

For more information, call us or check on Mibet website



Official Website

Mibet Energy

+86-592-3754999

[sales@mbt-energy.com](mailto:sales@mbt-energy.com)

[www.mbt-energy.com](http://www.mbt-energy.com)



**MIBET ENERGY**  
Solar PV Mounting System Solutions

The pictures are for reference only. Mibet Energy reserves the right of final interpretation.

选择绿色 选择迈贝特 | do My BesT , to be the best!

# MIBET ENERGY

Top 3 manufacturer of Solar Racking System, with solutions for commercial, industrial, residential and utility scale solar projects, including MRac roof racking, ground mount, floating system and solar tracker, compliant with certifications like ISO, CE, TUV, MCS, etc.



P03-04	MRac Tile Roof Hook Solar PV Mounting System
P05-06	MRac Balcony Solar Mounting System
P07	MRac L Feet and Hanger Bolt Kit Metal Roof PV Mounting System
P08	MRac Adjustable Support Kit Solar PV Mounting System
P09-10	MRac Kliplok
P11-12	MRac Mini-Rail Kit Metal Roof PV Mounting System
P13-14	MRac Trapezoidal Metal
P15-16	MRac East/West Matrix Solar Roof Mounting System
P17-18	MRac Roof Solar PV Mounting System RM-Ad
P19-20	MRac Roof Solar PV Mounting System RM-Ad Symmetric Ballast
P21-22	MRac Roof Solar PV Mounting System Matrix II
P23-24	MRac Double-row Tripod Base-beam-free RMIV
P25-26	MRac Manually Adjustable Ground Mounting
P27-28	MRac Solar Carport System II
P29-30	MRac Mono Carport System
P31-32	MRac Ground Mounting GT2
P33-34	MRac Ground Mounting GT4
P35-36	MRac Ground Mounting GT7
P37-38	MRac Smart Tracking Solar PV Mounting System
P39-40	MRac Floating Solar PV Mounting System G4N
P41-42	Service info

MRac<sup>®</sup>

Tile Roof Hook Solar PV Mounting System



Technical Parameters

System Name	MRac 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 <sup>2</sup>	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10 Years

Overview

MRac 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 Rol.
- > **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





MRac<sup>®</sup>

Balcony Solar Mounting System



Technical Parameters

System Name	MRac 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 <sup>2</sup>	Small Components	AL6005-T5
Applicable Solar Module	Framed	Color	Natural Silver or Customized
Panel Layout	Horizontal	Warranty	10-Year Warranty

Overview

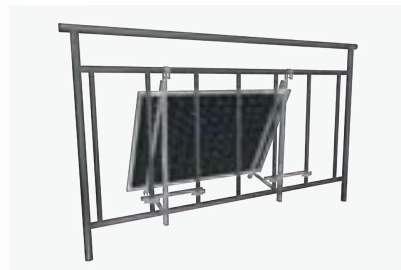
MRac Balcony Solar Mounting System is a Solar Mounting System product installed on balcony railings, which can easily realize the construction of photovoltaic power plants on the balcony. The system is all bolted and fixed, eliminating the need for welding and drilling during installation. The unique telescopic tube support leg design allows the angle of the panel to be adjusted at any time.



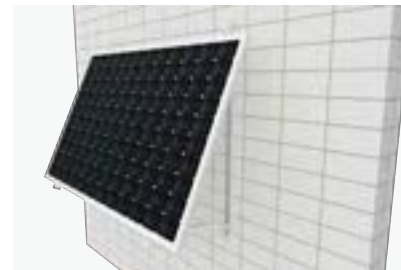
Advantages

- > **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



1 Installed on balcony with curved hook



2 Installed on wall with expansion bolts



3 Installed on concrete roof with expansion bolts

Component Details



Curved Hook

Material : Zn-Al-Mg Coating Steel



U-shaped Hoop

Material : Zn-Al-Mg Coating Steel



Longitudinal Beam H50

Material : Zn-Al-Mg Coating Steel



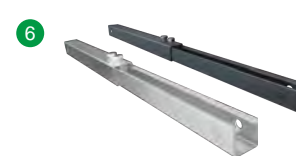
30\*30 Square Tube

Material : Zn-Al-Mg Coating Steel



U-shaped Base Beam H50

Material : Zn-Al-Mg Coating Steel



Pro-U shaped Adjustment Tube

Material : Zn-Al-Mg Coating Steel

Installation Guide



Install the tripod on the ground



Adjust the preset Angle



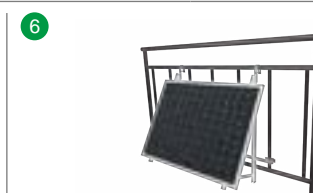
Lock the part of the Curved Hook



Find the 30\*30 square tube also placed under the base beam of the tripod



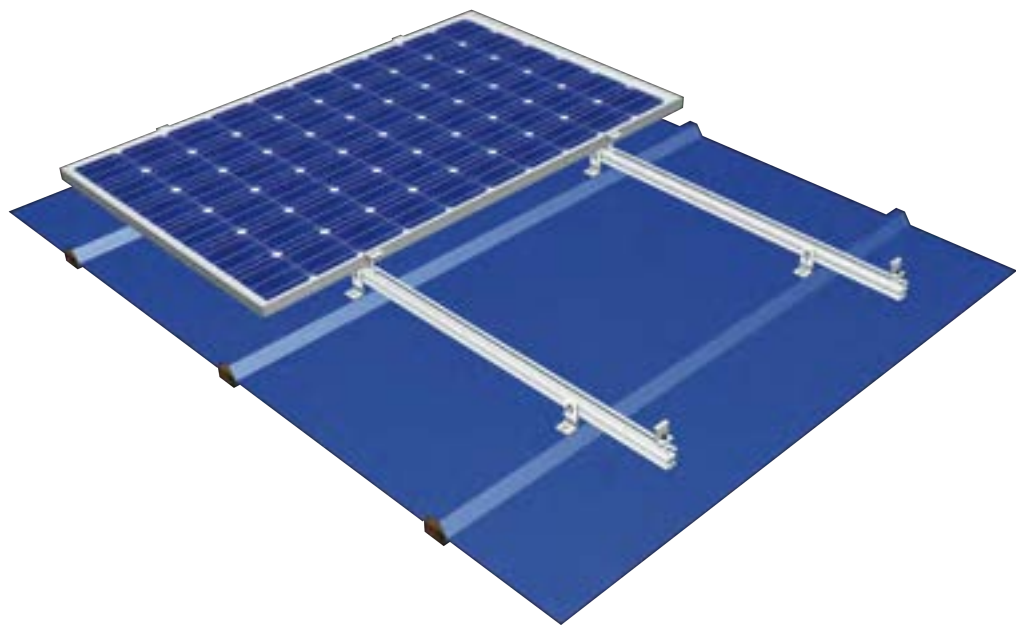
Repeat the above steps to complete the installation of another set of tripod



Install the panel

MRac<sup>®</sup>

L Feet and Hanger Bolt Kit Metal Roof PV Mounting System



Overview

MRac 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

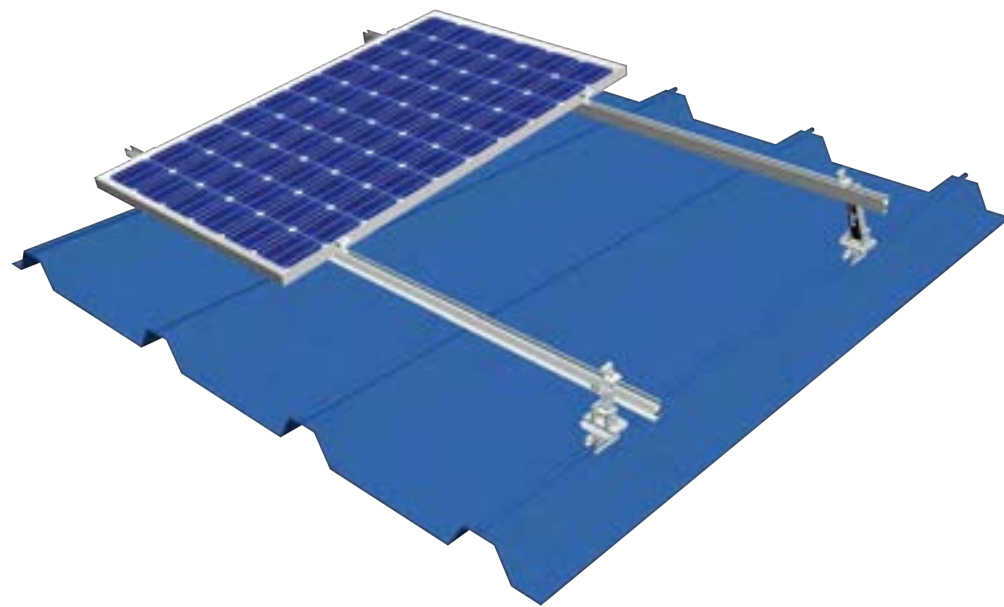
System Name	MRac L Feet Kit & Hanger Bolt Kit	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof		International Building Code IBC 2009,
Foundation	Trapezoidal Roof		California Building Code CBC 2010
Tilt Angle	0°	Material	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m²	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



