12*75
4		C Clamp Kit Components : C Clamp, Cross Module, Spring Washer M8, Hexagon Socket Bolt
5		End Clamp Kit Components : End Clamp, Cross Module, Spring Washer M8, Hexagon Socket Bolt
6		Inter Clamp Kit Components : Inter Clamp, Cross Module, Spring Washer M8, Hexagon Socket Bolt
7		Post Plate Material : AL6005-T5 (Anodized) Specification : Plate A: L90 Plate B: L70
8		U Post Material : Steel Q235B (Hot-Dip Galvanized)

Installation Guide



SLNRANCE Ground Mounting GT4



Technical Parameters

Installation Site	Ground	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Foundation	Concrete Base or Ground Screw		International Building Code IBC 2009,
Tilt Angle	0-60°		California Building Code CBC 2010
Wind Load	≤60m/s	Material	Al6005-T5(Anodized)
Snow Load	≤1.6KN/m ²	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Ground Clearance	≤500-2000mm	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Overview

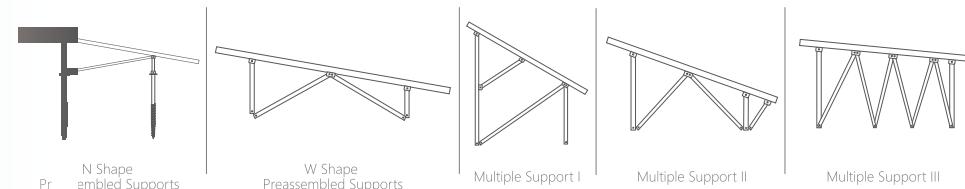
Ground Terrace GT4 is a highly pre-assembled ground mounting system, with strong wind load and snow load resistance. The system can achieve minor adjustment onsite with special design of Anchor Plate to adapt to different sites, and is mainly applied to medium to large scale solar PV projects. Patented and certified system design ensure projects safety and quick installation.



Advantages

- **Pre-assembled Components Save Onsite Installation Time**
Solution design case by case, most components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.
- **Flexibility and Adjustability**
The structure can be adjusted with some tolerance with east-west, west-south and south-north directions, assuring flexible on-site installation to achieve best yield for solar modules.
- **Quick Modular Kit Fixation**
Most of the components are designed as modular kit with anodized aluminum to further ensure easy and fast construction on site.
- **No Drill on Portrait Beam**
It improves the strength of the system to fix the portrait beam onto the post by special designed clamps, with force at the same direction of the gravity.

