



ANTAI TECHNOLOGY CO.,LTD

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

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

Website www.antaisolar.com E-mail sales@antaisolar.com

SOLAR MOUNTING **SYSTEM**

Catalogue/2022

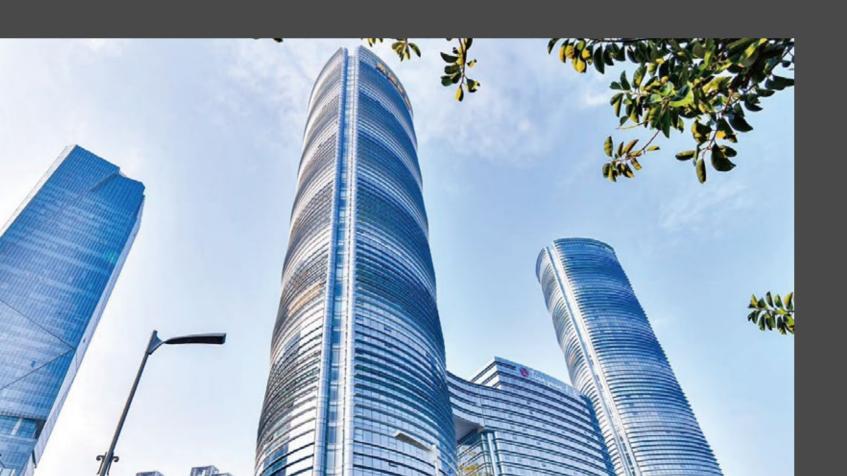


ABOUT ANTAI

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 five major manufacturing centers located in Turkey, Indonesia, Fujian, Jiangsu and Tianjin.

As of the end of 2021, its cumulative solar racking shipments had reached 19.3GW. It has ranked No.1 in Japan's solar racking market share and ranked No.1 of export volume to Japan for eight consecutive years and ranked top 1 in Australia and Chile distributed generation market.



ADVANTAGES



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.



Manufacturing centers located in Turkey, Indonesia, Fujian, Jiangsu, Tianjin. Vertical integrated production with strict process control. 6.8GW annually capacity of aluminum solar racking and 10GW annually capacity of steel solar racking.



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.



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



2008

Solar mounting system exported to Australia, US, Japan, etc.

2013

Ground screw production line set up expanding production base

2007
Acquired ISO9000 certificate

2011

The first Chinese aluminum solar mounting company entered Japan market

2015

Opened a logistic center in Japan

mounts shipment reached 6GW worldwide

2016
Accumulative solar mounts shipment

Set up the Shanghai, Japan and Australia branches

2018

Set up the Brazil office

Antai and Central South University signed an agreement about the establishment of academician working station

2020

Brand upgradation

Set up Shanghai R&D Center

2021

Carbon steel production line fully put into operation

Launched the world's longest solar tracker SPACE

2017

Set up the Philippine office

Exchange and cooperation with representatives from light alloy researchinstitute of Central South University