MRac<sup>®</sup>

Adjustable Support Kit Solar PV Mounting System



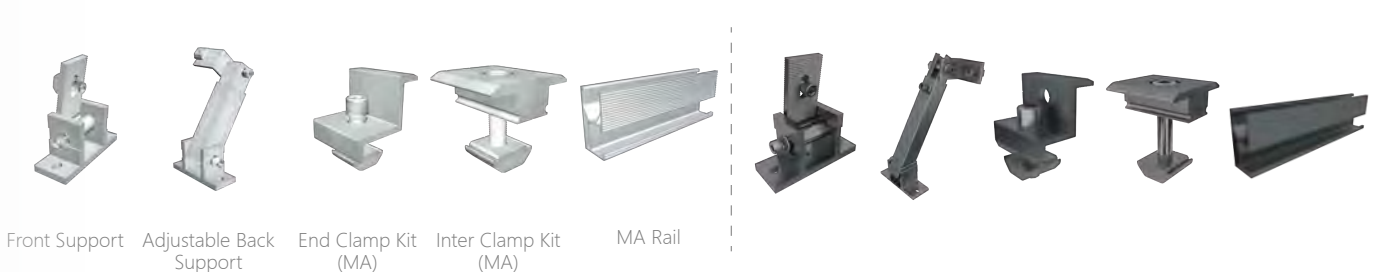
Overview

MRac 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

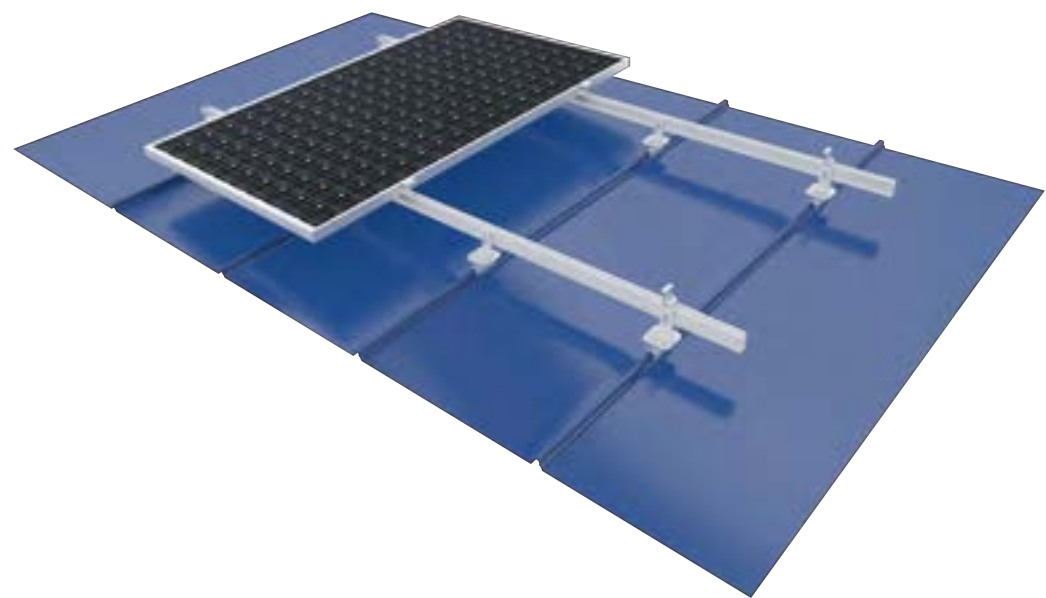
System Name	Adjustable Support	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof		International Building Code IBC 2009,
Foundation	Metal Roof		California Building Code CBC 2010
Tilt Angle	10-60°	Rail	AL6005-T5(Anodized)
Wind Load	≤60m/s	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m²	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



MRac<sup>®</sup>

Kliplok

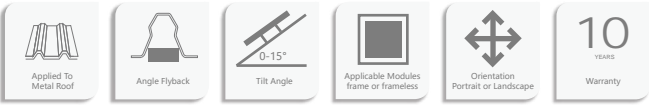


Technical Parameters

System name	MRac 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/m²	Small Components	AL6005-T5(Anodized)
Applicable Module	Framed or Frameless	Color	Silver or Customized
Panel Orientation	Portrait or Landscape	Warranty	10 Years

Overview

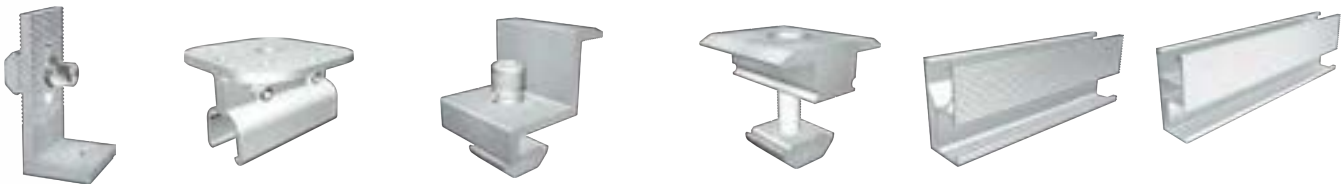
MRac Kliplok is mainly applied to metal roofs, and its material is Al6005-T5. With its professional design, it can realize the perfect connection between roof support and roof to meet customer installation requirement. Professional solution and structure design can save your installation time and cost. 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



L Feet Kit

Multi-functional Kliplok 406/700

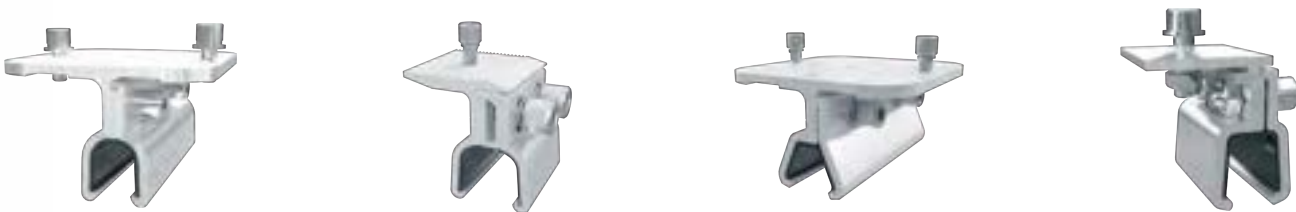
End Clamp Kit(MA)

Inter Clamp Kit(MA)

MA Rail

MA Rail H60

Applicable Kliplok Roof Support

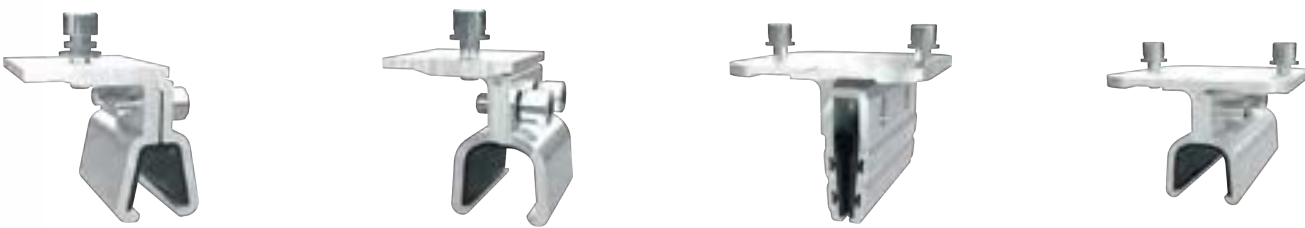


Multi-functional Kliplok 23

Kliplok 406&700 Compatible

Multi-functional Kliplok 406

Medium Kliplok 23



Kliplok 25B

Kliplok 700

Kliplock longline 305

Kliplok Interface Kit



Universal Kliplok Roof Clamp

Multi-functional Kliplok V

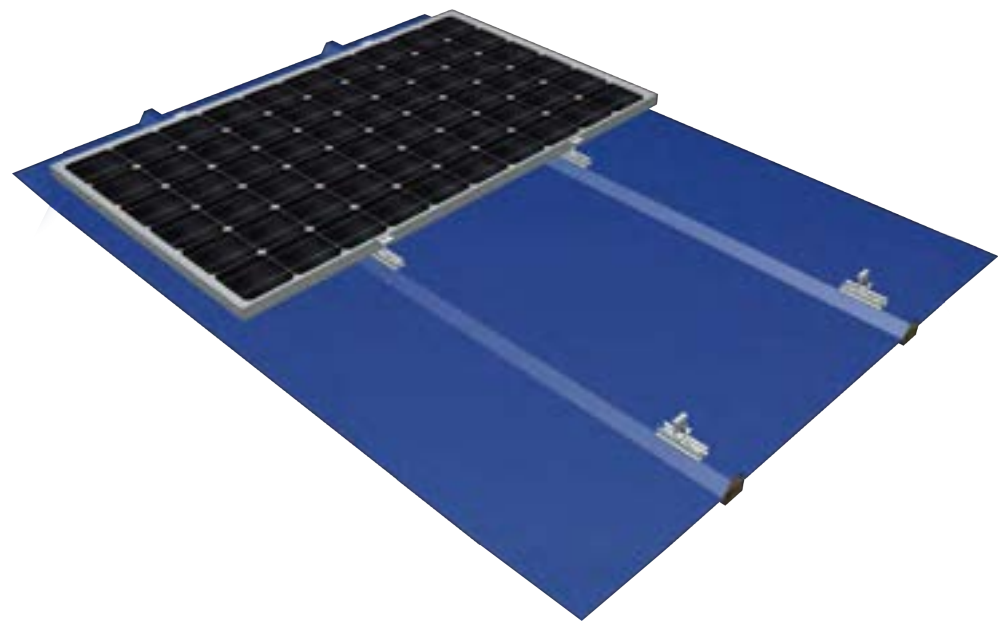
Multi-functional Kliplok VI

Multi-functional Kliplok 406/700



MRac<sup>®</sup>

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/m²	Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscap	Warranty	10-Year Warranty

Overview

MRac 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.