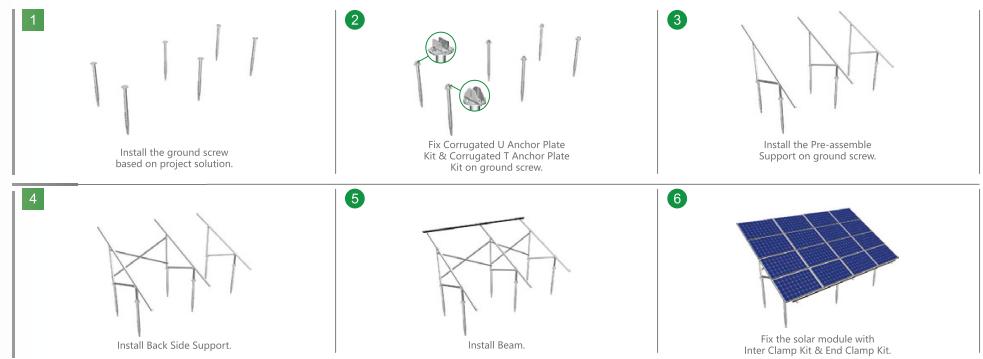
Structure



Component Details

1		Cross Beam 85	Specification : L71*85 Standard Length : 3100mm 4100mm 5100mm
2		Splice for Cross Beam85	Specification : L260mm Components : Hexa Self-Tapping Screw With EPDM Washer ST6.3*19
3		GT4 Preassembled Support	Components : Cross Beam 85 GT4 Square Tube A GT4 Square Tube B GT4 Square Tube C T Joint T Joint Joiner Flat Washer M12 Spring Washer M8 Flat Head Hexagon Bolt External Hexagon Bolt M12*19 External Hexagon Bolt Kit M12*19
4		C Clamp Kit	Components : C Clamp Cross Module Spring Washer M8 Hexagon Socket Head Bolt M8*28
5		Wide End Clamp Kit	Components : Wide End Clamp Cross Module Spring Washer M8 Hexagon Socket Head Bolt
6		U25 Inter Clamp Kit	Components : Inner Clamp Cross Module Spring Washer M8 Hexagon Socket Head Bolt
7		GT4 Corrugated T Anchor Plate Kit	Components : Corrugated Gasket Corrugated T Plate Hexagon Bolt Kit Material : AL6005-T5 (Anodized)
8		GT4 Corrugated U Anchor Plate Kit	Components : Corrugated Washer Corrugated U Anchor Plate M12*95 External Hexagon Bolt Plate Material : AL6005-T5 (Anodized)

Installation Guide



SUNRANCE Ground Mounting GT7



Technical Parameters

Installation Site	Ground	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Foundation	C-shape, I-shape, L-shape Piles		International Building Code IBC 2010,
Tilt Angle	0-60°		California Building Code CBC 2010
Wind Load	≤60m/s	Material	Q235B(Hot-Dip Galvanized)
Snow Load	≤1.6KN/m ²	Fastener	SUS304 & Hot Dip Galvanized
Ground Clearance	≤500-2000mm	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Overview

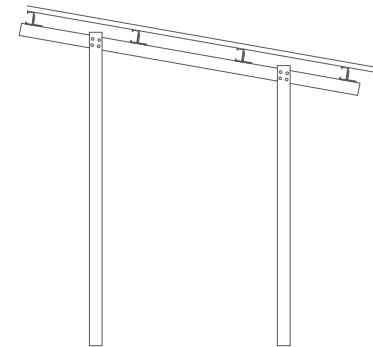
Ground Solar PV Mounting System GT7 is applied for the installation of large-scale and utility-scale solar PV power plant. Main components are made of hot-dip galvanized steel, with good performance of structure strength, stability, and anti-corrosion. Compatible with varied solar modules. Unique piles and structure design save installation time and cost.



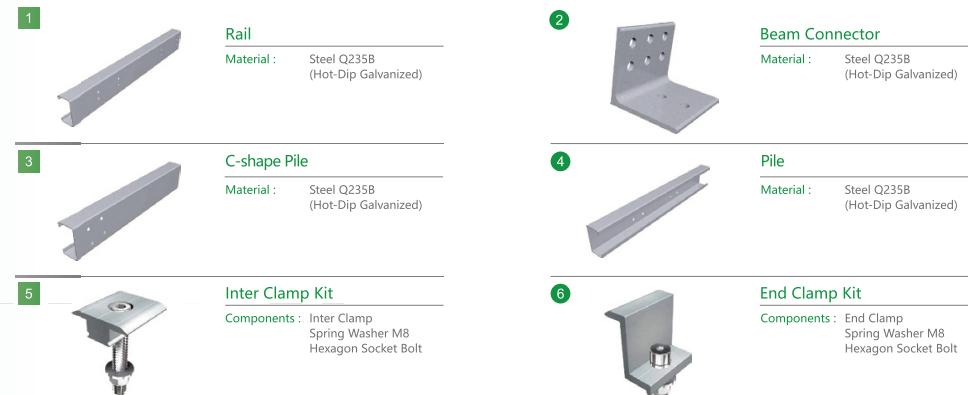
Advantages

- **Unique Pile Design**
Unique post design suitable for varied soil conditions and strengthen the whole structure stability.
- **Pre-assembled Components Save Onsite Installation Time**
Solution design case by case, most components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.
- **Flexibility and Adjustability**
The structure can be adjusted with some tolerance with east-west, west-south and south-north directions, assuring flexible on-site installation to achieve best yield for solar modules.
- **Compatible to Varied Solar Modules**
With MRAc module clamps, the system compatible with most kinds of framed 60-cell, 72-cell, half-cut cells modules and