2019

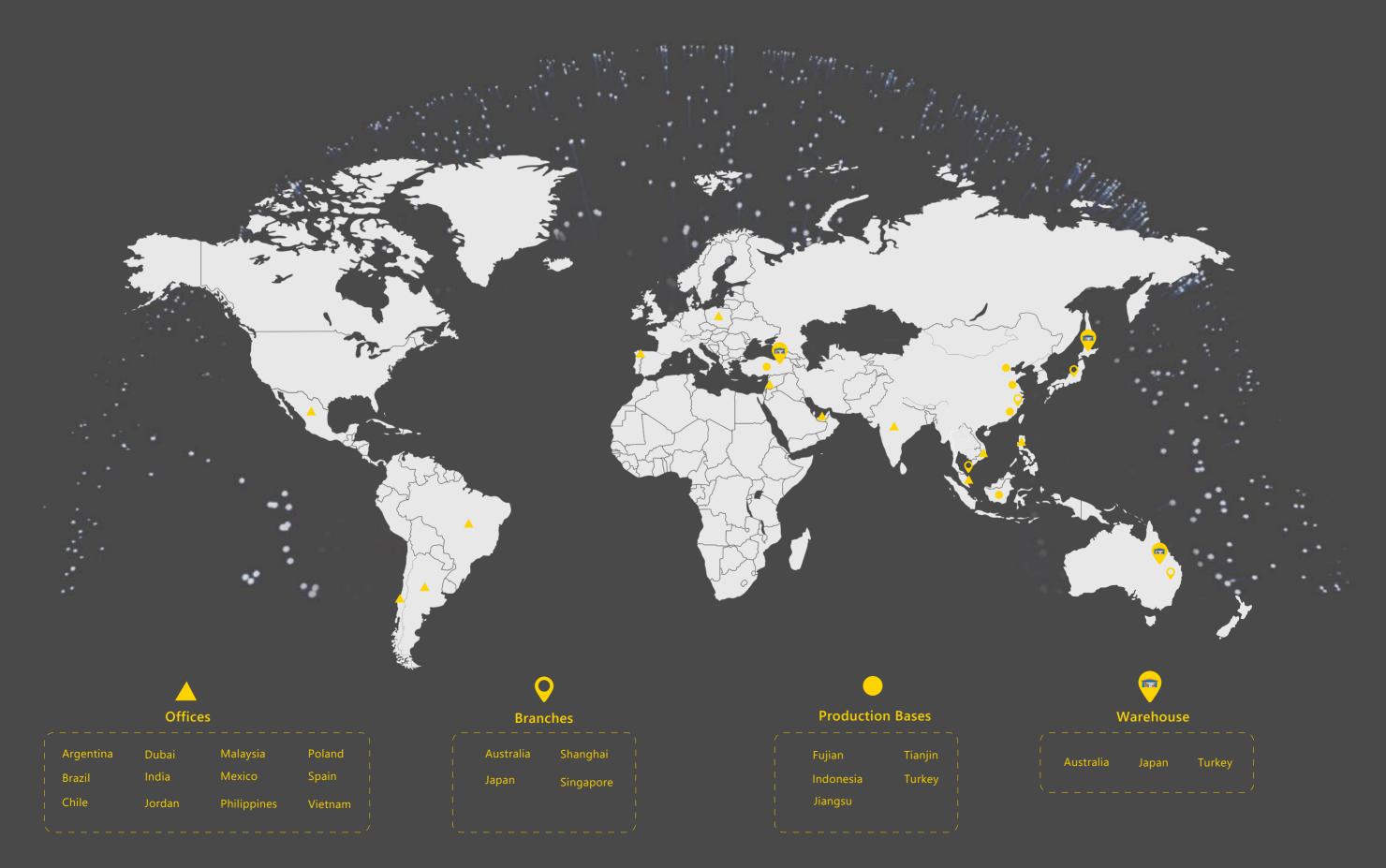
Start solar tracking system business

Set up new production base

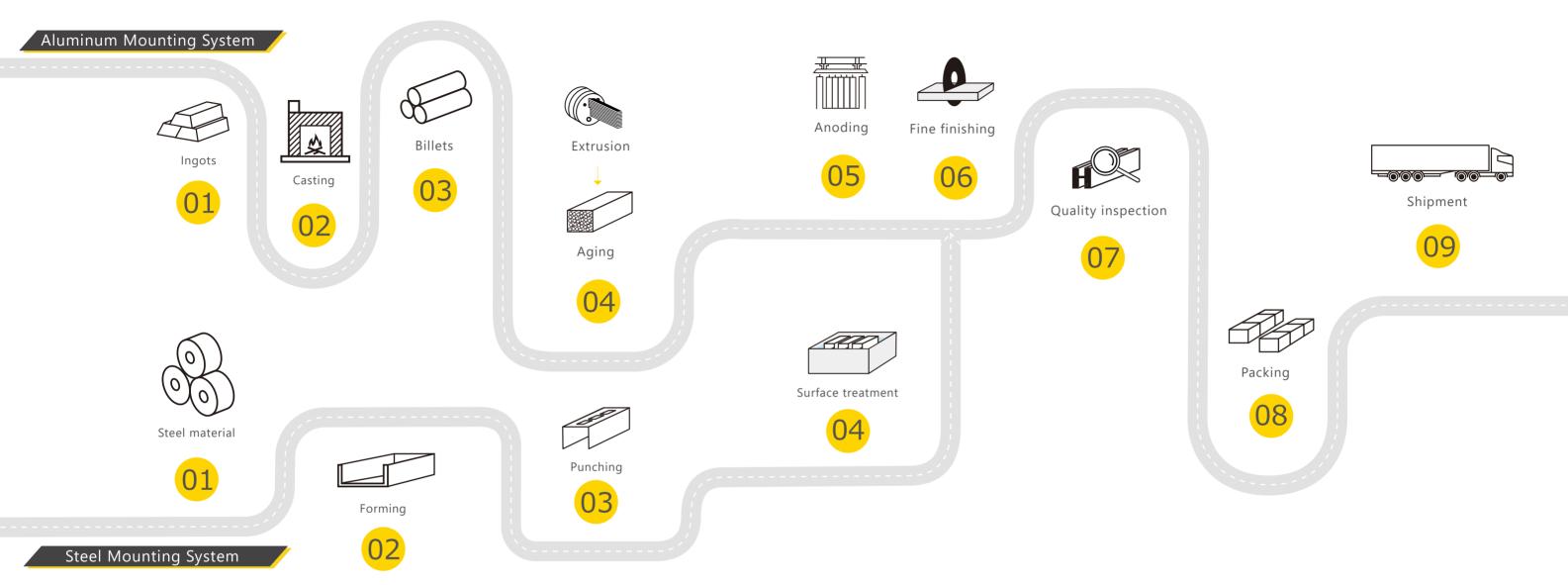
Set up the Singapore and Vietnam branches

