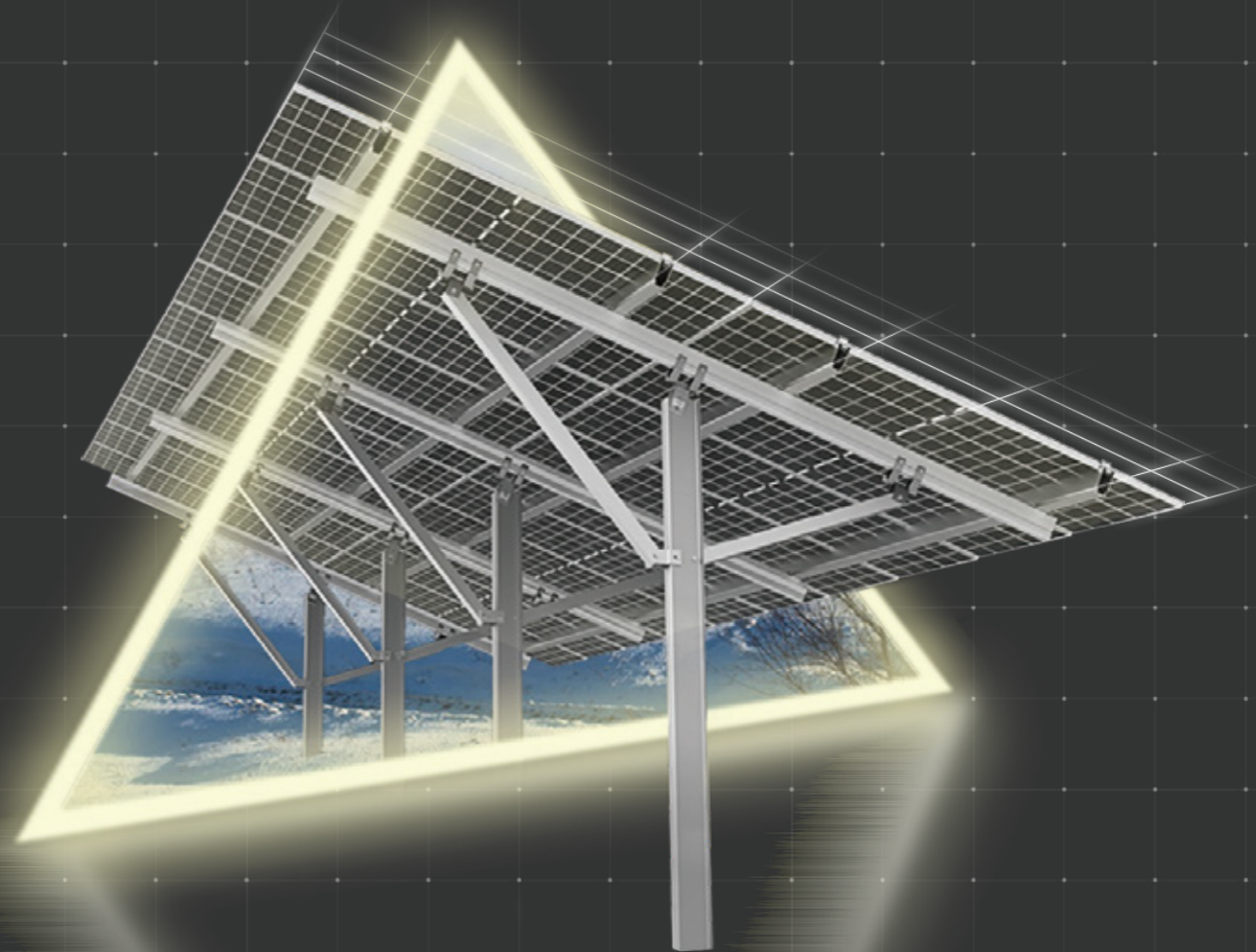
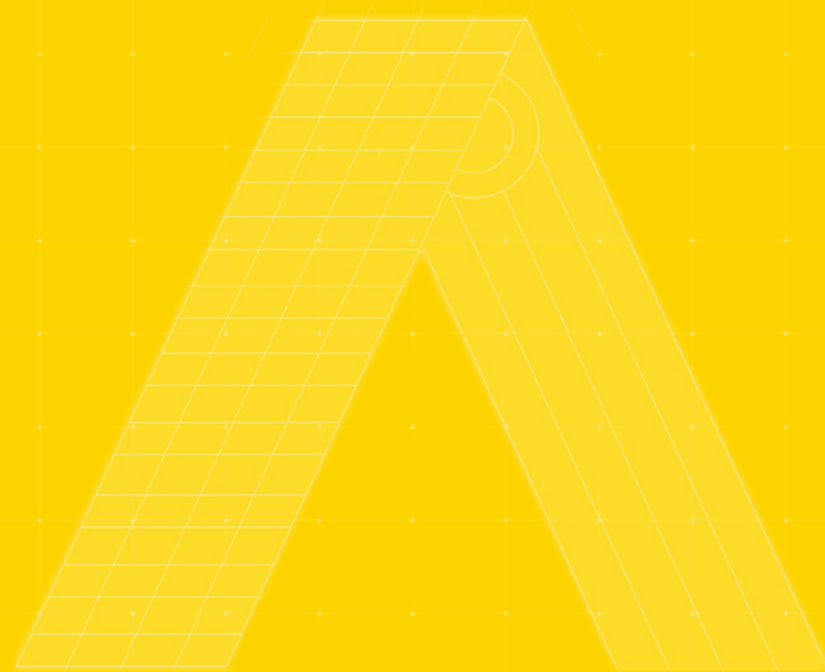




RAISE A GREEN WORLD



**SOLAR  
MOUNTING  
SYSTEM**

ANTAI TECHNOLOGY CO.,LTD

Web  
[www.antisolar.com](http://www.antisolar.com)

HQ Add  
30F, W Square, 1801 Huandao East Road  
Siming District, Xiamen, China

Production Base Add  
Guanshan Industrial Park  
Changtai County, Zhangzhou, China



# RAISE A GREEN WORLD

Leading supplier of the whole industry chain in  
PV mounting system

Offering a diverse product portfolio covering full-material,  
full-function of solar tracking and mounting systems to move towards zero-carbon future  
and promote sustainable development.

# ABOUT ANTAI

Antaisolar, the leading supplier of the whole industry chain in PV mounting system. Established in 2006, it has currently built up a manpower of 800 employees with R&D team of 120 specialists of diverse technical background. Antaisolar has been focusing on consistently providing convenient, reliable, and innovative solar mounting and tracking systems over the past years.

Headquartered in Xiamen, China, Antaisolar is based on the mission of "Raise a Green World", and has been continuously optimizing and promoting the global service by setting up branches and offices in Japan, Australia, Brazil, Singapore, Philippines, Vietnam and other regions. As for its producing force, it is distributed within six major manufacturing centers located in Turkey, Indonesia, India, Fujian, Jiangsu and Tianjin.

As of the end of 2022, its cumulative solar racking shipments had reached 25.4GW, leading the Japan's solar racking market, Australia and Chile distribution markets, and other markets such as Vietnam, Malaysia and Singapore.



# ADVANTAGES



**01**

**Front-runner of solar racking**

Ranked No.1 in Japan's solar racking market share and ranked No.1 of export volume to Japan for eight consecutive years; Ranked top 1 in Australia and Chile distributed generation market.



**02**

**Vertical integrated production**

Manufacturing centers located in Turkey, Indonesia, India, Fujian, Jiangsu, Tianjin. Vertical integrated production with strict process control. 10GW annually capacity of aluminum solar racking and 15GW annually capacity of steel solar racking.



**03**

**R&D innovation**

Owns three major R&D bases for solar tracker, fixed structure and high performance material; Highly educated R&D team composed of 120 persons with more than 15 year's experience. Good master of design and architectural standards for global regions.

