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Ten years focus

always be your solar support

//

About "US"

Antaisolar is one of the largest photovoltaic mounting system providers in China. Since 2009, we have been specializing in providing solutions for installing solar photovoltaic systems. We develop and produce solid mounting systems easily fitted to all types of roof and ground. With the extensive know-how, we accomplished large scale projects in the megawatt range at international levels.

The name Antai is translation of security and stability in Chinese. In photovoltaic installations which last over decades, in locations where wind and weather posing challenge, solid reliability is essential. Our quality, lightweight and durable mounting systems provide photovoltaic modules with best support against the force of nature.

Antaisolar is 100% subsidiary of Fujian Zhangzhou Antai Aluminium Co., Ltd total investment over 120 million RMB since 2006, covers an area of 70,000 square meters, including the construction area of 61,600 square meters, employees over 300.

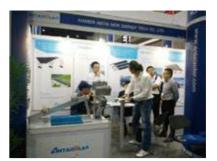


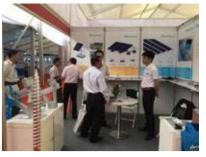
Milestones

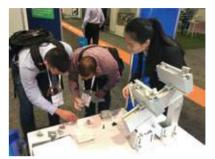
Accumulated installation capacity over 3GW



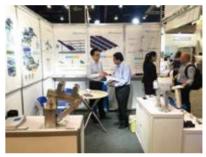
ASEAN Sustainable Energy Week
PV JAPAN 2016 in Yokohama
Myanenergy 2016 in Yangon
SPI 2016 in Las Vegas
PV EXPO 2016 in Osaka
PV JAPAN 2017 in Yokohama
Summer outing























Production

Antaisolar strive towards high operational efficiency. We operate manufacturing facilities in China covering 61600 square meters and more than 10 automated production lines. From raw material (aluminium ingots) to final packing, Antaisolar stick to highly quality control during the whole processing.













Molding



Aluminum extrusion

Punching







Anodizing treatment Powder coating



CASE • Ground mount





- 1: Metal roof mount Australia
- 2: Railless metal roof mount Japan
- 3: Triangle roof mount Korea
- 4: Metal roof mount Cambodia





- 1: SC ground mount Myanmar
- 2: CG ground mount Vietnam
- 3: NW ground mount Japan
- 4: Pile ground mount Japan







Our highlights

- Corrosion Resistance: anodized aluminum, average anodization thickness 12µm, and stainless steel 304
- Easy Installation: highest pre-assembly before shipment, modular design saving installation time
- Standards: international standards certified and statically tested
- Brand Reputation: export to developed market such as AU, JP, US, EU etc.
- Fast Shipment: 85MW capacity per month, 2 weeks lead time for project under 5MW.
- Technical Support: 20 experienced engineering support team
- 10 years warranty, 25 years design life time













Contents

Pitched roof mounting

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

Flat roof mounting

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

Ground mounting

- 15 Carport
- 17 SC ground mount
- 19 CG ground mount
- 21 NW ground mount
- 23 Pile ground mount
- 25 Pole ground mount
- 27 Steel ground mount

Accessories 29

31 Ground screw

Production & logistics 32



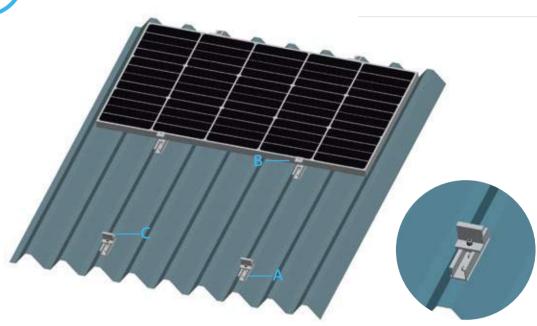
Application	Trapezoidal sheet, sandwich roofing, standing seam
Min. sheet thickness	0.8mm minimum
Roof slope	Up to 12°
Building height	Up to 20m
Wind speed	Up to 60m/s(216kmh/133mph)
PV module	Framed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304, 410
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Light, small
and easy mounting
on trapezoidal
metal sheet

The railless system facilitates the rapid mounting of framed PV modules on trapezoidal metal sheet roofs with minimum thickness 0.8mm, only four components are required to install the modules directly to the roof. A base mounting clip is 100mm or 140mm long, therefore easy to carry and attach to almost all trapezoidal and sandwich roofs. The EPDM sheet is in the package to seal the screw against the metal sheet..