Set up the Malaysia office

GLOBAL DEPLOYMENT



VERTICAL INTEGRATED PRODUCTION







QUALITY CONTROL

In-House Lab Testing

Spectrum Analyzer



Anti-pull force testing



Chemical Element Testing



Film Thickness Testing

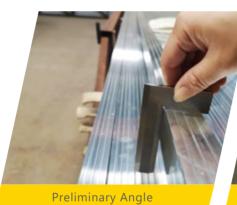


Salt Spray Testing



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.













Hardness Measurement

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 ilnstitutions of higher learning to promote all-round integration of industrial technologies.

Unique High performance Aluminum alloy

Items (Mechanical properties)	AT6063-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



17 Pile ground mount

19 Steel ground mount

PITCHED ROOF

- 01 Metal roof mount
- 03 Tile roof mount
- 05 Standing seam mount
- 07 Railless metal roof mount

FLAT ROOF

- 09 Adjustable tilt roof mount
- 11 Triangle roof mount
- 13 Railess ballasted mount

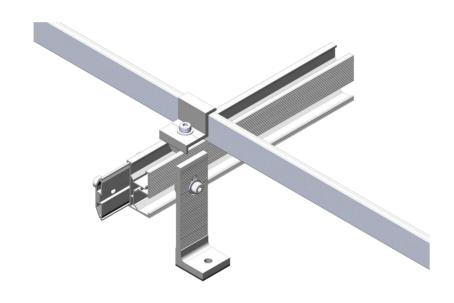
CARPORT

21 Aluminum carport mount 25 Steel carport mount

SCREW

27 Ground screw

METAL ROOF SOLAR MOUNTING SYSTEM



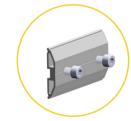
Components



A: L bracket



B : Rail



C : Rail splice



D: Inter clamp



E : End clamp

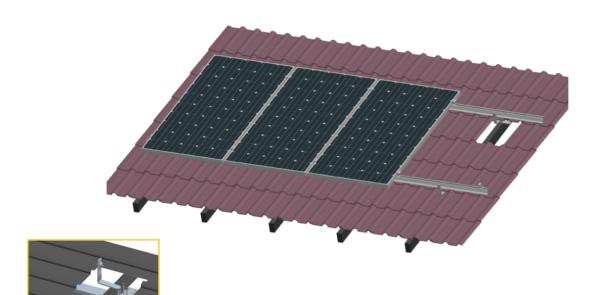


Features

- **01** Simple, minimal system components.
- **02** L Feet or hanger bolt are available for foot options.
- **03** Compliant with the Australian and other international standards.