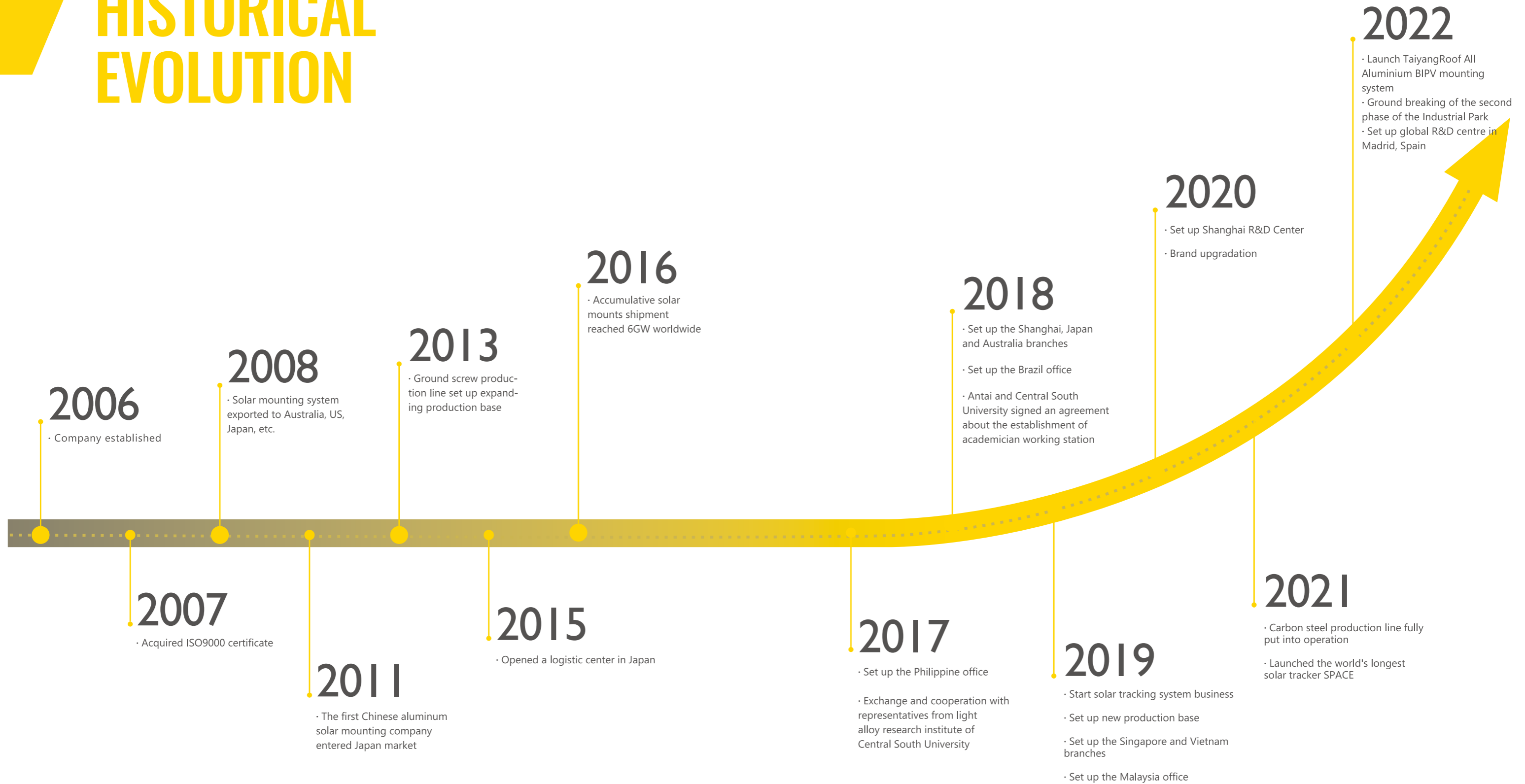


**04**

**Global localization service**

Strategic layout of overseas branches and offices in 16 countries and regions. Owns local logistic center in Japan, Turkey and Australia; Set up overseas technical and sales teams to provide all-round localization service.

# HISTORICAL EVOLUTION



# GLOBAL DEPLOYMENT



Offices

- |           |        |             |       |
|-----------|--------|-------------|-------|
| Argentina | Poland | Malaysia    | Dubai |
| Brazil    | India  | Mexico      | Spain |
| Vietnam   | Jordan | Philippines | Chile |



Branches

- |           |         |           |         |
|-----------|---------|-----------|---------|
| Shanghai  | Japan   | India     | America |
| Australia | Holland | Singapore |         |



Production Bases

- |           |         |             |       |
|-----------|---------|-------------|-------|
| Fujian    | Tianjin | Jiangsu     | India |
| Indonesia | Brazil  | Middle East |       |