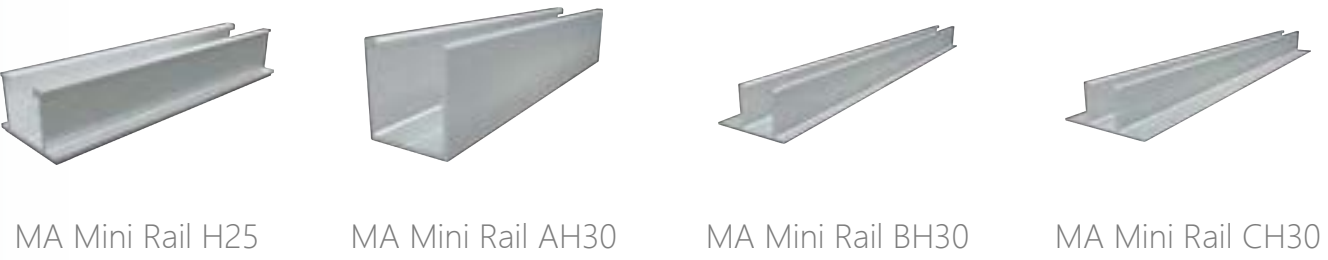
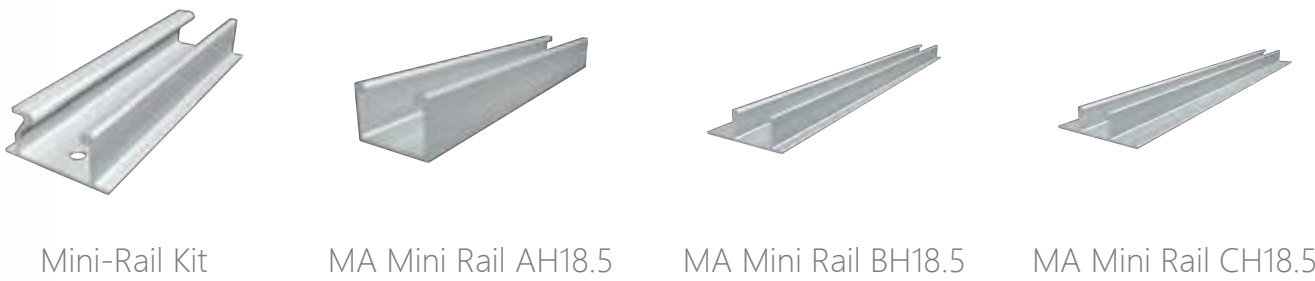
Advantages

- > **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 Rol.
- > **Compatible to Different Types of Solar Modules**  
Compatible to most kinds of framed 60-cell, 72-cell, half-cut cells modules and frameless modules.

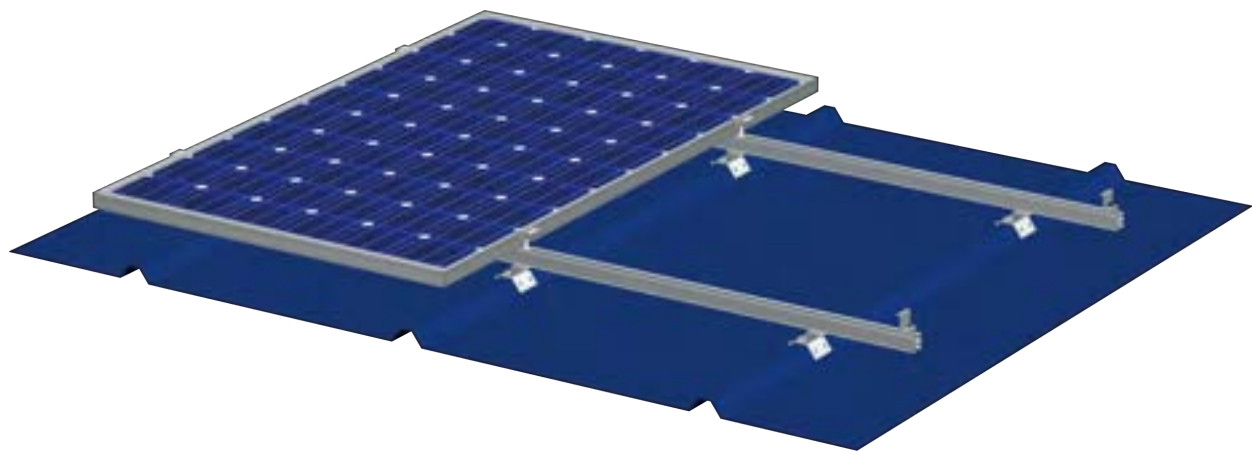
Components



Optional



# MRac® Trapezoidal Metal



## Technical Parameters

System Name	MRac 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/m²	Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

## Overview

MRac 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 klipkoks 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.



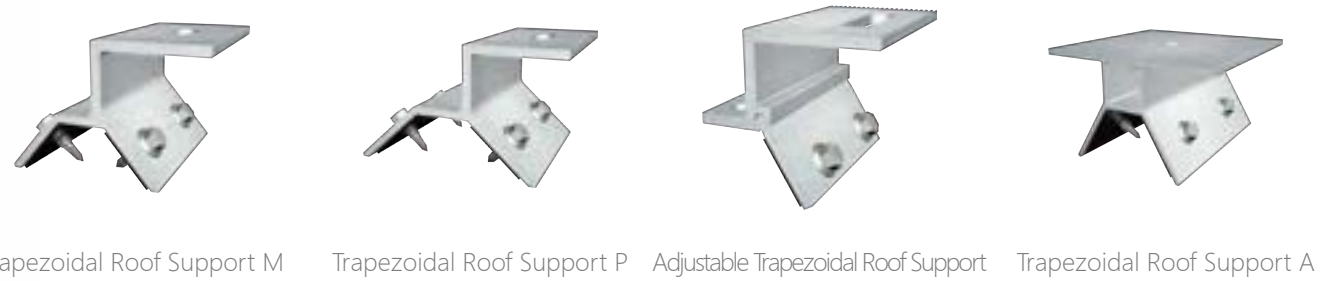
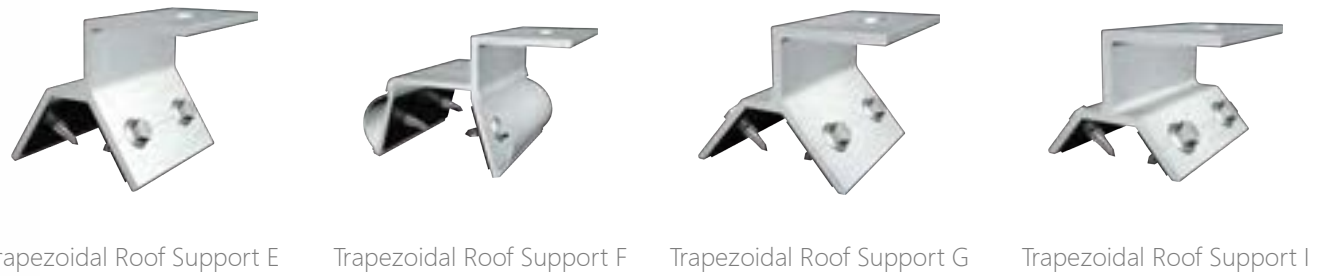
## Advantages

- > **Applicable for different metal roofs**  
According to different metal roof types, making professionally design and achieve perfectly connection between the klipkoks 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