Application	Pitched roof
Roof Slope	Up to 60°
Building height	Up to 20m
Roof cladding	Suitable for most types of cladding
Recommended wind speed	Up to 60 m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304

TILE ROOF SOLAR MOUNTING SYSTEM



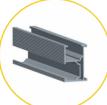
Components



A: Tile roof hook



D : Inter clamp



B : Rail





E : End clamp



C : Rail splice



Side view

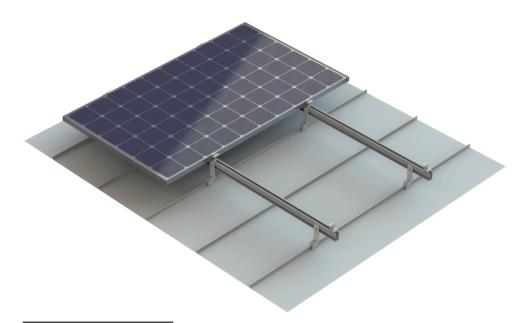


Features

- **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 the Australian and other international standards.

Application	Pitched roof
Roof Slope	Up to 60°
Building height	Up to 20m
Roof cladding	Suitable for most types of cladding
Recommended wind speed	Up to 60m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304

STANDING SEAM ROOF MOUNTING SYSTEM



Components





TYN-382 clamp



TYN-385 clamp



C : Rail



Kliplok® 406



Kliplok® 700

Standing seam clamp



Features

- **01** Non-penetrating roof clamp mounting ensures watertightness.
- **02** Maximum stability with minimum weight.
- **03** A variety of roof clamps suit for all roofing sheets.
- **04** Simple and quick installation by attaching the clamp to the standing seams.

Application	Suitable for Lysaght® Kliplok® 406, 700, Lysaght® Locked seam®, Stramit® Speed Deck, Fielders®
Roof Slope	Up to 60°
Building height	Up to 20m
Recommended wind speed	Up to 60 m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304

RAILLESS METAL SHEET MOUNTING SYSTEM



Components



A: Locked seam®



Kliplok® 406



B: Inter clamp



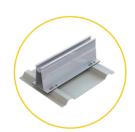
Kliplok® 700



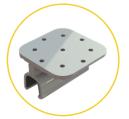
C : End clamp



Kliplok® 406



Railess roof clamp



Kliplok® 700



Features

- **01** Fast installation without rail and saving cost.
- **02** EPDM gaskets under attachments to protection from water leakage.
- **03** Railless mounting system allows for easy logistics, cost-effective warehousing.
- **04** Length of roof attachment can be customized.

Application	Trapezoidal sheet, sandwich roofing, standing seam
Roof Slope	Up to 60°
Building height	Up to 20m
Min. sheet thickness	0.8mm minimum
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

ADJUSTABLE TILT FLAT ROOF MOUNTING SYSTEM



Components



A : Front leg



B : Back leg



C : Rail splice



D : Inter clamp



E: End clamp

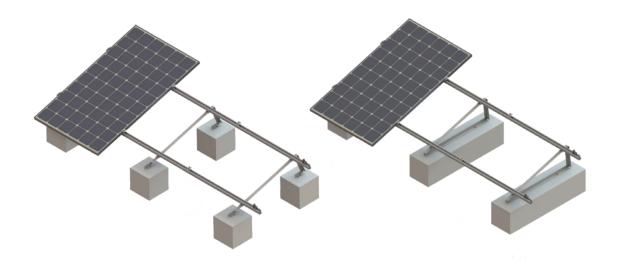


Features

- **01** Non-penetrating roof clamp mounting ensures watertightness.
- **02** Maximum stability with minimum weight.
- **03** A variety of roof clamps suit for all roofing sheets.
- **04** Simple and quick installation by attaching the clamp to the standing seams.

Application	Pitched roof
Roof Slope	Up to 60°
Building height	Up to 20m
Tilt angle	Fixed, 10-15°, 15-30°, 30-60°
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

TRIANGLE FLAT ROOF MOUNTING SYSTEM



Components



A1 : Triangle bracket A



A2 : Triangle bracket B



C : Rail splice



D : Rail



E : Rail clamp



D: Inter/ End clamp

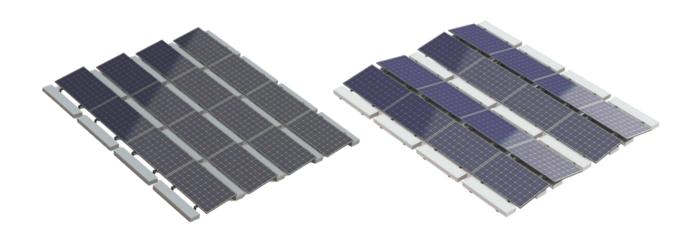


Features

- **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.