Warehouse

- |       |        |
|-------|--------|
| Japan | Brazil |
|-------|--------|

# VERTICAL INTEGRATED PRODUCTION

## Aluminum Mounting System



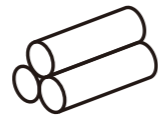
Ingots

01



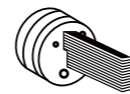
Casting

02

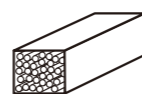


Billets

03



Extrusion



Aging

04



Anodizing

05



Fine finishing

06



Quality inspection

07



Shipment

09

## Steel Mounting System

01

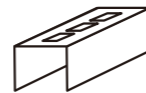


Steel material



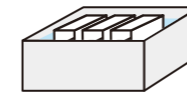
Forming

02



Punching

03



Surface treatment

04



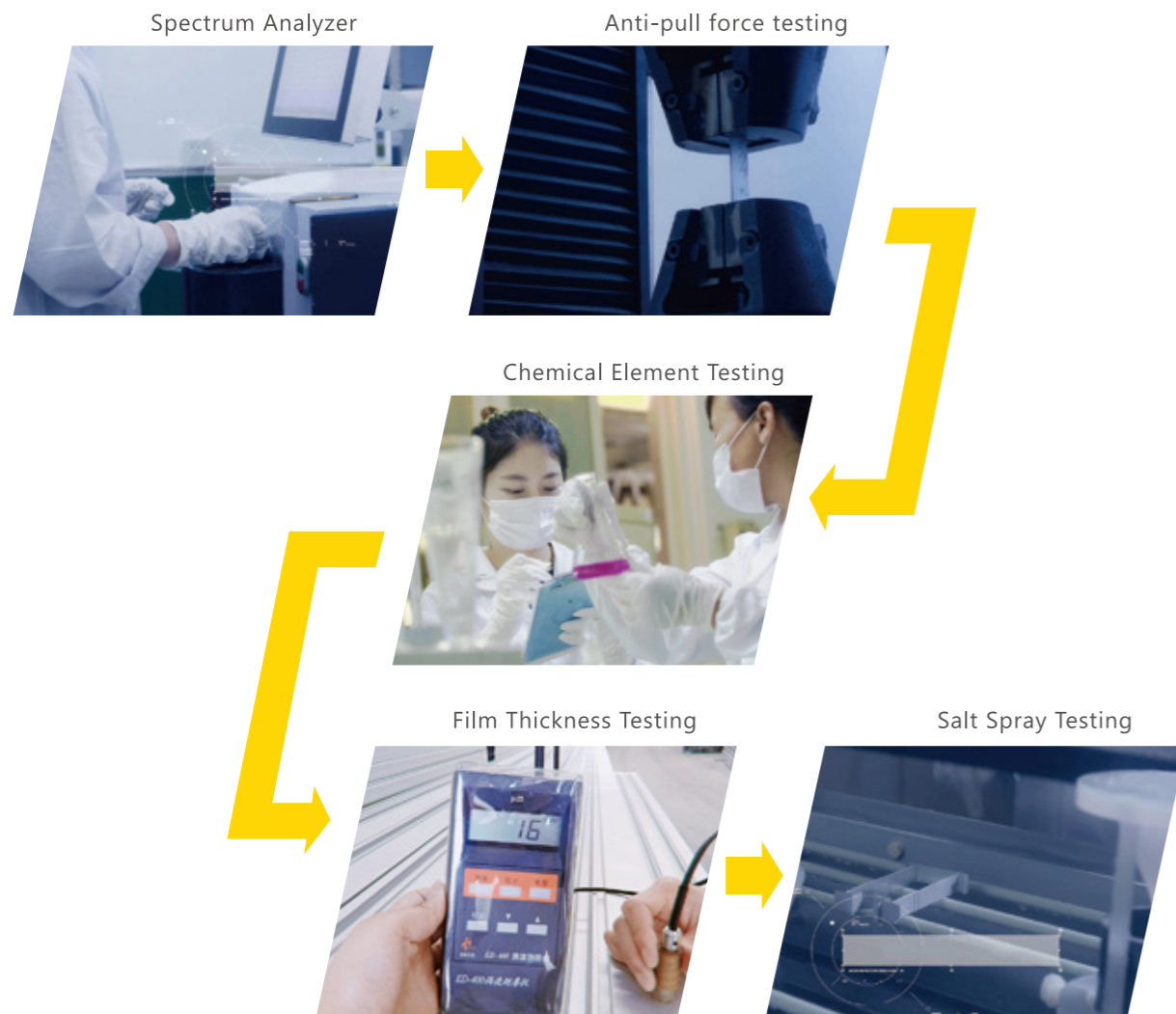
Packing

08



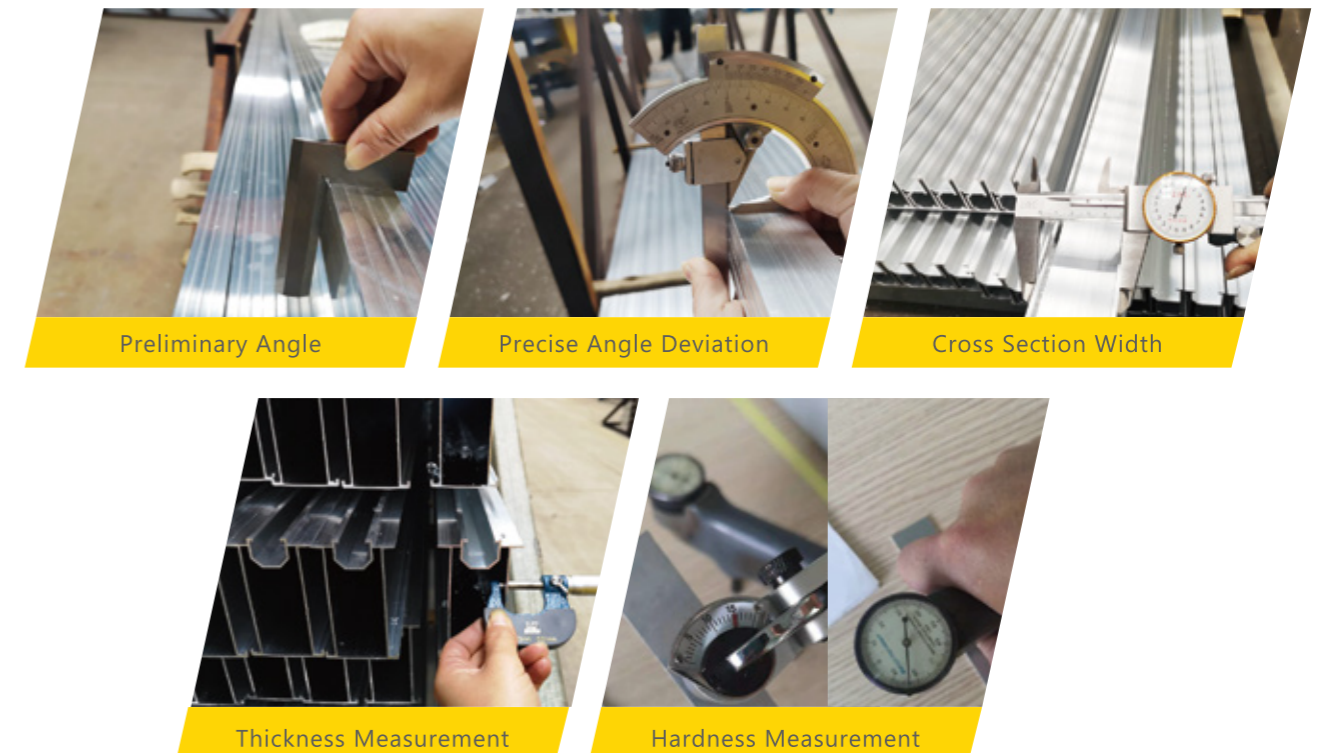
# QUALITY CONTROL

## In-House Lab Testing



## Sample Inspection

Own factory with complete aluminum and steel production chain. A quality-guarantee system for our aluminum products consists of our advanced testing equipment, excellent inspectors and thorough QC management. Whole process inspection from raw material to finished product including section size, thickness, torsion, bending, angle, surface quality, etc.



## Third party certification

Products are certified by third-party testing agencies in different worldwide regions to ensure that product performance meets architectural and design standards for global regions.

Certified by third-party testing agencies regularly



## Material R&D

Establish an academician and expert workstation with Central South University to carry out research and development of high-performance materials; Deepen school-enterprise cooperation with Shanghai Jiaotong University and other domestic institutions of higher learning to promote all-round integration of industrial technologies.

### Unique High performance Aluminum alloy

Items (Mechanical properties)	AL6063-T5	AT6005-T5	Antai AL6005-T6
Tensile strength(MPa)	175	250	290
Proof strength(MPa)	130	200	265
Elongation after fracture(%)	7	7	10

# GLOBAL SERVICE



## **Global network & localization service**

Strategic layout of overseas branches and offices  
Local sales and technical team service



## **Experienced engineer & site support**

On-site technical support in early stage of project  
On-site technical installation guidance if necessary



## **Professional logistics**

Customized logistics services provided for fast access to site  
Globally warehouse layout



## **Reliable after-sales service**

10 years warranty  
7\*24 on call, designing proposal offered within 24 hours  
Multilingual, 1 to 1 exclusive customer service

## CONTENTS



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- 19 Kliplok Without Rail System

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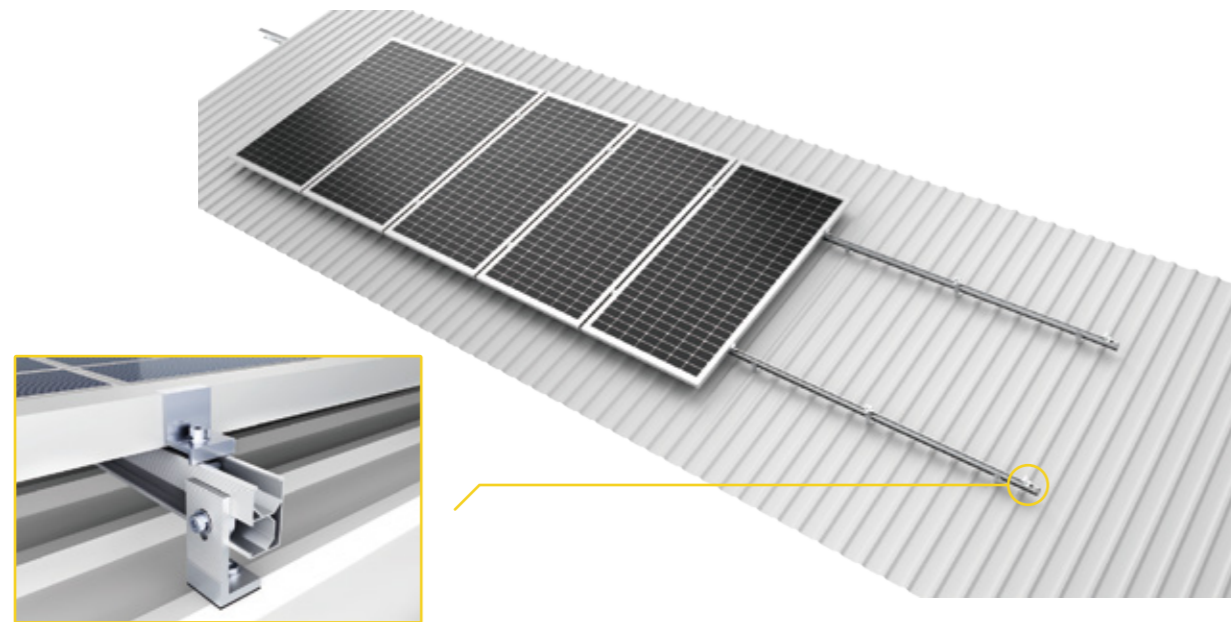
- 35 Aluminum Carport Mount (Standard)
- 37 Aluminum Carport Mount (Waterproof)

### SCREW

- 43 Ground screw

# METAROOF-MT L FEET WITH C RAIL

**10** YEARS WARRANTY



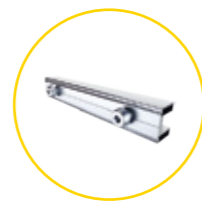
## Components



L Bracket



Rail



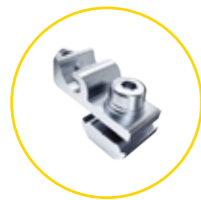
Rail Splice



Inter Clamp



End Clamp



Grounding Lug Kit (Optional)



Grounding Clip (Optional)



Cable Clip (Optional)

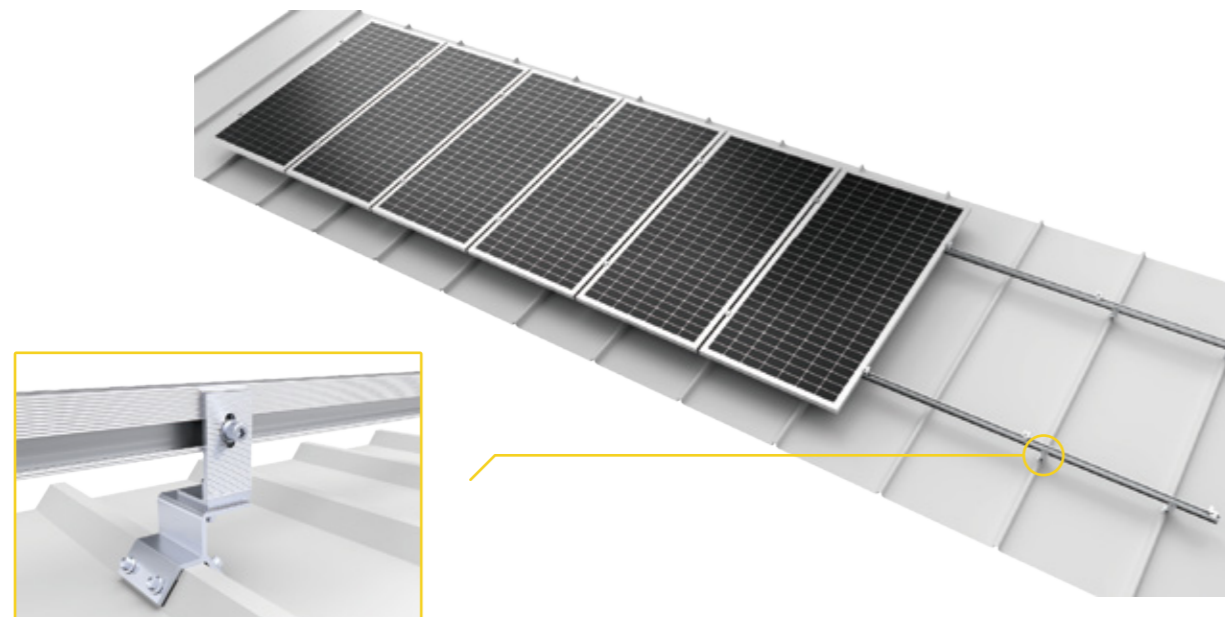
## Features

- 01** Good flexibility to match various types of roof clamps.
- 02** Good stability when attached directly on roof purling.
- 03** Compliant with the Australian and other international standards.