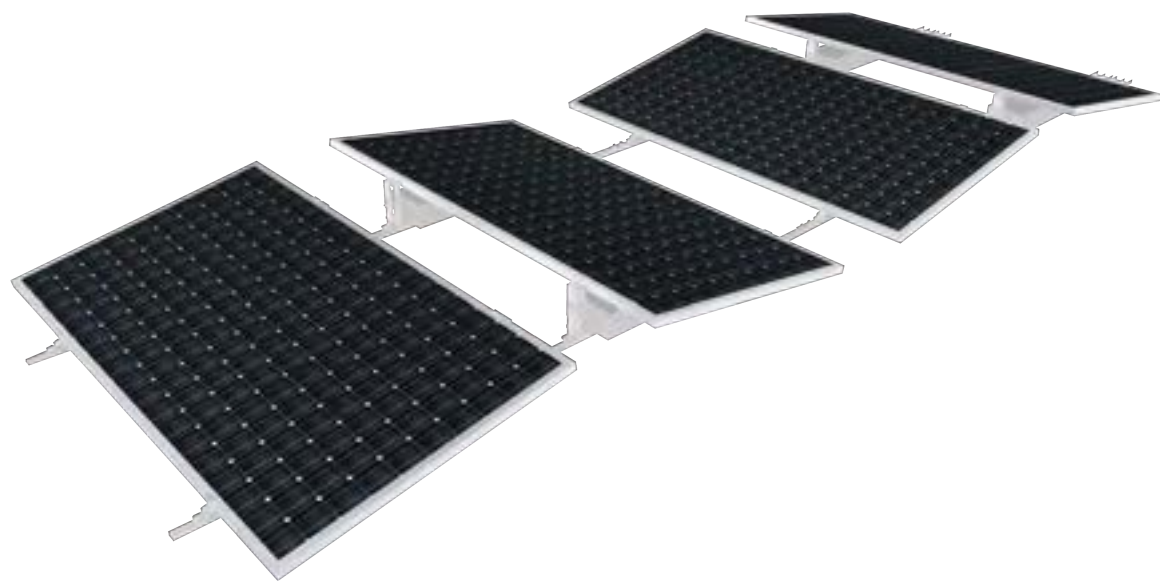
## Applicable Standing Seam Support





MRac<sup>®</sup>

East/West Matrix Solar Roof Mounting System



Technical Parameters

System Name	MRac 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,
Roof Type	Concrete Ballast		California Building Code CBC 2010
Tilt Angle	10°	Material	AL6005-T5(Anodized)
Wind Load	≤44m/s	Fastener	SUS304, Hot Dip Galvanized, Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤1.6KN/m²	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

MRac 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

1

**GM Rail**  
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

**C Clamp Kit**  
Components : C Clamp  
Cross Module  
Spring Washer M8  
Hex Socket Head Bolt

6

**End Clamp Kit**  
Components : End Clamp  
Spring Washer M8  
Hexagon Socket Bolt

Installation Guide

1

Put the GM Rail

2

Install the support plate.

3

Put the cement pier.

4

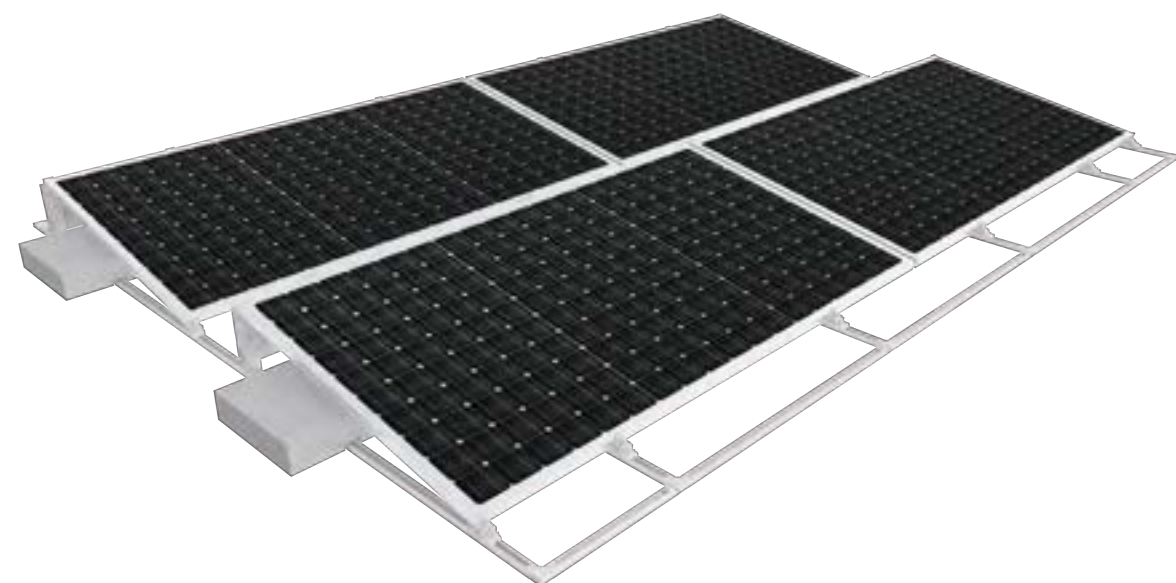
Install the module

5

Complete installation

MRac<sup>®</sup>

Roof Solar PV Mounting System RM-Ad



Technical Parameters

System Name	MRac 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/m²	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

MRac 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

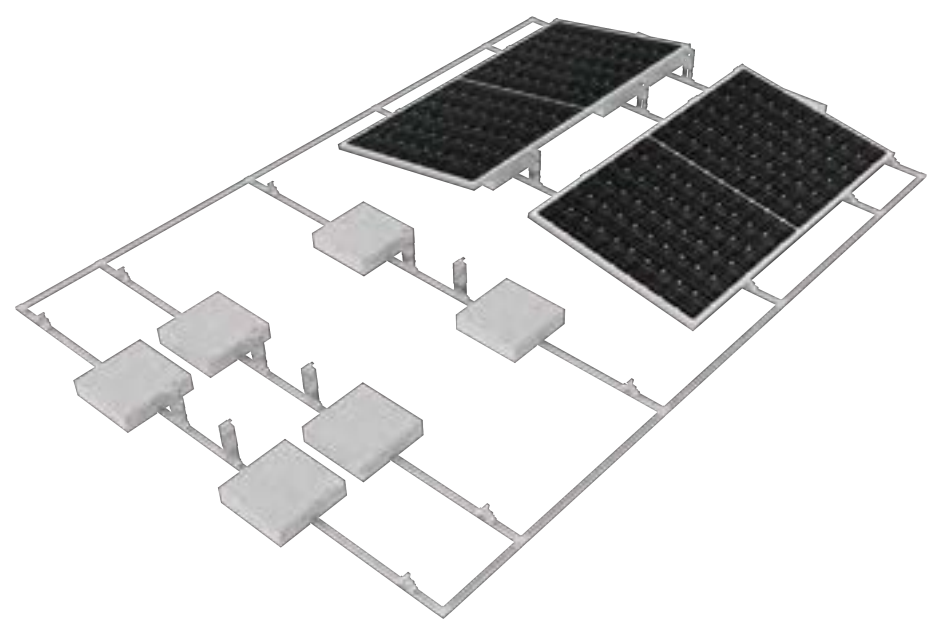
Put the cement pier.
- 5

Install the wind deflectors.
- 6

Install the panel, then the installation is done.

MRac<sup>®</sup>

Roof Solar PV Mounting System RM-Ad  
Symmetric Ballast



Technical Parameters

System Name	MRac 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/m²	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

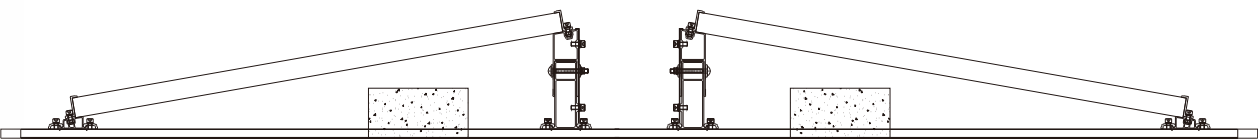
MRac Roof Solar PV Mounting System RM-Ad is a non-penetration solution for flat rooftop, to meet different tilt angles installation. It is applicable to the roof areas with medium wind load. Quick installation and stable structure are assured by the modular patented design.



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

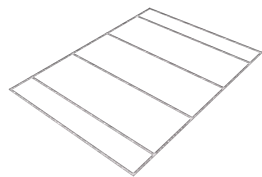
9



**C Clamp Kit**  
Components : C Clamp  
Cross Module  
Spring Washer M8  
Hex Socket Head Bolt

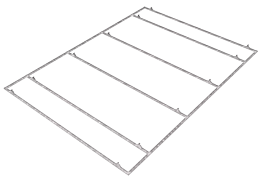
Installation Guide

1



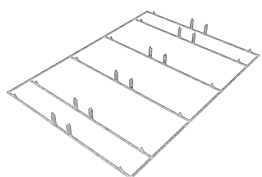
Connect the GM rail with connector.

2



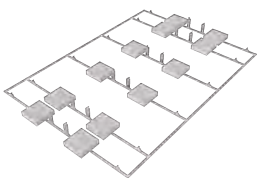
Install the front support plate.

3



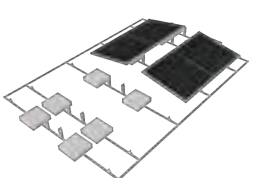
Install the rear support plate.

4



Put the cement pier.