Application	Flat roof, open terrain
Tilt angle	10°, 15°, 20°, 30°
Building height	Up to 20m
Snow load	Up to 99cm
Recommended wind speed	Up to 60m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304, 410

RAIL-FREE BALLASTED FLAT MOUNTING SYSTEM



Components



A1 : Front support A



B2 : Inter support B



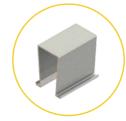
B1 : Rear support A



C2 : Inter support C



C1 : Inter support A



D : Buckle



A2 : Front support B



E: Ballast tray



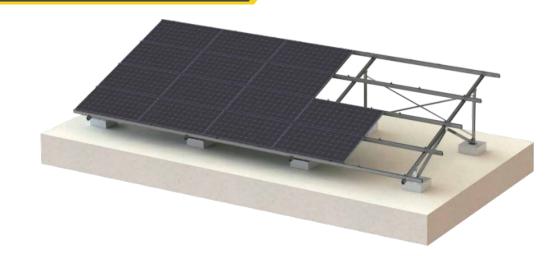
Features

- **01** Non-penetrating roof clamp mounting ensures watertightness.
- **02** No drilling or digging, without roof penetration.
- **03** Ballast weight is customizable to different wind zone.

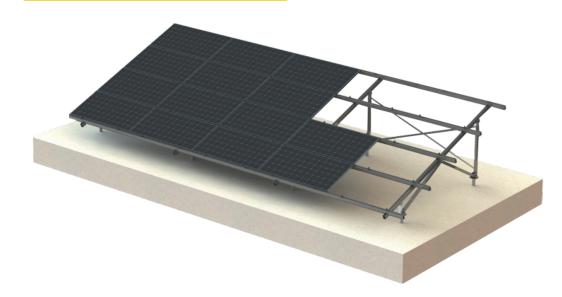
Application	Flat roof, open terrain
Tilt angle	5°, 10°
Building height	Up to 24m
Recommended wind speed	Up to 60m/s
PV module	Framed, unframed
Module orientation	Landscape recommened
Material	Anodized aluminum 6005 T6 stainless steel 304, 410

GROUND MOUNTING SYSTEM

Concrete foundation



Ground screw foundation



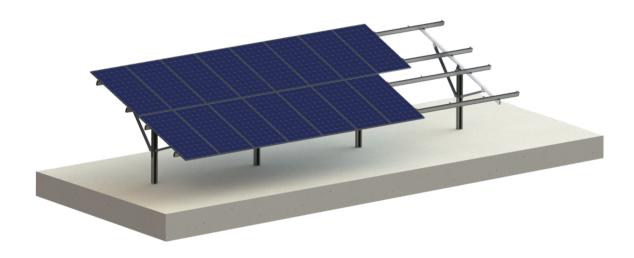


Features

- **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.

Application	Open terrain, landfill, and disposal
Elevation angle	Up to 60°
Distance between footings	Depending on load condtion, refer to manual
Snow load	Up to 50cm
Recommended wind speed	Up to 60 m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304 Hot-dipped galvanized steel Q235B, Q355B

PILE GROUND **MOUNTING SYSTEM**



Components



A: Pre-assembled beam



B : Pillar



C : Rail



D : Rail splice



E : Pillar cap



F : Rail clamp



G: End clamp



H: Inter clamp

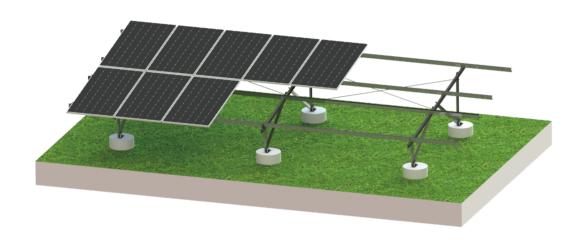


Features

- **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.