## Specification

Roof Type	Metal roof
Tilt Angle	0°-45°
Wind Load	60m/s
Snow Load	1.6KN/m <sup>2</sup>
Applicable Solar Module	Framed/Frameless
Panel Layout	Portrait/Landscape
Design Standard	BS EN1991, ASCE7-10, BS 6399, AS-NZS 1170, GB 50009-2012, MS 1553
Material	AL-6005-T6 & SUS304 & EPDM
Color	Sliver/Black
Warranty	10-year

# METAROOF-MT TRAPEZOID L FEET WITH C RAIL



## Components



Trapezoidal Clamp



L Feet Clamp



Rail



Rail Splice



Inter Clamp



End Clamp



Grounding Lug Kit  
(Optional)



Grounding Clip  
(Optional)



Cable Clip  
(Optional)

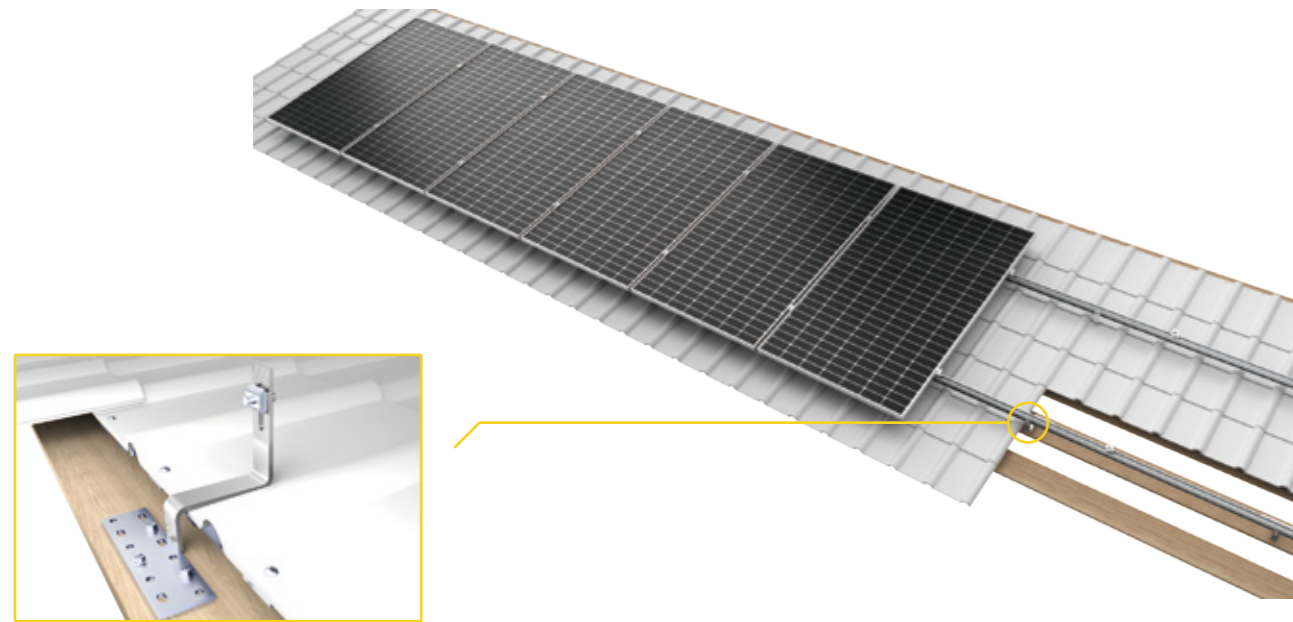
## Features

- 01** Non-penetrating roof clamp mounting ensures watertightness.
- 02** A variety of roof clamps suit for all roofing sheets.
- 03** Simple and quick installation by fixing the clamp to the metal roofs
- 04** Expand installation availability while there is no suitable fixing purlin under the roof.

## Specification

Roof Type	Metal roof
Tilt Angle	0°-45°
Wind Load	60m/s
Snow Load	1.6KN/m <sup>2</sup>
Applicable Solar Module	Framed/Frameless
Panel Layout	Portrait/Landscape
Design Standard	BS EN1991, ASCE7-10, BS 6399, AS-NZS 1170, GB 50009-2012, MS 1553
Material	AL-6005-T6 & SUS304
Color	Sliver/Black
Warranty	10-year

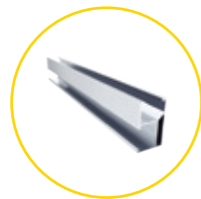
# METAROOF-TR HOOK SYSTEM



## Components



Tile Roof Hook



Rail



Rail Splice



Inter Clamp



End Clamp



Grounding Lug Kit  
(Optional)



Grounding Clip  
(Optional)



Cable Clip  
(Optional)

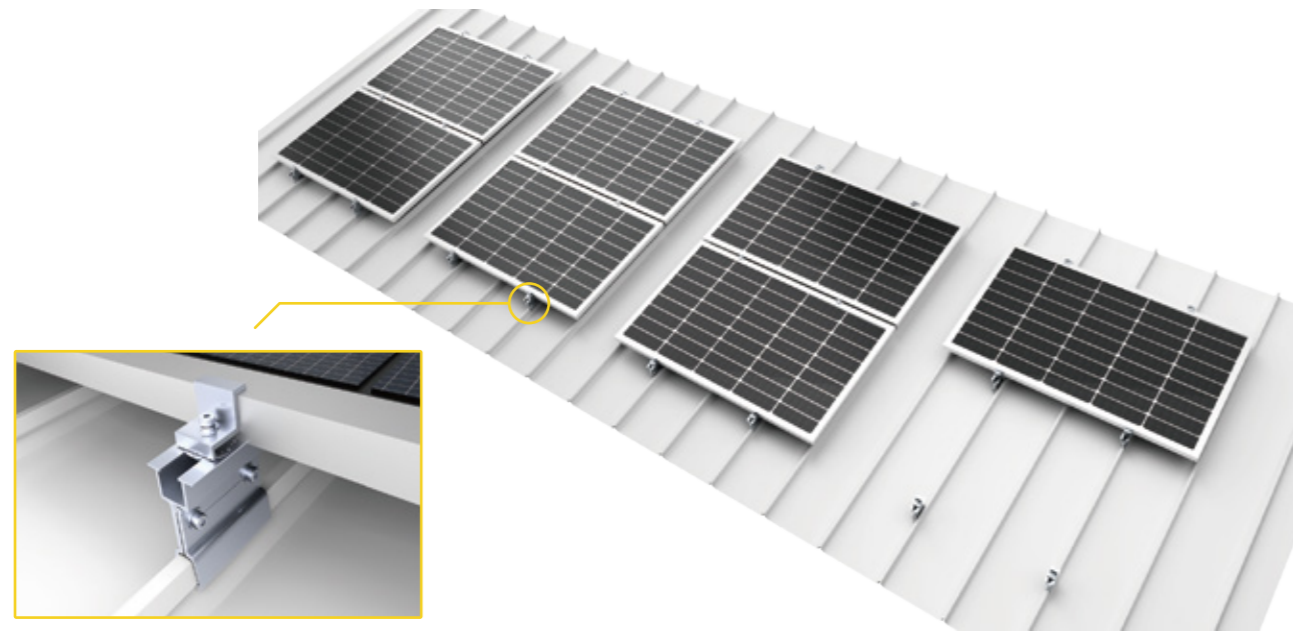
## Features

- 01** A variety of stainless steel roof hooks suit for pantile, plain tile or slate tiles.
- 02** Comprehensive range of aluminum rails for varying load profiles.
- 03** Compliant with European, American, Australian and other international standards

## Specification

Roof Type	Tile roof
Tilt Angle	0°-45°
Wind Load	60m/s
Snow Load	1.6kN/m <sup>2</sup>
Applicable Solar Module	Framed/Frameless
Panel Layout	Portrait/Landscape
Design Standard	BS EN1991, ASCE7-10, BS 6399, AS-NZS 1170, GB 50009-2012, MS 1553
Material	AL-6005-T6 & SUS304
Color	Sliver/Black
Warranty	10-year

# METAROOF-MK KILPLOK WITHOUT RAIL SYSTEM



## Components



Kliplok Without Rail



End Clamp



Mid Clamp



Grounding Lug Kit



Grounding Clip  
( Optional )



Cable Clip  
( Optional )

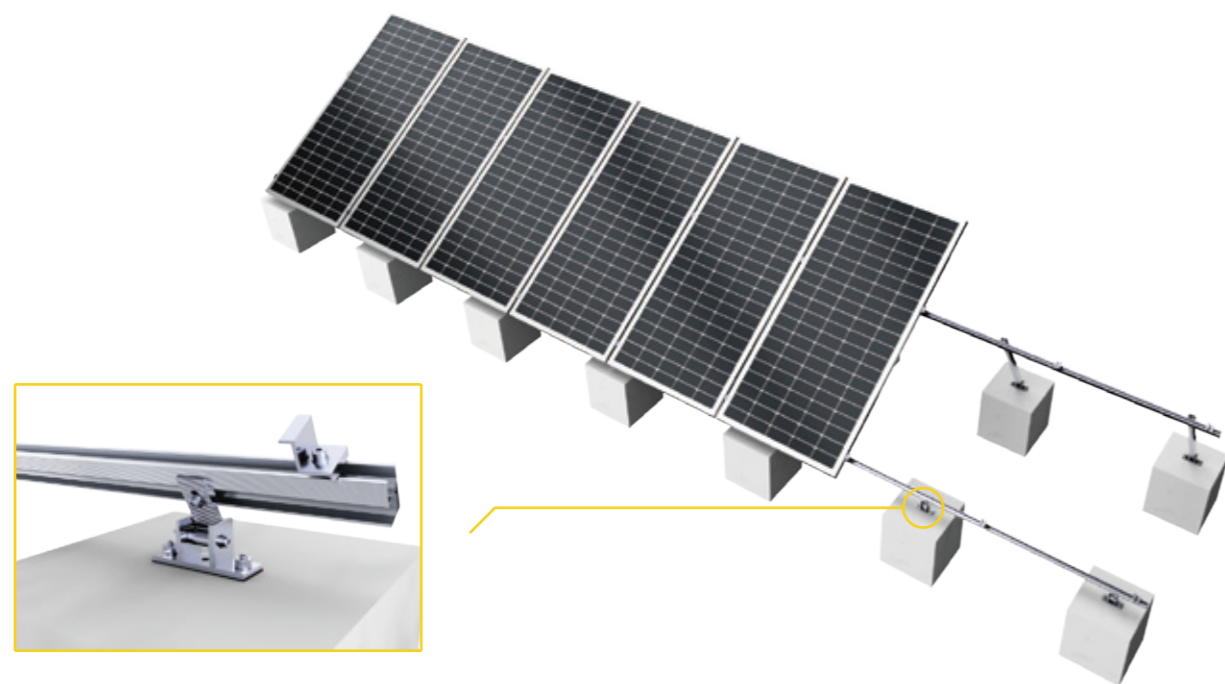
## Features

- 01** Fast installation without rail and saving cost.
- 02** Non-penetrating roof clamp mounting ensure waterproofing
- 03** Professional packaging solution for easy logistics, and cost-effective warehousing