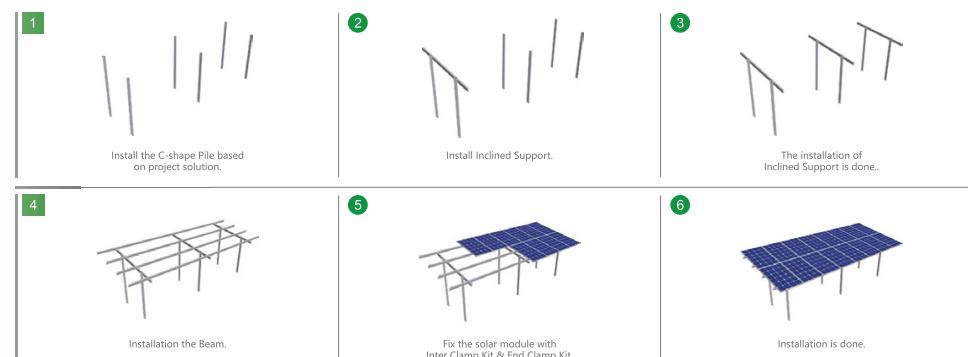
Structure



Component Details



Installation Guide



SLNRANCE Concrete Pile High Elevation Mounting System



Technical Parameters

Installation Site	Ponds, Reservoirs	Design Standard	AS/NZS 1170, DIN 1055, JIS C8955: 2017, International Building Code IBC 2009, California Building Code CBC 2010;
Foundation	Pre-stressed Concrete Pile		
Tilt Angle	0-45°		
Wind Load	60m/s	Material	Q235B (Hot-Dip Galvanized) & Al6005-T5(Anodized)
Snow Load	1.4KN/m ²	Fastener	Q235B (Hot-Dip Galvanized) & Zinc-Nickel Alloy Electroplated Steel
Ground Clearance	400-1200mm	Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Overview

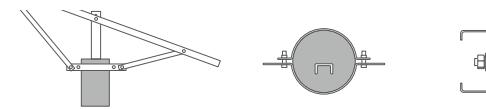
Concrete Pile High Elevation Mounting System is applied to fish Pond, flood area and sandy land solar PV projects. Main components are made of hot-dip galvanized steel, with good performance of structure strength, stability and anti-corrosion, compatible with varied solar modules. Unique piles and structure design save installation time and cost.



Advantages

- **Pre-assembled Components Save Onsite Installation Time**
Solution design case by case, most components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.
- **Dual-Use of Land or Utilize Waste Land Improve the Economic Benefit**
Install solar projects above the fishpond, achieving the dual-use of land to improve the economic benefit. This system can utilize waste land like flood area or sandy area to save land resources.
- **Quick Modular Kit Fixation**
Most of the components are designed as modular kit with anodized aluminum to further ensure easy and fast construction on site.

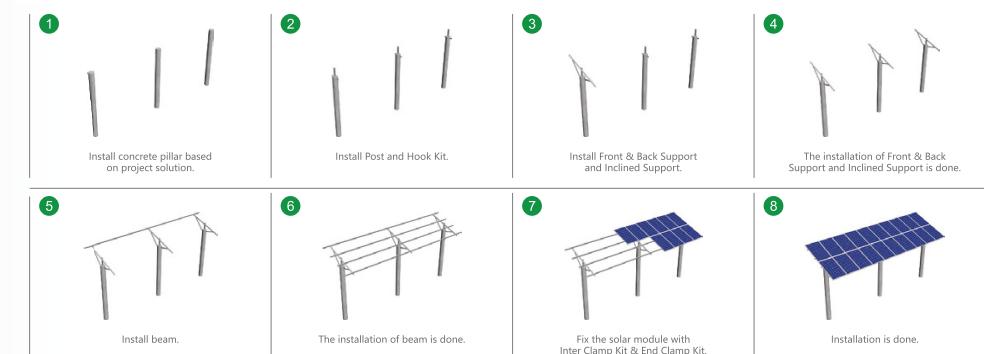
Structure



Component Details

	Beam Hoop Spec: C100*50*15*2*L4500 Material: Q235B(Hot-Dip Galvanized)
	Front/Back Post Components: Front Support Back Support Material: Q235B (Hot-Dip Galvanized)
	End Clamp Kit Components: End clamp Cross Module Spring Washer M8 Hexagon Socket Bolt
	Post Hoop Spec: C100*50*15*2*L557 Components: Flat Washer M16 Spring Washer M16 Hexagon Socket Head Bolt Nut M16 Hexagon Socket Head Bolt M16*50
	Big Connector Hoop Spec: 80*40*5*100 Components: Flat Washer M12 Spring Washer M12 Head Bolt M12 Head Bolt Nut M12 Hexagon Socket V12*30