Railless mounting system allows for easy logistics, cost-effective warehousing and easy mounting.

Railless metal sheet mounting system



Components



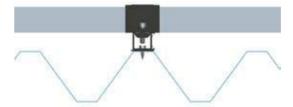
A: Roof attachment



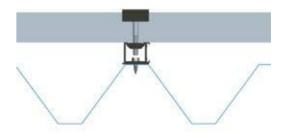
B : Inter clamp



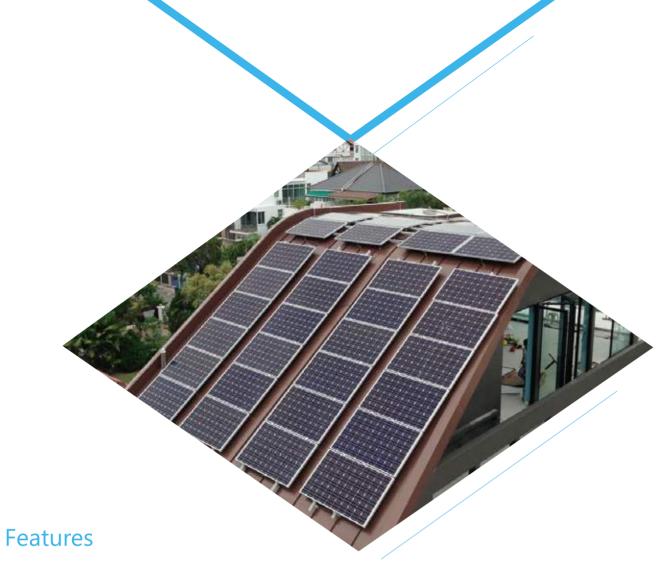
C : End clamp



Side view



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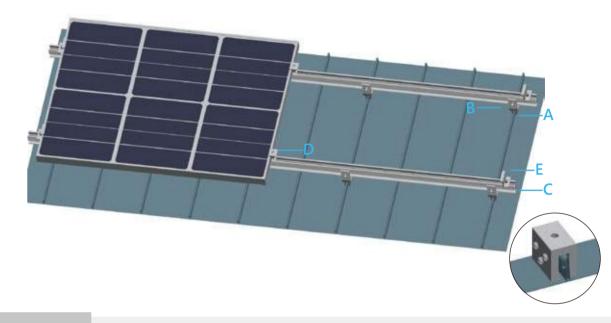
Application	Suitable for Lysaght® Kliplok® 406, 700, Lysaght®
	Locked seam®, Stramit® Speed Deck, Fielders®
Roof slope	Up to 45°
Min. sheet thickness	0.42mm minimum
Building height	Up to 20m
Wind speed	Up to 88m/s(316.8kmh/196.9mph)
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Headache-free mounting solution for metal roofs with standing seam design

The standing seam roof clamps make mounting on folded seam roof particularly easy. The clamps are simply attached to the standing seams. The clamps offer a secure fastening without penetrating the roof sheets, ensuring maximum stability with minimum weight. The variety of system combinations like L-foot, fixed foot or PV module clamp directly, allows it to be connected quickly to all rail components.