## Specification

Roof Type	Metal roof
Tilt Angle	0°-45°
Wind Load	60m/s
Snow Load	1.6KN/m <sup>2</sup>
Applicable Solar Module	Framed/Frameless
Panel Layout	Portrait/Landscape
Design Standard	BS EN1991, ASCE7-10, BS 6399, AS-NZS 1170, GB 50009-2012, MS 1553
Material	AL-6005-T6 & SUS304
Color	Sliver/Black
Warranty	10-year

# METAROOF-FR ADJUSTABLE TILT MOUNTING SYSTEM



## Components



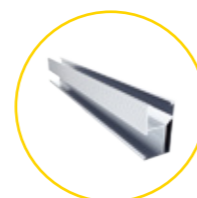
Front Leg



Back Leg



Expansion Bolt



Rail



Rail Splice



Inter Clamp



End Clamp



Grounding Lug Kit  
(Optional)



Grounding Clip  
(Optional)



Cable Clip  
(Optional)



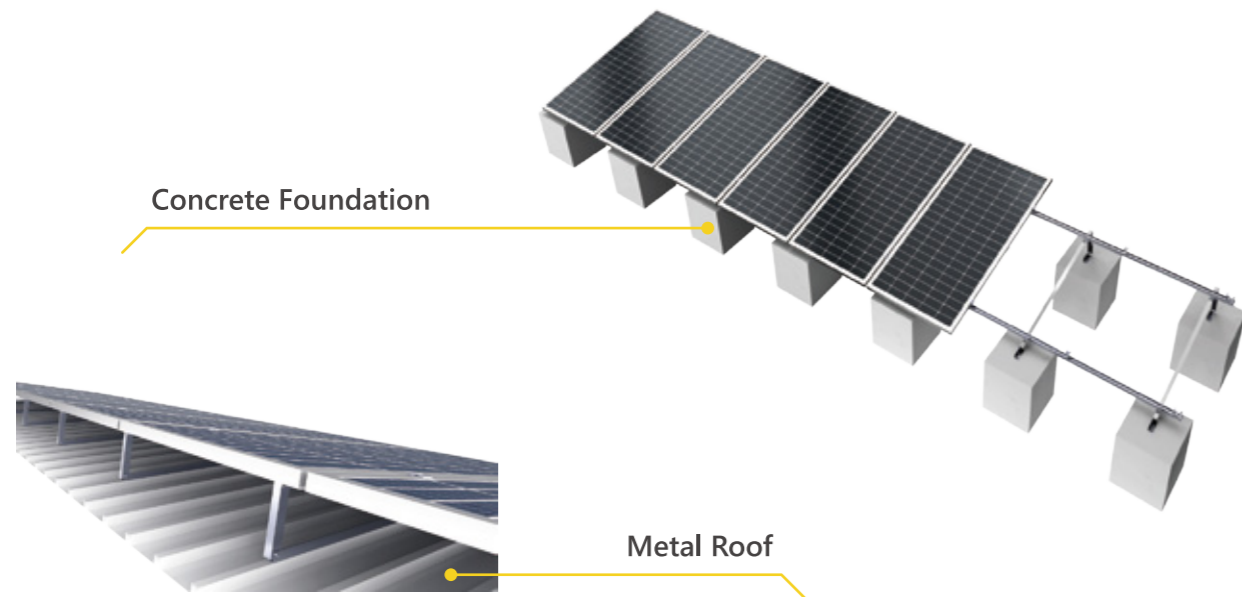
## Features

- 01** Allow for project-specific adjustments and optimize solar power output.
- 02** Compact package before shipment for easy transportation and retail.
- 03** Fit for different metal roof or open concrete terrain applications.
- 04** Highly pre-assembly to save on site installation time.

## Specification

Roof Type	Pitched Roof / Flat Roof
Tilt Angle	Fixed 10-15°, 15-30°, 30-60°
Wind Load	Up to 60m/s
Snow Load	Up to 60cm
Applicable Solar Module	Framed/Frameless
Panel Layout	Portrait/Landscape
Design Standard	BS EN, ASCE7-10, BS 6399, AS-NZS 1170, GB 50009-2012, MS 1553
Material	AL-6005-T6, SUS304, 410
Color	Sliver/Black
Warranty	10-year

# METAROOOF-FR TRIANGLE SYSTEM



## Components



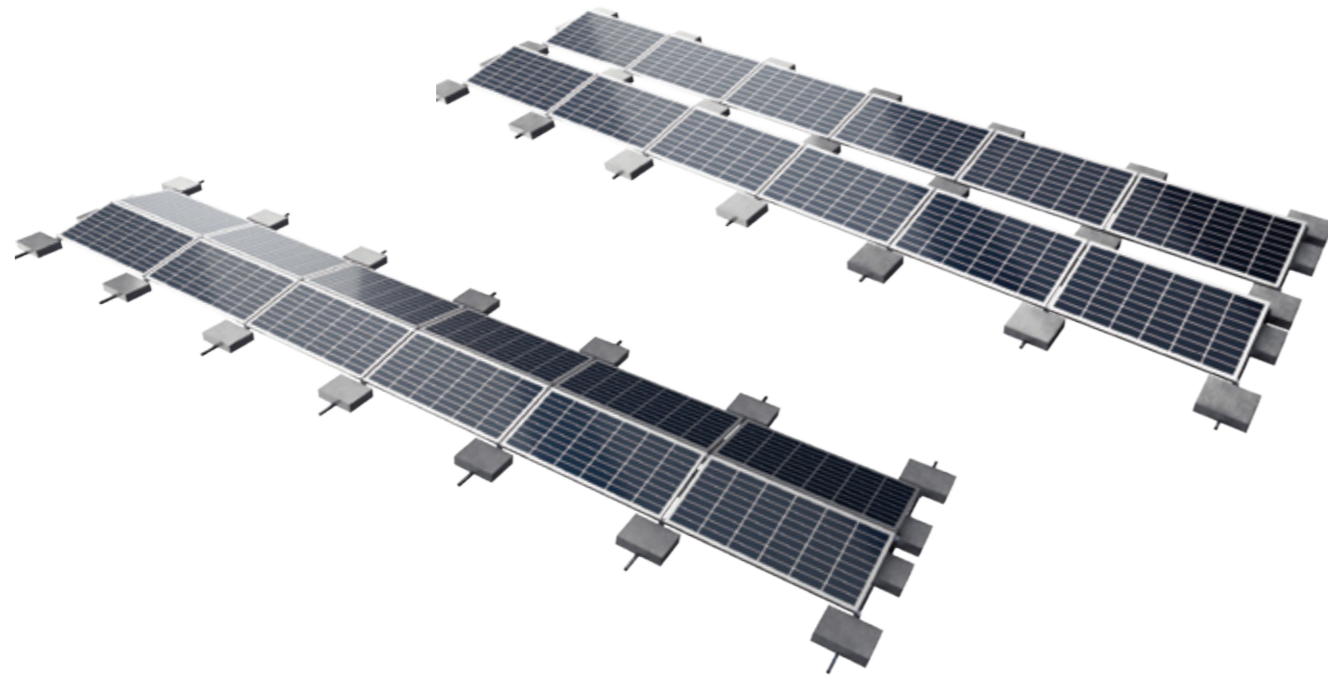
## Features

- 01** Universal design for flat roof or open terrain applications.
- 02** Various combinations such as ballasted block or roof penetration.
- 03** Pre-assembly triangle support and fold design save on site installation time.

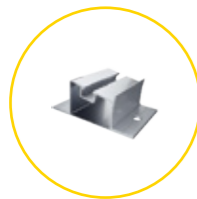
## Specification

Roof Type	Pitched Roof / Flat Roof
Tilt Angle	Fixed 10-15°, 15-30°, 30-60°
Wind Load	Up to 60m/s
Snow Load	Up to 80cm
Applicable Solar Module	Framed/Frameless
Panel Layout	Portrait/Landscape
Design Standard	BS EN, ASCE7-10, BS 6399, AS-NZS 1170, GB 50009-2012, MS 1553
Material	AL-6005-T6, SUS304, 410
Color	Sliver/Black
Warranty	10-year

# METAROOOF-FR BALLAST SYSTEM



## Components



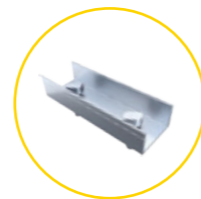
Front Base



Back Base Kit



Beam



Splice For Rail



End Clamp



Grounding Clip



Cable Clip



## Features

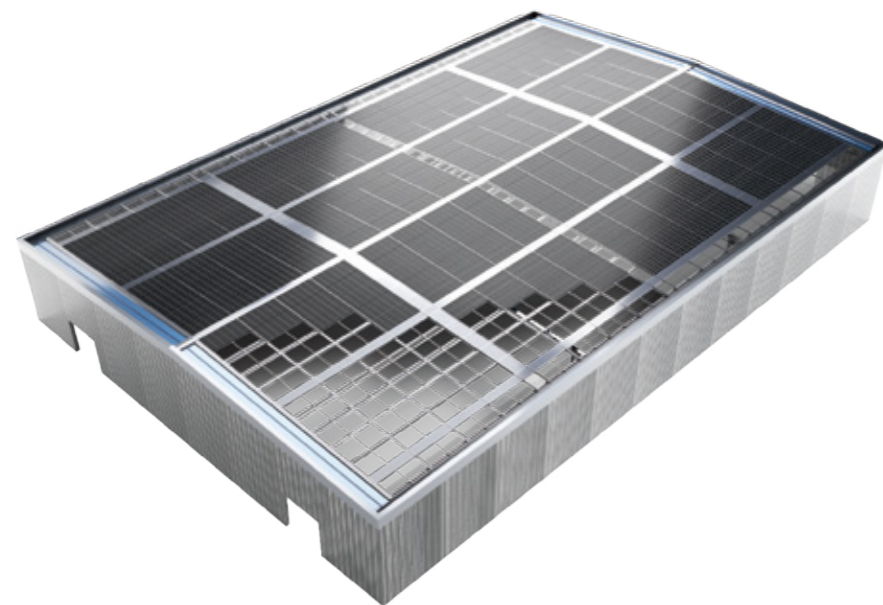
- 01** Non-penetrating roof ballast mounting ensure water-tightness.
- 02** Simple and pre-assembled structure saves the on-site installation time and labor cost.
- 03** Ballast weight is customizable to different wind zone.