5

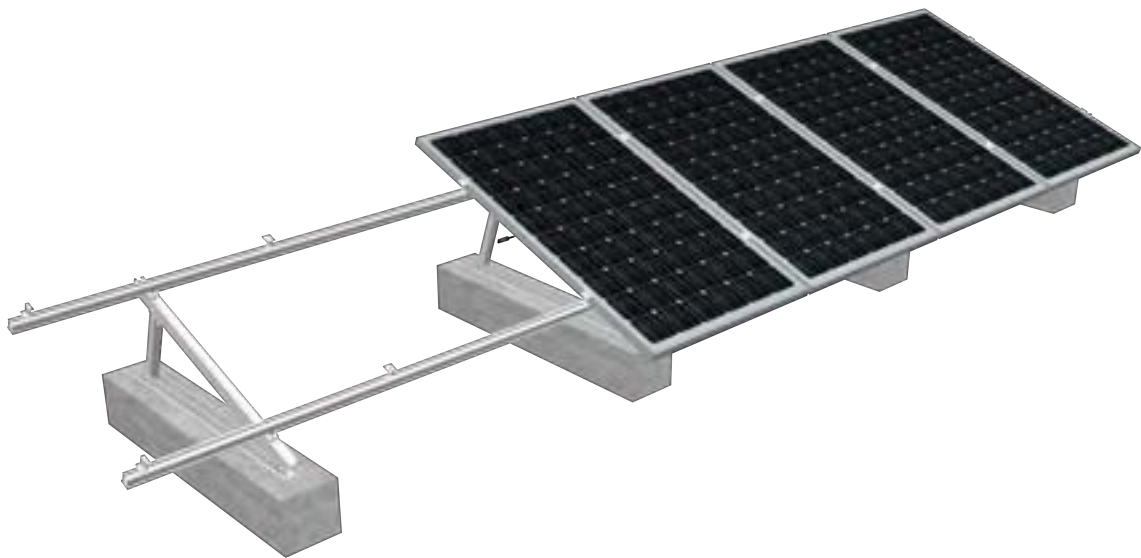


Install the panels, then the installation is done.



MRac<sup>®</sup>

Roof Solar PV Mounting System Matrix II



Technical Parameters			
System Name	MRac 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/m²	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

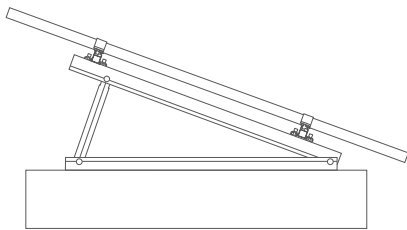
MRac Roof Solar PV Mounting System Matrix II is derived from RM I to meet different roof projects demands. Solar modules can be arranged with single or double rows of landscape or portrait orientation. Quick installation and stable structure are assured by the modular Patented design.



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  
HJointer  
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  
Hexagon Bolt M10\*65

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

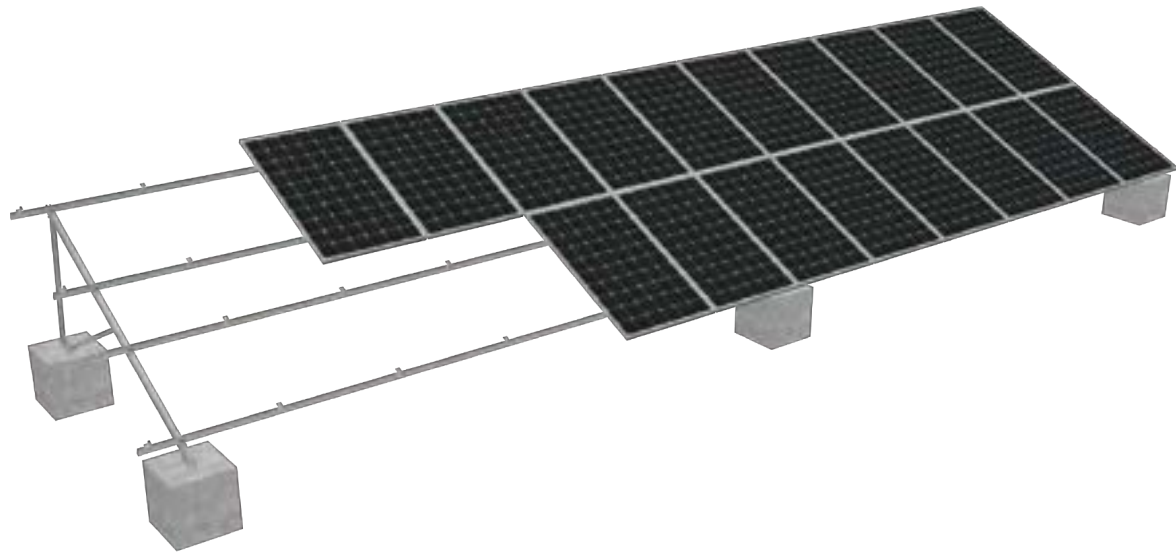
Fasten modules by Inner Clamp Kits
- 7

Fasten modules by End Clamp Kits
- 8

Complete installation

MRac<sup>®</sup>

Double-row Tripod Base-beam-free RMIV



Technical Parameters

System Name	MRac 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/m²	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

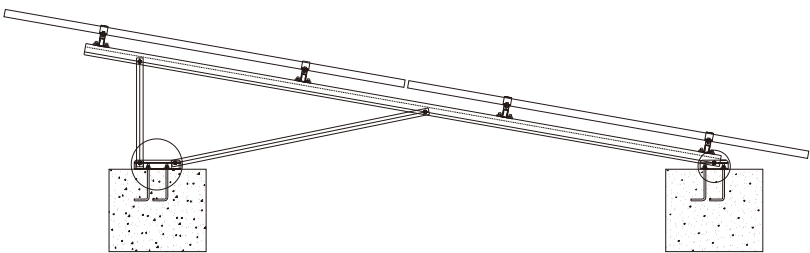
MRac Double-row Tripod Base-beam-free RMIV is derived from RM II to meet different roof projects demands. Solar modules can be arranged with single or double rows of landscape or portrait orientation. Quick installation and stable structure are assured by the modular Patented design.



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

1



**MA Rail**  
Specification : 3100、4100、5100mm  
Material : AL6005-T5(Anodized)

2



**Splice kit for MA Rail**  
Specification : L200  
Material : AL6005-T5(Anodized)

3



**End clamp kit(MA)**  
Components : End Clamp  
Cross Module  
Spring Washer M8  
Hex Socket Head Bolt

4



**Inter Clamp Kit(MA)**  
Components : Inter Clamp  
Cross Module  
Spring Washer M8  
Hex Socket Head Bolt

5



**Rail Clamp(MA)**  
Material : AL6005-T5(Anodized)

6



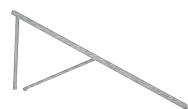
**RMIV Back Base**  
Material : Steel Q235B  
(Hot-Dip Galvanized)

7



**RMIV Front Base**  
Material : Steel Q235B  
(Hot-Dip Galvanized)

8



**Pre-assembled Structure**  
Material : AL6005-T5(Anodized)

Installation Guide

1



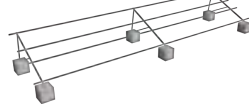
Place the concrete base and install the anchor base

2



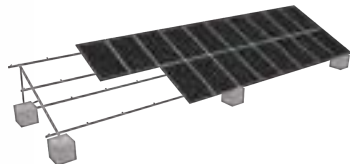
Install pre-assembled structure

3



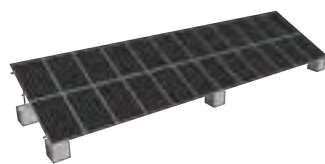
Install the rail

4



Install the panels.

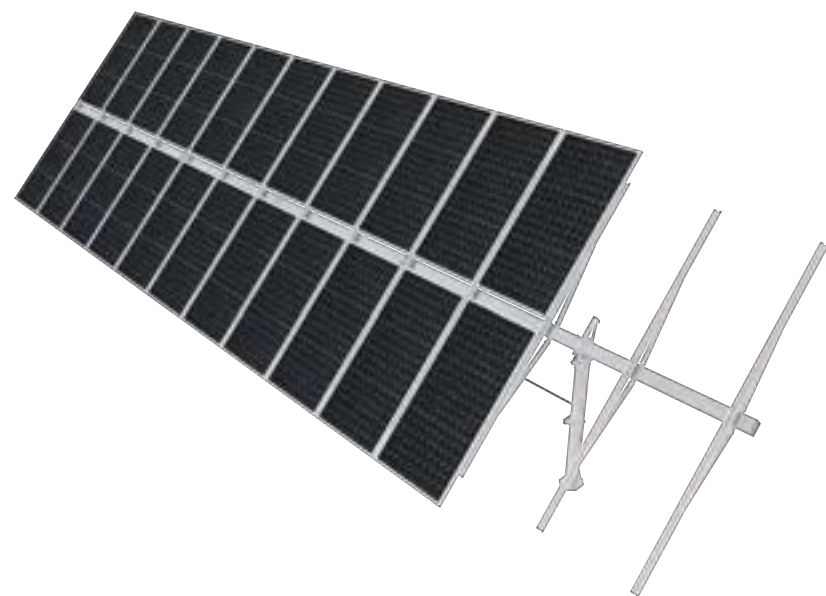
5



Complete installation

MRac<sup>®</sup>

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 <sup>2</sup>	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

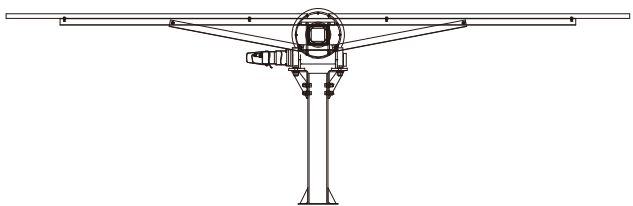
MRac Manually Adjustable Ground Terrace is suitable for the installation of large-scale commercial and utility solar power stations. The product has a firm structure with strong stability. The main parts are made of carbon steel, which has good corrosion resistance. The product is flexible in design, 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