Standing seam roof mounting system





 $A: Locked \ seam \\ {\mathbb R}$



B: L foot



C : Rail



D : Inter clamp



E : End clamp



Kalzip®



Kliplok® 406



Kliplok® 700



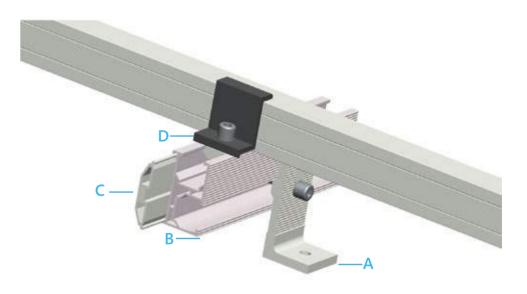
Application	Pitched roof
Roof Slope	Up to 45°
Building height	Up to 20m
Roof cladding	Suitable for most types of cladding
Wind speed	Up to 88m/s(316.8kmh/196.9mph)
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Solid, versatile for all metal sheet roofs

The metal roof mounting system is suitable for roofing with corrugated sheet metal, trapezoidal metal sheet. L Feet, hanger bolt are available for foot options, making installation more fast, competitive and reliable. Systems are fully compliant with the Australian and other international standards on wind & snow load, making it suitable for a wide variety of climatic zones.



Metal roof solar mounting system



Components



A: L bracket

Use to secure rails through roofing material. Fix the L bracket(together with rubber pad) to the rafter using SUS 410 Screw.



B : Rail

Supporting PV modules, aluminum extrusion, length customizable. Connect the rail with L bracket by T-module and tighten the bolt.



C : Rail splice

Connect multiple rails together, forms a rigid joint. Slide the splices on the rear side of rail with the next rail segment.



D : End clamp

Providing bond from rail to module. Slide the end clamp tightly against the solar module and' fasten tightly using the Allen bolt.



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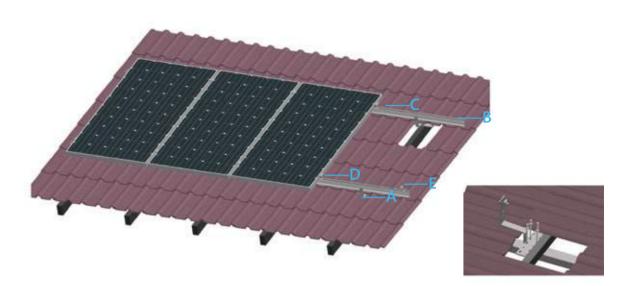
Application	Pitched roof
Roof Slope	Up to 45°
Building height	Up to 20m
Roof cladding	Suitable for most types of cladding
Wind speed	Up to 88m/s(316.8kmh/196.9mph)
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Flexible, simple clean on different tile roofing

The tile roof solar mounting system offers perfect solution for installation on tile roofing, the roof fastening is done using highly-resistant stainless steel roof hooks, which is suitable for nearly all coverings, such as pantile, plain tiles, slate tiles. Systems are fully compliant with the Australian and other international standards on wind & snow load, making it suitable for a wide variety of climatic zones.



Tile roof solar mounting system





A: Tile roof hook



B : Rail



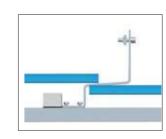
C : Rail splice



D : Inter clamp



E: End clamp



Side view

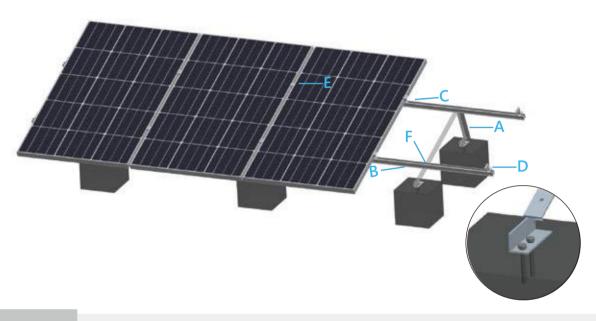


Application	Flat roof, open terrain
Tilt angle	10°, 15°, 20°, 30°
Building height	Up to 20m
Snow load	Up to 99cm
Wind speed	Up to 60m/s(216kmh/133mph)
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304, 410
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Most economical flat roof mount solution

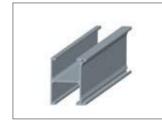
Antaisolar triangle mounting bracket is a newly developed product for flat rooftop installation, more cost-effective than the traditional bracket. With only two supporting angle aluminums, it can be installed without rail, or with rail. For mini power solar plant, it's recommended to design without rail, which helps to reduce the cost and simplify packing. Fold design allows for easy transportation. Railless mounting system allows for easy logistics, cost-effective warehousing and easy mounting.