## Specification

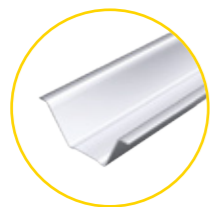
Roof Type	Flat Roof/Open Terrian
Tilt Angle	10°
Wind Load	50m/s
Snow Load	1.0KN/m <sup>2</sup>
Applicable Solar Module	Framed/Frameless
Panel Layout	Portrait/Landscape
Design Standard	BS EN, ASCE7-10, BS 6399, AS-NZS 1170, GB 50009-2012, MS 1553
Material	AL-6005-T6, SUS304
Color	Sliver/Black
Warranty	10-year

# TAIYANGROOF BIPV MOUNTING SYSTEM

10 YEARS WARRANTY



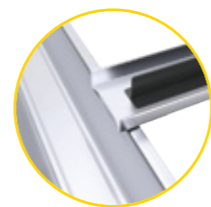
## Components



Kliplok Without Rail



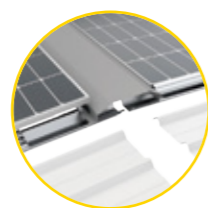
End Clamp



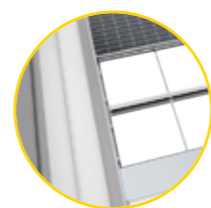
Mid Clamp



Grounding Lug Kit



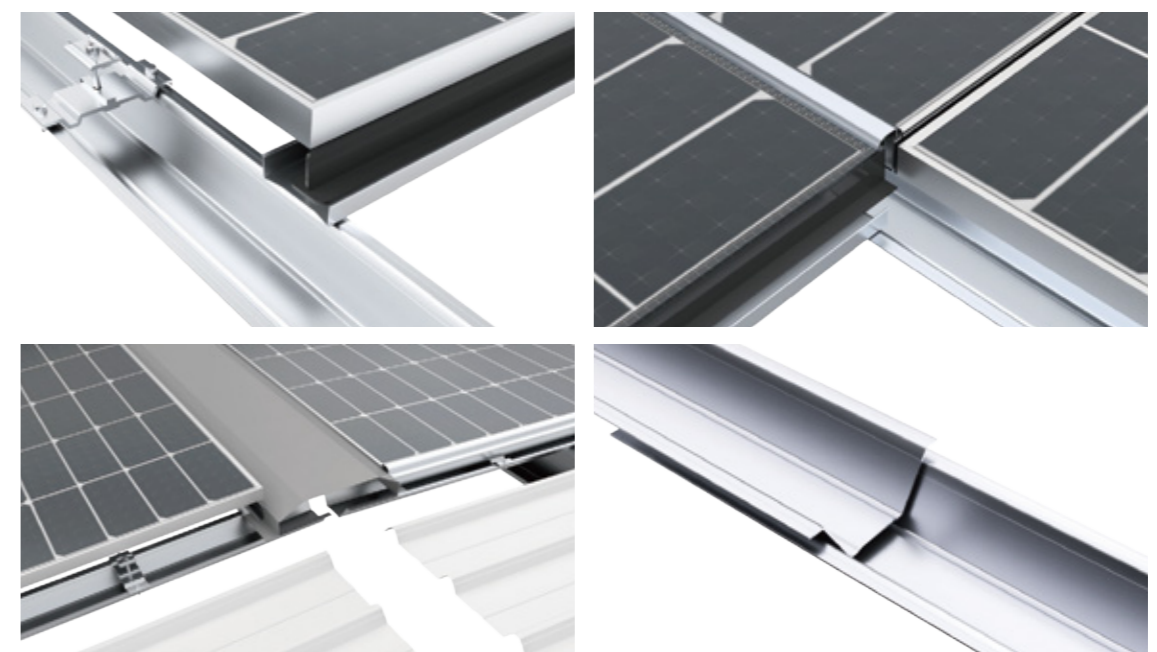
Grounding Clip  
( Optional )



Cable Clip  
( Optional )

## Features

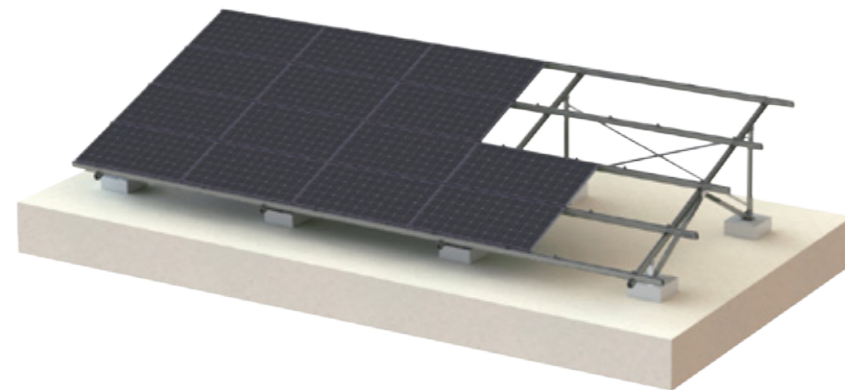
- 01** Combination of building safety and power generation efficiency.
- 02** Utilizing Antaisolar's high-strength aluminium alloy for excellent stability and reliability.
- 03** The six patent components keep the whole structure watertight, while the installation, operation and maintenance are simple, efficient and cost-saving.



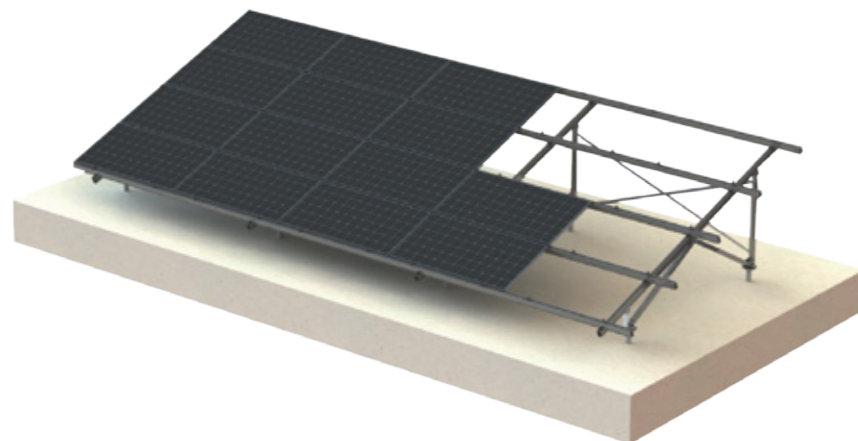
# METAGROUND-AL GROUND MOUNTING SYSTEM



Concrete foundation



Ground screw foundation



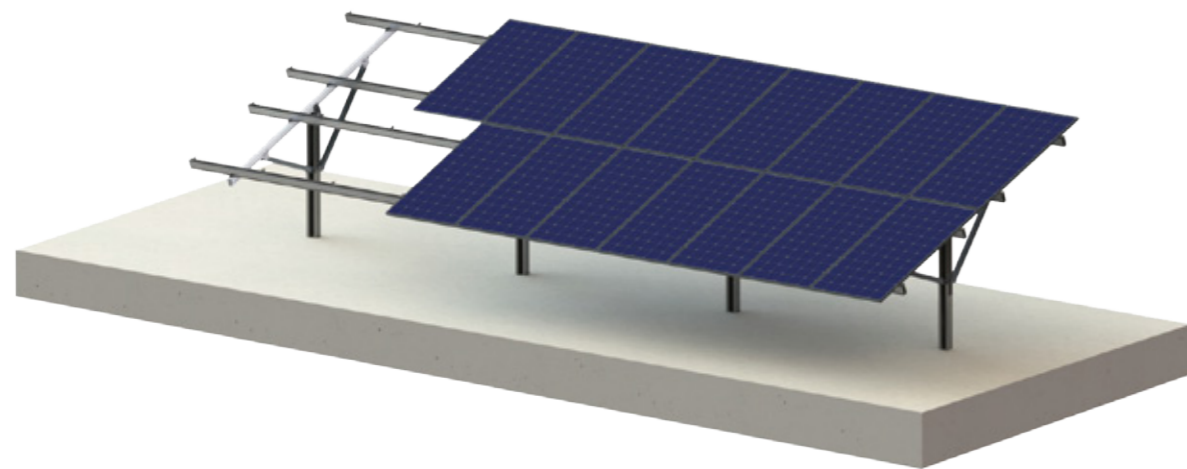
## Features

- 01** Aluminum structure to offer high corrosion resistant and lightweight.
- 02** Different designs to meet high loads caused by local wind and snow condition.
- 03** Pre-assembly supporting beam to save on site installation time.
- 04** Ground screw or concrete block foundation are optional.