1



Square Steel

Material: Steel Q235B  
(Hot-Dip Galvanized)

2



Angle Bar

Material: Steel Q235B  
(Hot-Dip Galvanized)

3



Control Box

Material: Steel Q235B  
(Hot-Dip Galvanized)

4



Post

Material: Steel Q235B  
(Hot-Dip Galvanized)

5



Holder for Post of Push Rod

Material: Steel Q235B  
(Hot-Dip Galvanized)

6



Bearing's Plate

Material: Steel Q235B  
(Hot-Dip Galvanized)

7



Bearing base

Material: Steel Q235B  
(Hot-Dip Galvanized)

8



U-shape Bolt

Material: Steel Q235B  
(Hot-Dip Galvanized)

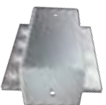
9



Electric Push Rod

Material: Steel Q235B  
(Hot-Dip Galvanized)

10



Hoop Kit

Material: Steel Q235B  
(Hot-Dip Galvanized)

Installation Guide

1



Install Posts according to the engineering drawing

2



Install motor and bearing sleeve

3



Install main beams

4



Install damper

5



Install portrait beams

6



Use Inter Clamp Kits and End Clamp Kits to fix panels



# MRac<sup>®</sup> 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/m²	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

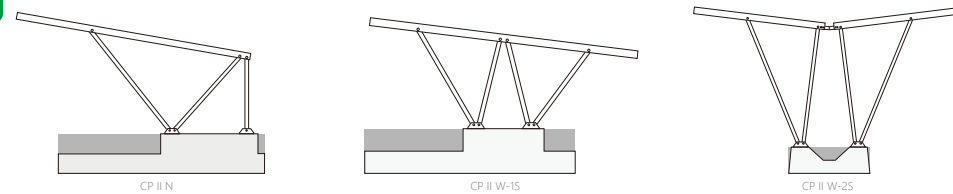
MRac Solar Carport System II is a pre-assembled ground solar mounting system which is ideal for large commercial and utility-scale solar PV projects. The system has been developed for various photovoltaic modules and will be customized to fit into the parking lot or designed according to specific requirements. 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 Mrac module clamps, the system compatible with most kinds of framed and frame and frameless modules.

## Structure



## Component Details

- 1

**Conical Symmetric Cross Beam 135**  
Specification : L\*58\*135  
Standard Length 3000mm  
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 )
- 4

**C Clamp Kit**  
Components : C Clamp  
Symmetric Cross Module  
Spring Washer M8  
Hexagon Socket Bolt
- 5

**Wide End Clamp Kit**  
Components : Wide End Clamp  
Symmetric Cross Module  
Spring Washer M8  
Hexagon Socket Bolt
- 6

**U25 Inter Clamp Kit**  
Components : U25 Inter Clamp  
Symmetric Cross Module  
Spring Washer M8  
Hexagon Socket Bolt
- 7

**Anchor Plate for Carport (L250)**  
Specification : 62\*49\*L250  
Material : AL6005-T5 (Anodized )
- 8

**Square Tube**  
Specification : L\*100\*100  
Material : AL6005-T5 (Anodized )
- 9

**Anchor Plate for Carport (L450)**  
Specification : 62\*49\*L450  
Material : AL6005-T5 (Anodized )
- 10

**Waterproof for Cross Beam**  
Specification : L\*100\*100

## Installation Guide

- 1

Grout the bolt embedded on the concrete foundation based on project solution.
- 2

Fix Corrugated T Anchor Plate Kit on the concrete foundation.
- 3

Connect the Pre-assemble Support with the Anchor Plate Kit on the concrete foundation.
- 4

The installation of Pre-assemble Support is done.
- 5

Install beam.
- 6

The installation of beam is done.
- 7

Fix the solar module with Inter Clamp Kit & End Clamp Kit.
- 8

Installation is done.

# MRac<sup>®</sup> 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/m²	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

MRac Pro 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 MRac module clamps, the system compatible with most kinds of framed 60-cell, 72-cell.

## Structure



## Component Details

- 1

**76 steel tube**  
Material: HDG Steel
- 2

**Mono post with welding plate**  
Material: Zn-Al-Mg Coating Steel
- 3

**Splick for Rail**  
Material: Zn-Al-Mg Coating Steel
- 4

**Rail Connector**  
Material: Zn-Al-Mg Coating Steel
- 5

**H-shape Steel**  
Material: HDG Steel
- 6

**H-shape Steel with Welding Plate**  
Material: HDG Steel
- 7

**Pull Rod kit-A**  
Material: Zn-Al-Mg Coating Steel
- 8

**Pull Rod kit-B**  
Material: Zn-Al-Mg Coating Steel
- 9

**Inter Clamp kit**  
Material: AL6005-T5 (Anodized) SUS304
- 10

**End Clamp kit**  
Material: AL6005-T5 (Anodized) SUS304

## Installation Guide

- 1

Fix the H-shape Steel Welding Plate.
- 2

Install the H-shape Steel.
- 3

Install the 76 steel tube.
- 4

Install the Pull Rod kit A&B.
- 5

Install the module.
- 6

The installation is done.

# MRac<sup>®</sup> 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/m²	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

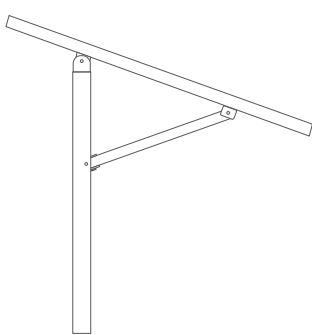
MRac Ground Terrace GT2 is a highly pre-assembled ground mounting system, which can be applied to the installation of large commercial and utility scale solar PV projects. Made of high quality aluminum material, GT2 has excellent corrosion resistance performance. The single-pile patented structure design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



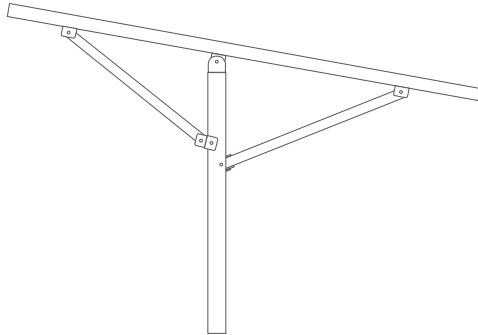
## Advantages

- > **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



Single Arm Side Support



Double Arms Side Support

## 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 Joinder ; C clamp Kit  
Pre-Assembled Square Tube  
Spring WasherM12 ; 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)

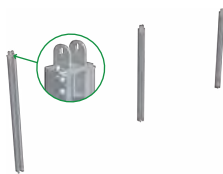
## Installation Guide

1



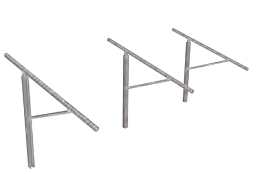
Install the U post with driven pile based on project solution

2



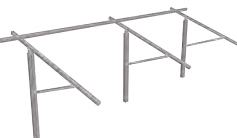
Install Post Plate onto U post

3



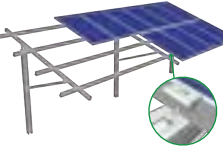
Install the Pre-assemble Support on the Post Plate & U post

4



Fasten the rail with C Clamp Kit

5



Fix the solar module with Inter Clamp Kit & End Clamp Kit

6



Installation is done.



# MRac<sup>®</sup> 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/m²	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

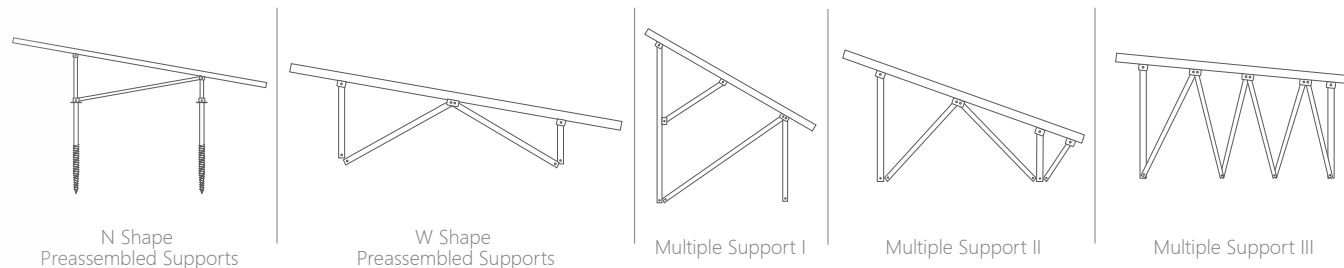
MRac Ground Terrace GT4 is a highly pre-assembled ground mounting system, with strong wind load and snow load resistance. The system can achieve minor adjustment onsite with special design of Anchor Plate to adapt to different sites, and is mainly applied to medium to large scale solar PV projects. Patented 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 : L\*71\*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 80  
GT4 Square Tube A  
GT4 Square Tube B  
GT4 Square Tube C  
T Front Joiner  
T Back Joiner  
Flat Washer M12  
Spring Washer M8  
External Hexagon Bolt M12  
Flat Head Hexagon Bolt  
External Hexagon Bolt Kit M12\*90