Triangle flat roof mounting system









B : Rail



C : Rail splice



D : End clamp



E : Inter clamp



F : T-module



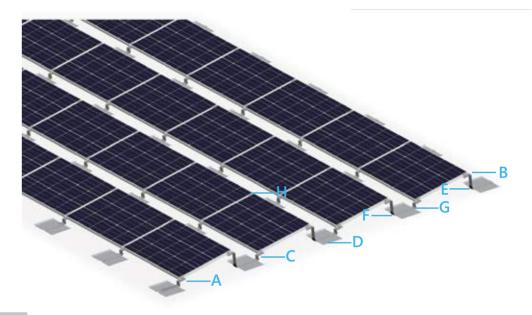
Application	Flat roof, landfill, open terrain
Tilt angle	5°, 10°
Inter-row spacing	400mm recommended
Building height	Up to 24m
Wind speed	Up to 60m/s(216kmh/133mph)
PV module	Framed, unframed
Module orientation	Landscape recommened
Material	Anodized aluminum 6005 T6 stainless steel 304, 410
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Best price value available,
Q235 steel

The railless ballasted roof mounting system is suitable for commercial flat rooftops, a south-oriented racking solution for mounting framed modules on flat roofs with 5°, 10° mounting tilts. Variable ballasted weight allows for local wind rating requirements to be meet on an individual basis. Eliminating rails equate to just a few boxes per system, without the inconvenience of long, cumbersome rails.

The simple and straightforward installation process of the system can save time and reduce the labor cost.

Rail-free ballasted flat mounting system

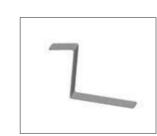




A: Front support



E : Protection mat (Front and rear)



B : Rear support



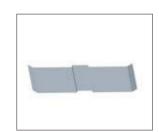
F : Protection mat (Inter)



C : Inter support



G: Buckle



D : Ballast tray



H : Clamp

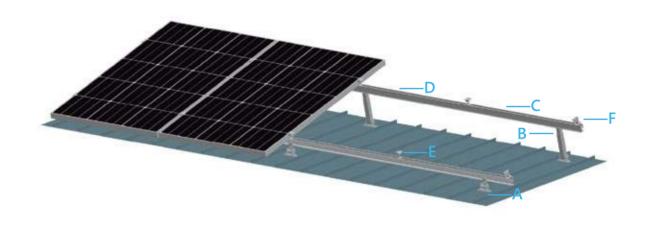


Application	Flat roof
Tilt angle	Fixed, 10-15°, 15-30°, 30-60°
Roof slope	Up to 45°
Building height	Up to 20m
Wind speed	Up to 88m/s(316.8kmh/196.9mph)
PV module	Framed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6, stainless steel 304, 410
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Adaptable, ecomomical mounting on almost all flat roof coverings

The adjustable tilt flat roof mounting system will easily fit different flat roofs or open terrain applications, due to its variable tilt angle and footing options for both roof clamp and roof penetration. The solar system can be used as fixed tilt or adjustable tilt, allows for project-specific adjustments and optimize solar power output. The innovative design and high pre-assembly eliminate the need for on-site cutting, welding and enable quick and easy field PV module installation.

Adjustable tilt flat roof mounting system









B: Back leg



C : Rail



D : Rail splice



E : Inter clamp



F : End clamp



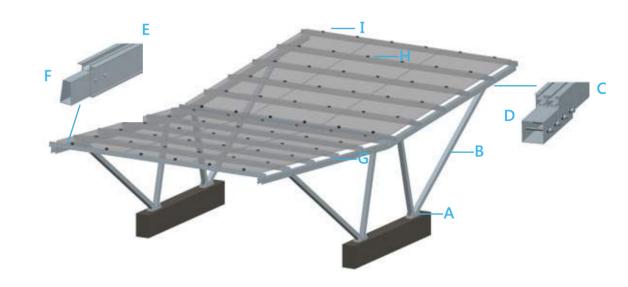
Application	Open terrain
Elevation angle	Recommend below 30°
Distance between footings	5000mm above
Snow load	Up to 150cm
Wind speed	Up to 60m/s(216kmh/133mph)
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304, 410
	Hot-dipped galvanized steel Q235B
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Economical multi-function structure for solar purpose