## Specification

Ground Type	Open terrain, landfill, and disposal
Tilt Angle	Up to 60°
Wind Load	Up to 60m/s
Snow Load	Up to 50cm
Applicable Solar Module	Framed / Frameless
Panel Layout	Portrait / Landscape
Design Standard	BS EN, ASCE7-10, BS 6399, AS-NZS 1170, GB 50009-2012, MS 1553
Material	AL-6005-T6, SUS304
Color	Sliver / Black
Warranty	10-year

# METAGROUND-AL/STEEL PILE GROUND MOUNTING SYSTEM



## Components



Pre-assembled Beam



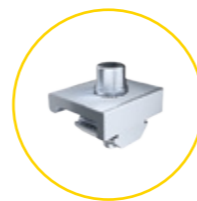
Pillar



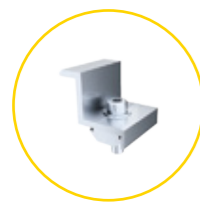
Rail



Rail Splice



Rail Clamp



End Clamp



Inter Clamp



Grounding Clip  
(Optional)



Grounding Lug Kit  
(Optional)



Cable Clip  
(Optional)

## Features

- 01** Fit for flat ground, uneven complex terrain and slope conditions.
- 02** Flexible adjustment for angles or height while installation.
- 03** Pre-assembly supporting beam to save on-site installation time.
- 04** Ramming posts eliminates the need for additional excavation works.

## Specification

Application	Open terrain
Elevation angle	Up to 60°
Foundation	Pile in or pre-cast, bored pier
Snow load	Up to 150cm
Recommended wind speed	Up to 60 m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6, stainless steel 304, 410 Hot-dipped galvanized steel Q235B, Q235B

# METAGROUND-AL/STEEL PILE GROUND MOUNTING SYSTEM



## Components



Pre-assembled Beam



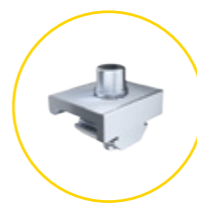
Pillar



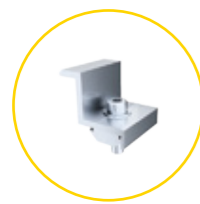
Rail



Rail Splice



Rail Clamp



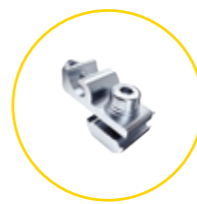
End Clamp



Inter Clamp



Grounding Clip  
(Optional)



Grounding Lug Kit  
(Optional)



Cable Clip  
(Optional)

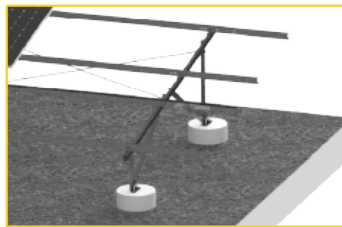
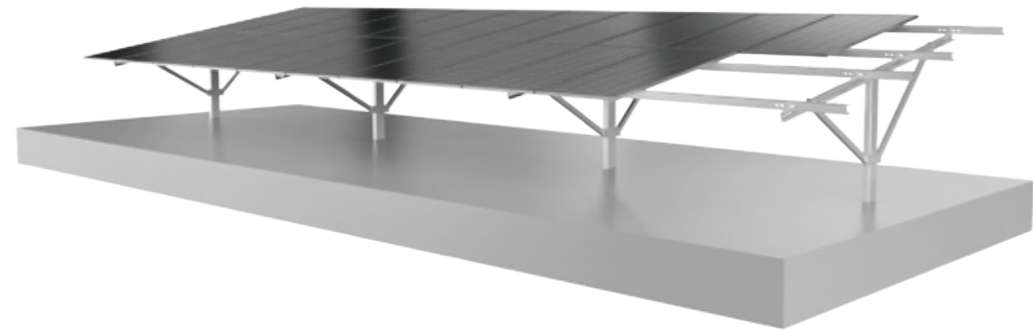
## Features

- 01** Fit for flat ground, uneven complex terrain and slope conditions.
- 02** Flexible adjustment for angles or height while installation.
- 03** Pre-assembly supporting beam to save on-site installation time.
- 04** Ramming posts eliminates the need for additional excavation works.

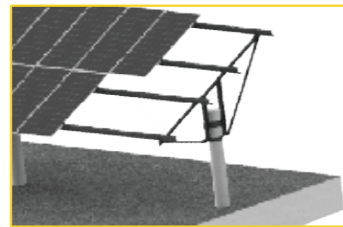
## Specification

Application	Open terrain
Elevation angle	Up to 60°
Foundation	Pile in or pre-cast, bored pier
Snow load	Up to 150cm
Recommended wind speed	Up to 60 m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6, stainless steel 304, 410 Hot-dipped galvanized steel Q235B, Q235B

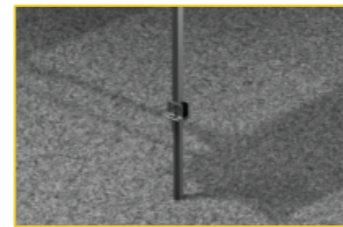
# METAGROUND-STEEL GROUND MOUNTING SYSTEM



Concrete Foundation



PHC



Screw Pile

## Components



C Steel Rail



Pillar



Rail Splice



L Connector



Rail Clamp



Inter/ End clamp



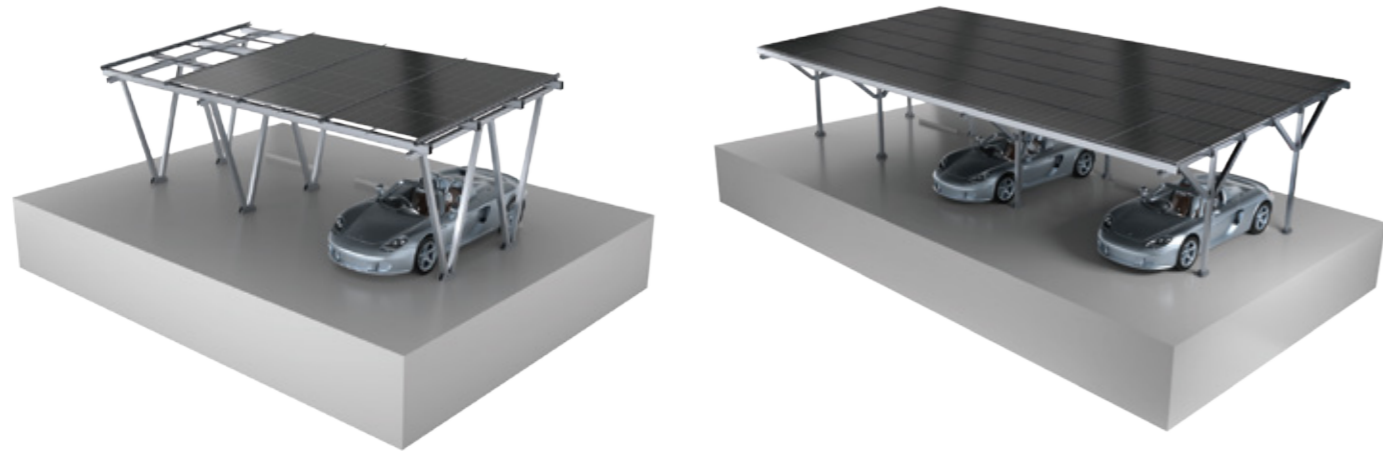
## Features

- 01** Economical and reliable solutions for solar projects on a free surface.
- 02** MAC steel or carbon steel is adopted as the main material to form a stable and cost-effective design.
- 03** Pre-assembly supporting beam to save on site installation time.
- 04** Ground screw or concrete block foundation are optional.

## Specification

Application	Open terrain
Adjustable angle	Up to 20°
Foundation	7500mm above
Snow load	Up to 150cm
Recommended wind speed	Up to 60m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	MAC steel; Hot-dipped galvanized steel Q235B, Q355B; stainless steel 304, 410

# METAGROUND-AL CARPORT MOUNTING SYSTEM (STANDARD)



## Components



End Clamp



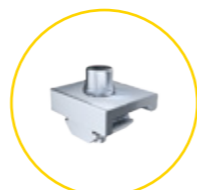
Mid Clamp



Rail



Rail Splice



Rail Clamp



Beam



Pole



Small Foot Seat



Big Foot Seat



Embedded Bolt



Ground Lug Kit  
(Optional)



Grounding Clip  
(Optional)



Cable Clip  
(Optional)