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

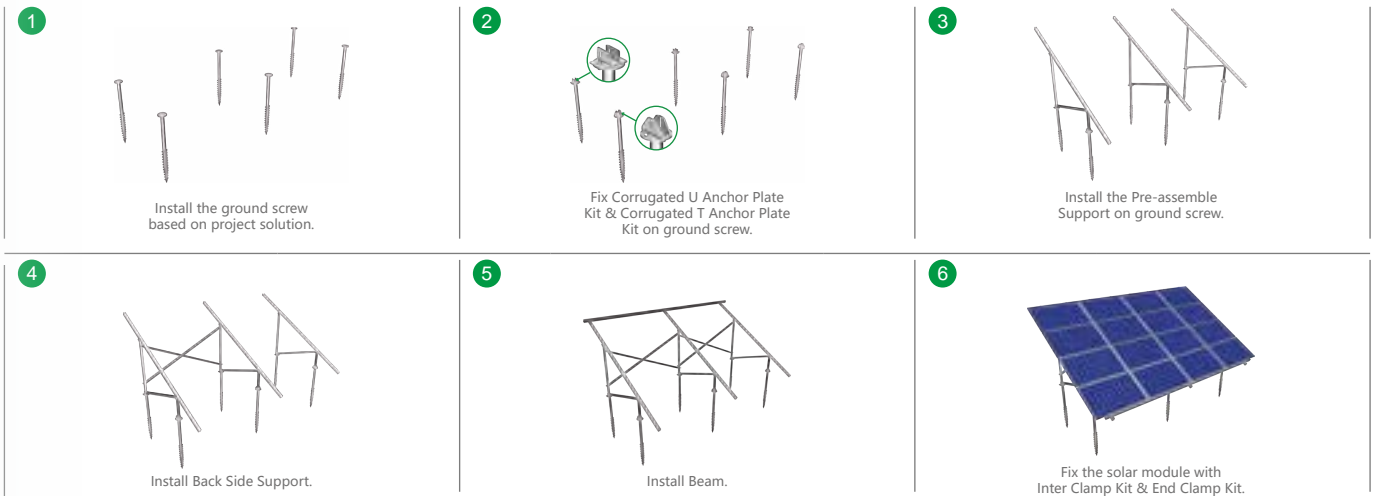
7

**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 Kit  
Material : AL6005-T5 (Anodized )

## Installation Guide



# MRac<sup>®</sup> 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, ㄗ-shape Piles		International Building Code IBC 2009,
Tilt Angle	0-60°		California Building Code CBC 2010
Wind Load	≤60m/s	Material	Q235B(Hot-Dip Galvanized)
Snow Load	≤1.6KN/m²	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

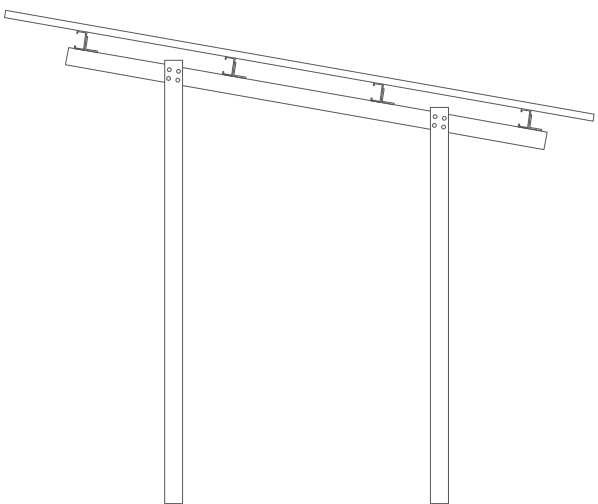
MRac Ground Solar PV Mounting System GT7 is applied for the installation of large-scale and utility-scale solar PV power plant. Main components are made of hot-dip galvanized steel, with good performance of structure strength, stability, and anti-corrosion. Compatible with varied solar modules. Unique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

## Structure



## Component Details

1



**Rail**  
Material : Steel Q235B (Hot-Dip Galvanized)

2



**Beam Connector**  
Material : Steel Q235B (Hot-Dip Galvanized)

3



**C-shape Pile**  
Material : Steel Q235B (Hot-Dip Galvanized)

4



**Pile**  
Material : Steel Q235B (Hot-Dip Galvanized)

5



**Inter Clamp Kit**  
Components : Inter Clamp  
Spring Washer M8  
Hexagon Socket Bolt

6



**End Clamp Kit**  
Components : End Clamp  
Spring Washer M8  
Hexagon Socket Bolt

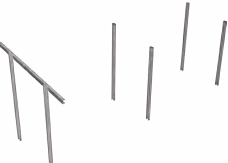
## Installation Guide

1



Install the C-shape Pile based on project solution.

2



Install Inclined Support.

3



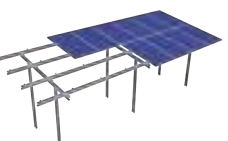
The installation of Inclined Support is done..

4



Installation the Beam.

5



Fix the solar module with Inter Clamp Kit & End Clamp Kit.

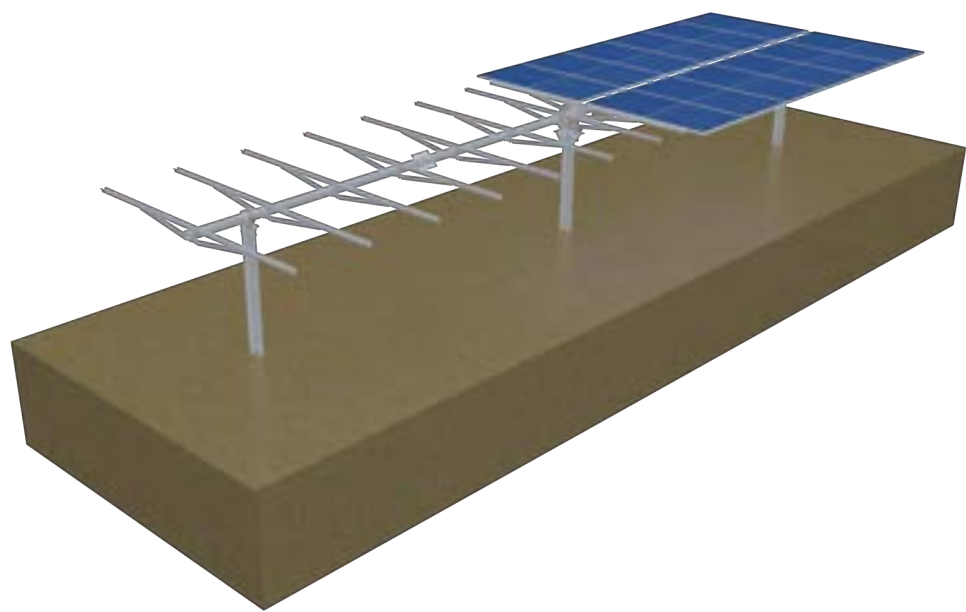
6



Installation is done.

MRac<sup>®</sup>

Smart Horizontal Single Axis Tracking Solar PV Mounting System



Technical Parameters

GPS Module	Acquire longitude, latitude and accurate time automatically, and be Compatible with Beidou Satellite Positioning System	Design Support	Support Wind Protection, Snow Removal Mode; Rain Cleaning Mode;
Install Capacity	<25KWP		Position Return Mode;
Tracking Angle	±60°	Driving Methods	Slewing Speed Reducer
Wind Resistance	<22m/s	Material	Q235B(HDG)&Al 6005-T5
Tracking Algorithm	Astronomical Algorithms +Tilt Sensors	Control System	Microcomputer
Ground Clearance	400mm+	IP	Grade
Power Supply	DC24V	Warranty	10-Years Warranty

Overview

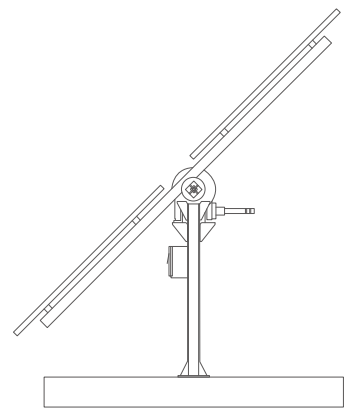
MRac Smart Horizontal Single Axis Tracking Solar PV Mounting System is mainly applied to large-scale solar power plant at low latitude areas. One motor and control system make the whole solar module array track automatically. The unique linkage structure and slewing bearing ensure the stability of the whole system, low failure rate and maintenance cost. It is a good choice for large-scale solar power plant with roughly 20% power generation, comparing to fixed system.



Advantages

- > **Automatic Tracking without Manual Debugging**  
With good environmental adaptability, no affection by rainy and cloudy weather;Wide Range of tracking angle improves the power generation .
- > **Equipped with GPS to Ensure the Accuracy of Time**  
High weather resistance contributes to safe and stable operation between -40℃-85℃The excellent electromagnetic compatibility design makes the system stable and reliable.
- > **Remote Communication, Group Control for Multi-Equipment**  
Automatically identify the failure, with automatic self-protection and alarm; Quadruple over-current protection ensures the safety of the whole system .
- > **Customized System Configuration Available**  
It can be designed according to customer's specific requirement.