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

STEEL GROUND MOUNTING SYSTEM



Components



A: C steel rail





D : L Connector



B : Pillar



E : Rail clamp



C : Rail splice



D: Inter/ End clamp

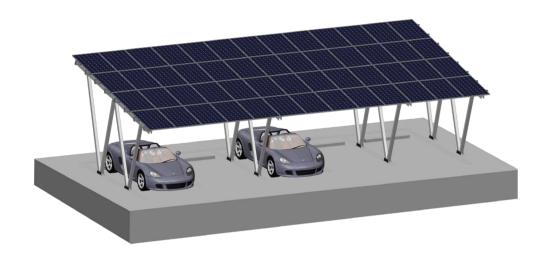


Features

- **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.

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

ALUMINUM CARPORT SOLAR MOUNTING SYSTEM



Components



A : Beam connector



B : Rail



C : Rail splice



D : Pole



E : Foot seat



G : Inter clamp



H: End clamp



I : Rail clamp



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.

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

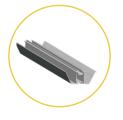
ALUMINUM CARPORT MOUNTING SYSTEM-WATERPROOF



Components



A : Supporting Beam



F : Water guide rail



B : Rail



G : Water guide rail splice



C : Rail splice



H : Cover plate



D : Big foot seat





E : Small foot seat



I : Water guide gutter J : Inter/ End clamp



Features

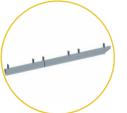
- **01** Effectively use of the space while generating electricity.
- **02** Fully waterproof design for framed module installation.
- **03** Pre-assembly supporting beam to save on site installation time.
- **04** Various foundation options include precast concrete, bored pier and ground screw.

Application	Open terrain			
Elevation angle	Recommend below 30°			
Distance between footings	5000mm above			
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 Hot-dipped galvanized steel Q235B, Q355B			

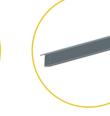
STEEL CARPORT MOUNTING SYSTEM



Components



A : Supporting beam



B : Horizontal beam



C : Pole



D : Bracing



E : Hook



F : Connector



G: Water guide gutter



H: Inter/ End clamp

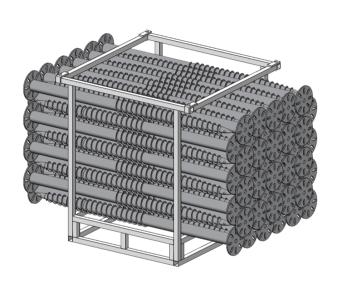


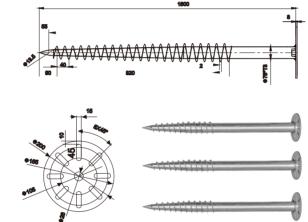
Features

- **01** Effectively use of the space while generating electricity.
- **02** Strong stability steel structure with larger span to reduce cost.
- **03** Pre-assembly supporting beam to save on site installation time.
- **04** Various foundation options include precast concrete, bored pier and ground screw.

Application	Open terrain			
Elevation angle	Up to 20°			
Distance between footings	7500mm 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





Manual piling diver

Easy operation, cost effection for small size ground project.

Pile diver

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









Features

- **01** Ground screw foundation allows for a screamlined design and a very cost-effect ground mount system. Using less concrete, no excavation, especially useful for sites with restricted access or environmental sensitivity.
- **02** High adaptability can be widely used in all kinds of geological conditions, such as foreshore, desert, grassland, etc.
- **03** Average 80um galvanization ensure high corrosion resistance without additional treatmentl.

Length can be customized

Item No.	Length	Out Dia.	Thickness	Flange Out Dia.	Material
AT76xT3.5x1200 AT76xT3.5x1400 AT76xT3.5x1600 AT76xT3.5x1800 AT76xT3.5x2000	1200mm 1400mm 1600mm 1800mm 2000mm	76mm	3.5mm	220mm	Hot dipped galvanized steel, Q235B
AT76xT3x1200 AT76xT3x1400 AT76xT3x1600 AT76xT3x1800 AT76xT3x2000	1200mm 1400mm 1600mm 1800mm 2000mm	76mm	3mm	200mm	Hot dipped galvanized steel, Q235B