Installation Guide



SLNRANCE MRac Smart Tracking Solar PV System



Technical Parameters

GPS Module	Automatically obtain latitude and longitude and precise time	Design Support	Support Wind Protection
	Compatible with GPS + Beidou satellite positioning system		Snow Removal Mode
Installation Capacity	Maximum 90 solar modules per row		Rain Cleaning Mode
Tracking Angle	$\pm 60^\circ$		Position Return Mode
Wind Resistance	47m/s design standard ASCE7-10, <18m/s (shelter from wind)	Drive Method	Slewing Speed Reducer
		Structure Material	Hot-dip Galvanized + POSMAC Steel
Tracking Algorithm	Astronomical Algorithms +Tilt Sensors	Control System	Micro Controller Unit
Drive Device	Slewing Drive, 24V DC motor	Protection Level	IP65
Power Supply	Self-powered/External Connection	System Warranty	10 Years
Communication Method	LoRa wireless communication or 485 bus (Modbus protocol)	System Daily Power Consumption	$\leq 0.1\text{Kwh}$

Overview

Smart Tracking Solar PV System is mainly applied to large-scale solar plant with its most affordable, efficient and sustainable solutions. System combining with single row, 1 controller per tracker, multipoint parallel drive with backtracking mode, having strong wind-resistance capability. Comparing to fixed mounting system, MRac Smart Single-axis Tracker is first option for LSS, could increase nearly 20% power generation under same conditions.



Advantages

- Debugging by automatic tracking
- Profitability and reliability for different conditions
- Easy to install, lower O&M costs
- Multipoint parallel drive, strong wind-resistance capability
- Strong adaptability of terrain up to 25% N-S slope

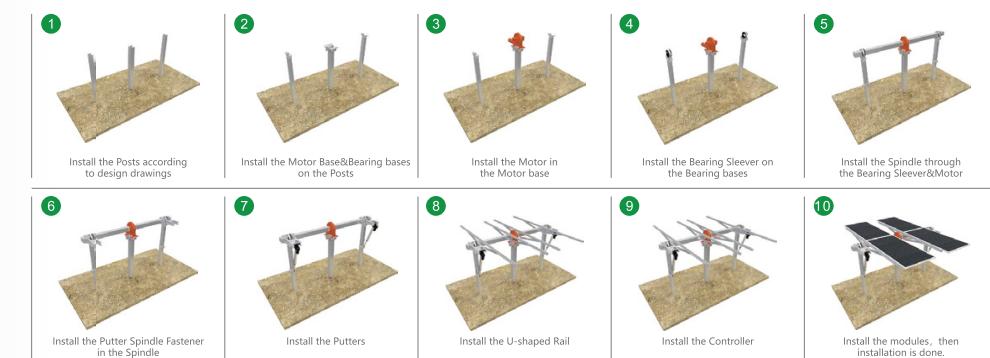
Structure



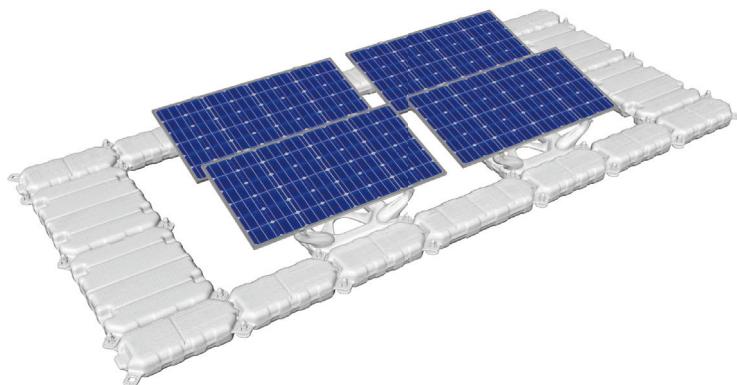
Component Details

1		Post Material: Q235B/Q355B (Hot-Dip Galvanized)
3		Motor Spec: 7-9 inches
5		Bearing base Material: Q235B (Hot-Dip Galvanized)
7		Tilt Sensor Material: Q235B (Hot-Dip Galvanized)
9		Motor Base Material: Q235B/Q355B (Hot-Dip Galvanized)
11		Bearing Sleeve Material: Q235B (Hot-Dip Galvanized)
13		U-shaped Rail Material: Zn-Al-Mg Coating Steel Q355B (Hot-Dip Galvanized)
2		Controller Material: Q235B(Hot-Dip Galvanized)
4		Putter Spindle Fastener Material: Q235B(Hot-Dip Galvanized)
6		Putter Customized according to actual needs
8		Angle Steel Material: Q235B(Hot-Dip Galvanized)
10		Putter Post Fastener Material: Q235B(Hot-Dip Galvanized)
12		U-shaped support Material: Zn-Al-Mg Coating Steel Q355B (Hot-Dip Galvanized)
14		Spindle Spec: 120*120, 140*140 Material: Q355B(Hot-Dip Galvanized)