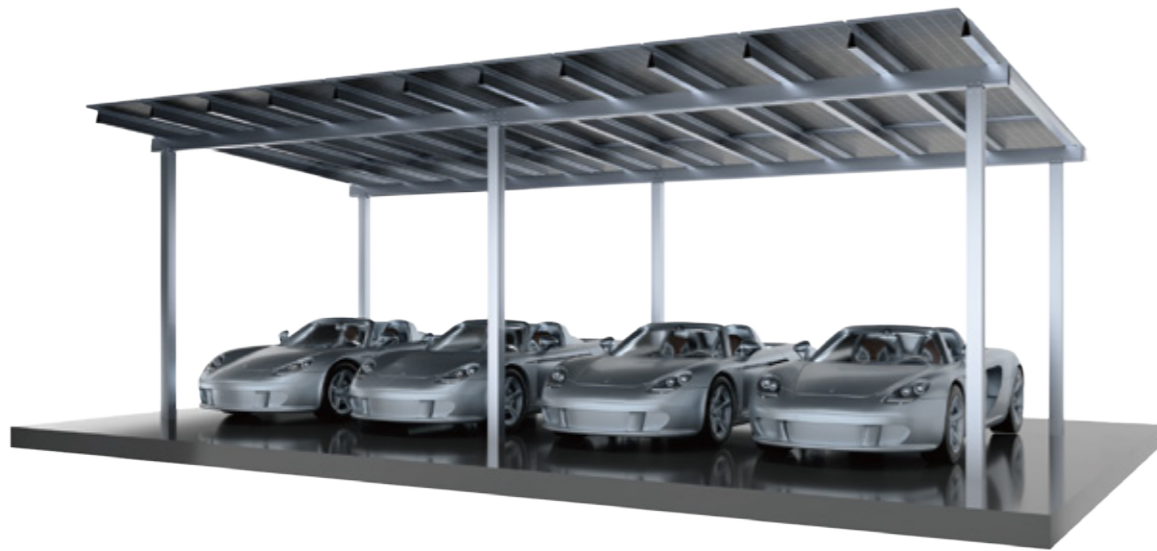
## Features

- 01** Effectively use of the space while generating electricity.
- 02** Different options for both single and double rows of parking.
- 03** Pre-assembly supporting beam to save on site installation time.
- 04** Various foundation options include precast concrete, bored pier and ground screw.

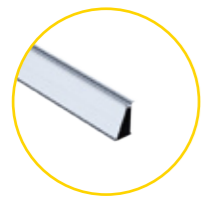
## Specification

Application	Open terrain
Elevation angle	Recommend below 30°
Distance between footings	5000mm above
Snow load	Up to 150cm
Recommended wind speed	Up to 60m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304, 410 Hot-dipped galvanized steel Q235B, Q355B

# METAGROUND-AL CARPORT MOUNTING SYSTEM (STANDARD)



## Components



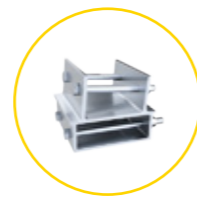
End Clamp



Mid Clamp



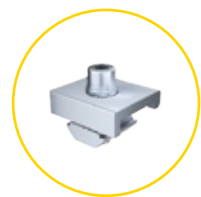
Rail



Rail Splice



Rail Clamp



Beam



Pole



Small Foot Seat



Big Foot Seat



Embedded Bolt

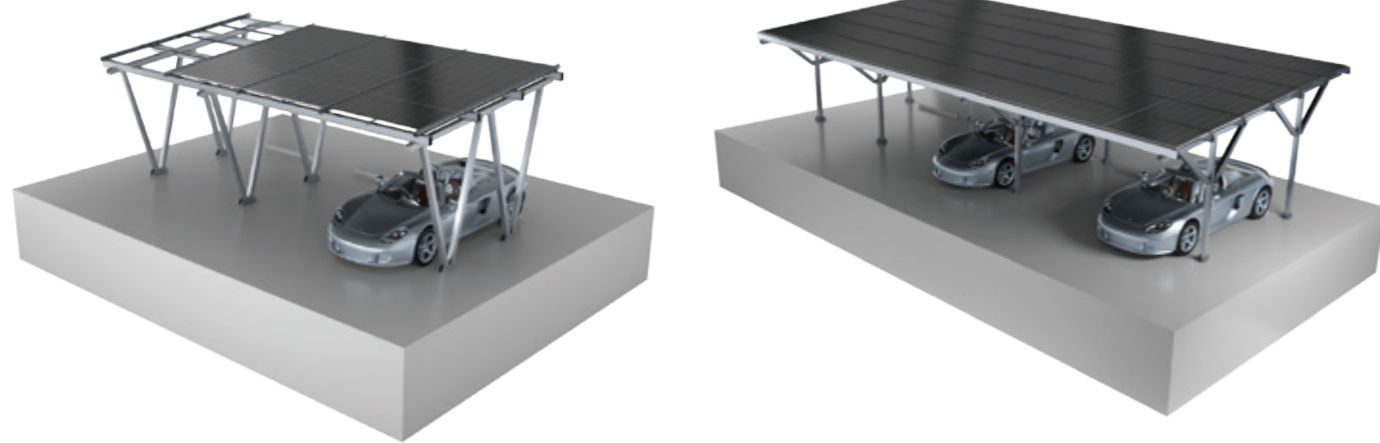
## Features

- 01** High corrosion. Aluminum structure to offer high corrosion resistant and lightweight.
- 02** Parking Friendly Structural Design: unobstructed door opening and easier reversing
- 03** Highly pre-assembled. Pre-assembly supporting beam to save on site installation time.
- 04** Optional foundation. Ground screw or concrete block foundation are optional.

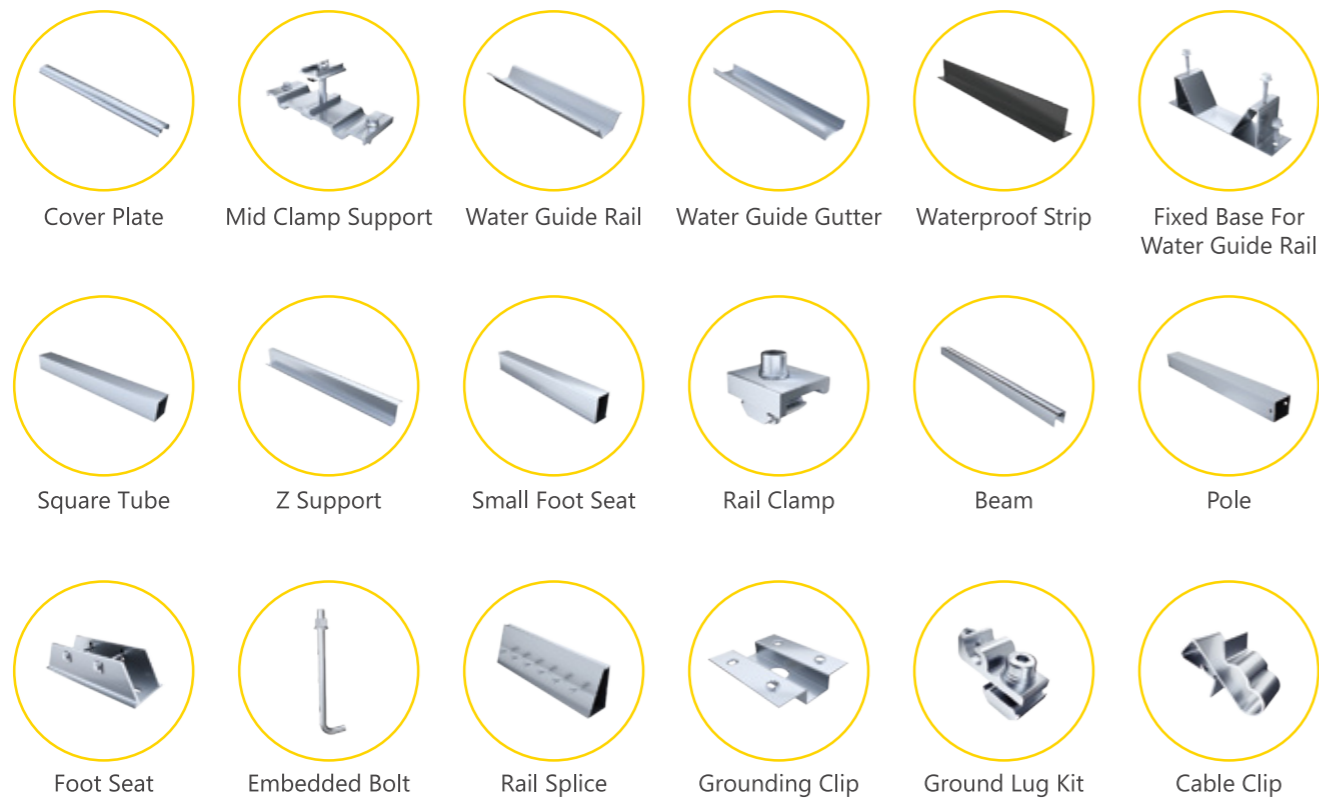
## Specification

Ground Type	Al
Tilt Angle	5°
Wind Load	38-46m/s
Snow Load	50-99cm
Applicable Solar Module	Framed/Frameless
Panel Layout	Portrait/Landscape
Design Standard	Eurocode EN 1990/1991, ASCE7-10, GB 50009-2012
Material	AL-6005-T6, SUS304
Color	Sliver/Black
Warranty	10-year

# METAGROUND-AL CARPORT MOUNTING SYSTEM (WATERPROOF)



## Components



## Features

- 01** Effectively use of the space while generating electricity.
- 02** Fully waterproof design for framed module installation.
- 03** Pre-assembly supporting beam to save on site installation time.
- 04** Various foundation options include precast concrete, bored pier and ground screw.

## Specification

Application	Open terrain
Elevation angle	Recommend below 30°
Distance between footings	5000mm above
Snow load	Up to 150cm
Recommended wind speed	Up to 60m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304 Hot-dipped galvanized steel Q235B, Q355B

# HOT-DIP GALVANIZED STEEL GROUND SCREW



Ground Screw



Ground Screw



Ground Screw



U Pile



C Pile



## Manual piling diver

Easy operation, cost effection for small size ground project.

## Pile diver

High installation efficiency, 30-75s for one screw in, ideal for large scale project.