Structure



Component Details

- 1

**Post**  
Specification : C100\*50\*15\*2\*L4500  
Material : Steel Q235B (Hot-Dip Galvanized)
- 2

**Motor Base**  
Material : Steel Q235B (Hot-Dip Galvanized)
- 3

**Bearing Base**  
Material : Steel Q235B (Hot-Dip Galvanized)
- 4

**Bearing Sleeve**  
Material : AL6005-T5 (Anodized )
- 5

**Diamond End Clamp Kit**  
Components : End Clamp  
Diamond Bolt M8  
Spring Washer M8  
Hexagon Bolt Kit
- 6

**Diamond Inter Clamp Kit**  
Components : Inter Clamp  
Diamond Bolt M8  
Spring washer M8  
Hexagon bolt Kit
- 7

**Control box**  
Specification : L300\*160\*400
- 8

**Motor**  
Specification : 7inch/9inch  
Single Side or  
Double Side Output

Installation Guide

- 1

Install the Post on the foundation based on project solution.
- 2

Install Motor and Bearing Sleeve.
- 3

Install Main Beam.
- 4

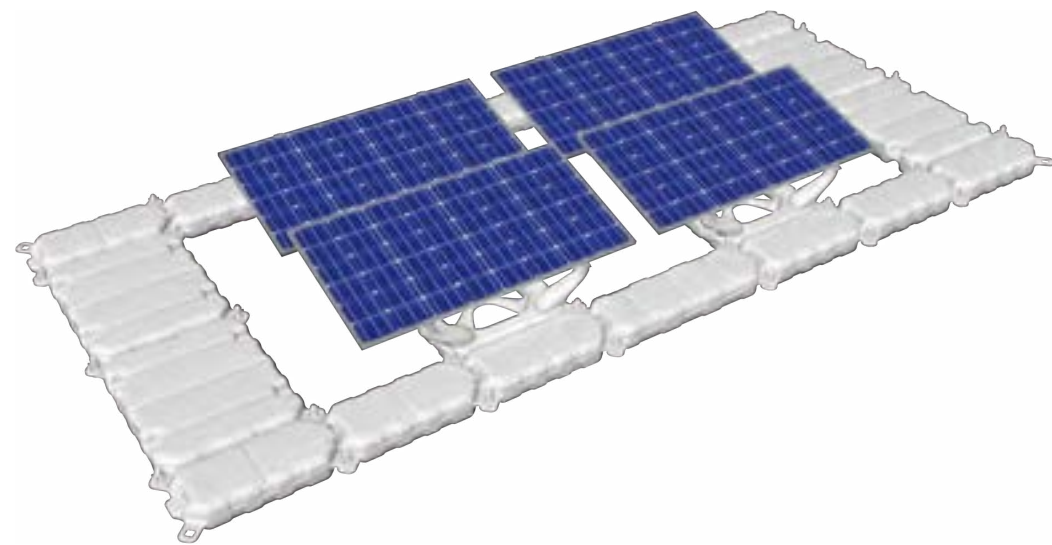
The installation of Main Beam is done.
- 5

Fix the solar module with Inter Clamp Kit & End Clamp Kit.
- 6

Installation is done.



# MRac<sup>®</sup> Floating PV Mounting System G4N

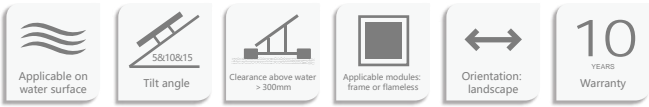


## Technical Parameters

Product Name	MRac 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 <sup>2</sup>	Fastener	Zinc-Nickle 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 <sup>2</sup> , Walkway Floater 155KG/m <sup>2</sup>

## Overview

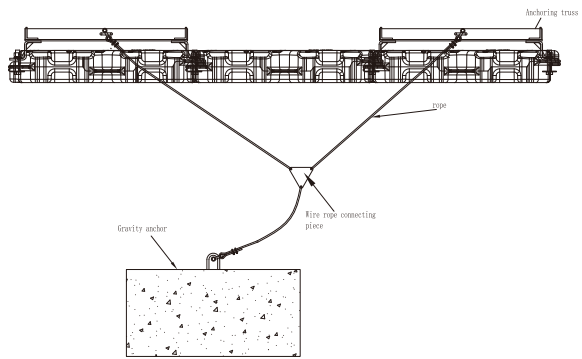
MRac Floating PV Mounting System G4N is applied to solar pv power plant installation on the water. Adopting HDPE material, it has passed the Hunt Water Absorption Test, Anti-Aging Test, Anti-UV Test etc. Moreover, it can bear the pulling force that is much higher than other products. Adopting new module 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

1



Portrait Walkway Floater  
Material : HDPE

2



Short Horizontal Walkway Floater  
Material : HDPE

3



Long Horizontal Walkway Floater  
Material : HDPE

4



Module Floater  
Material : HDPE

5



Support  
Material : HDPE

6



Plastic Bolts and Nuts  
Material : HDPE

7



Module Clamp  
Material : AL6005-T5 (Anodized)

8



End Clamp Kit  
Material : AL6005-T5 (Anodized)  
SUS304

## Installation Guide

1



Module Floater.

2



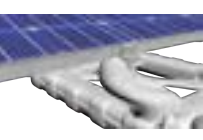
Install Support.

3



Install Module Clamp.

4



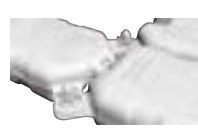
Install Module.

5



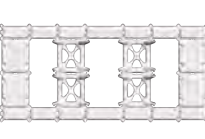
Connect the Module Floater with Walkway Floater.

6



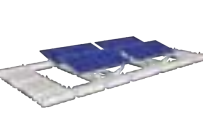
Connect the Floaters with Plastic Bolts and Nuts

7



Finish the installation of floaters.

8



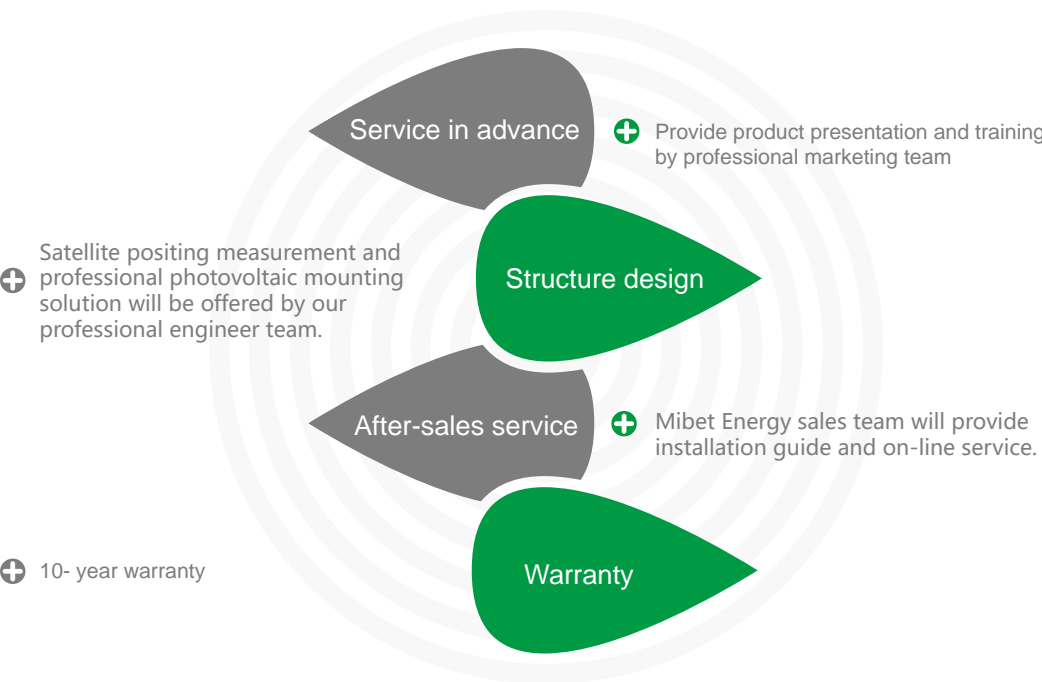
Installation is done.

## Declaration of 10-year Warranty



- Xiamen Mibet New Energy Co., Ltd. (hereinafter as “Mibet Energy”) warrants to the original purchaser (“Purchaser”) of product(s) that it manufactures (“Product”) at the original installation site that the Product shall be free from defects in material and workmanship for a period of ten (10) years, except for the anodized finish which shall be free from visible peeling, or cracking or chalking under normal atmospheric conditions.
- The after-sales service will not cover any man-made damage or any damage caused by the environment which is corrosive to solar mounting. Please read through the Cleaning and Maintenance Guide for Architecturally Finished Aluminum AAMA 609&610-02(please refer to [www.aamanet.org](http://www.aamanet.org)). Mibet energy solemnly promises to offer after-sales services for damages, which is not made by men, during transport, storage, and installation.
- Mibet Energy will not be responsible for any damage during the installation caused by non-compliance with the installation guide, by any alteration, rework and modification unauthorized by Mibet Energy, or by any design defect of drawings provided by the customer.
- Please ask the relevant suppliers for warranty declaration for other devices in solar system, e.g. solar modules and flashing.Mibet Energy is only responsible for solar mounting systems.

## Support and Service



Xiamen Mibet New Energy Co., Ltd.

## MIBET ENERGY