Installation Guide



SLNRANCE Floating PV Mounting System G4N



Technical Parameters

Product Name	Floating PV Mounting System G4N	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Lake, Reservoir		International Building Code IBC 2009,
Tilt Angle	5°, 10°, 15°		California Building Code CBC 2010
Wind Load	≤42m/s	Material	HDPE
Snow Load	≤1KN/m ²	Fastener	Zinc-Nickel Alloy & HDPE&Q235B
Water Surface Clearance	> 300mm	Small Components	AL6005-T5 (Anodized)
Module Type	Frame or Frameless	Color	Gray or Customized
Panel Orientation	Landscape, Double Row	Bearing Weight	Module Floater 70KG/m ² , Walkway Floater 155KG/m ²

Overview

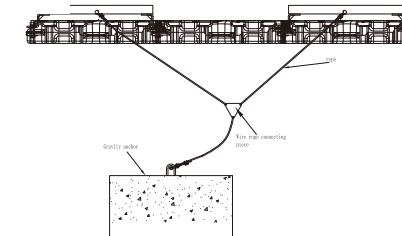
Floating PV Mounting System G4N is applied to solar pv power plant installation on the water. Adopting HDPE material, it has passed the Hunt Water Absorption Test, Anti-Aging Test, Anti-UV Test etc. Moreover, it can bear the pulling force that is much higher than other products. Adopting new module design in floater and main floater, it can realize the array of double row in the same facing or in symmetrical facing, which can increase the efficiency of solar power generation and installation capacity, be easily installed, and save the cost, and its lifetime has more than 25 years.



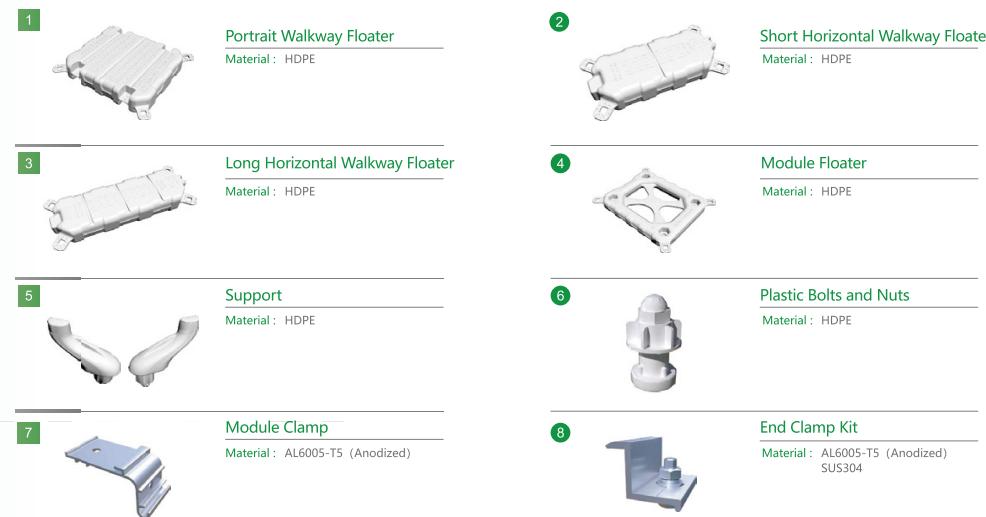
Advantages

- Modular design, simple and convenient splice installation;
- Increase the volume of floater to add the buoyant force of floater;
- The floater is made of high density polyethylene, which ensures its long service time;
- Various array design, easier to combine;
- Realize symmetrical facing array, increase the installation capacity, maximize the efficiency of power generation;
- Compatible with various solar module, save the cost;
- Strong weather ability, easy to operation and maintenance.

Structure



Component Details



Installation Guide