Carport solar mounting system offers simplified and economic solution providing shade for parking and solar power generation, it is designed with different options for both single and double rows of parking, tailored for most module types, orientations, and inclinations. Various foundation options include precast concrete, bored pier and ground screw. Long spans between foundations reduce cost and simplify the

Solar carport is one of the fastest growing trend in photovoltaic market, effectively uses existing parking space, streamlined design making it ideal choice to present environmental friendly image or work as electrical vehicle charging station.

Carport solar mounting system



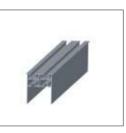
Components







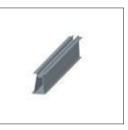
B : Pole



C : Supporting Beam



D : Beam connector



E : Rail



F : Rail splice



G: Rail clamp



H: Inter clamp



I : End clamp

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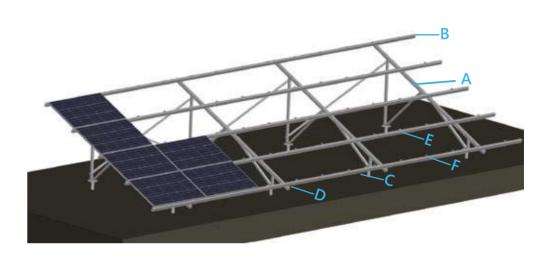


Application	Landfill, open terrain
Elevation angle	Up to 60°
Clearance	Up to request
Snow load	Up to 50cm
Wind speed	Up to 40m/s
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304
	Hot-dipped galvanized steel Q235B
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

The most simplest and easy solutions for ground mount installation.

The SC ground mounting system is the most simplest and easy solutions designed for ground mount installations. There is no joint components between supporting beam and bracing, which makes the installation more simple and saves labor time. Made of aluminum, the system is an extremely anti-corrosion during its entire life span. It's the lowest cost one of ground mount system while the other requirements are satisfied. The design goes through strict calculation and analysis to ensure its strength and durability.

SC ground mounting system

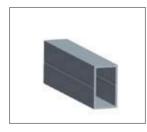


Components









C : Rail splice



D : Rail clamp



E : Inter clamp



F: End clamp



Side view



Foot view

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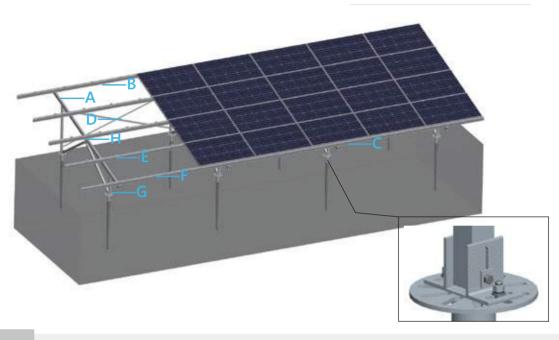


Open terrain, landfill, and disposal
Up to 60°
Depending on load condtion, refer to manual
Up to 50cm
Up to 60m/s(216kmh/133mph)
Framed, unframed
Landscape, portrait
Anodized aluminum 6005 T6 stainless steel 304
Hot-dipped galvanized steel Q235B
AS/NZ1170.2:2011, JIS C 8955:2011

Cost optimized aluminum ground mount solution

The CG ground mounting system is a cost optimized design based on NW, the supporting footing is delivered with highest pre-assembly to unfold at site. The optimized design is carried out by experienced engineers, this is important as high loads caused by wind and snow. It can use ground screw or concrete foundations, and its variable inclination and height makes plant design flexible. Anodized aluminum makes the whole system light but strong.

CG ground mounting system









E : Inter clamp



B : Rail



F : End clamp



C : Rail splice



G : Foot seat



D : Reinforcement aluminum



H : Rail clamp

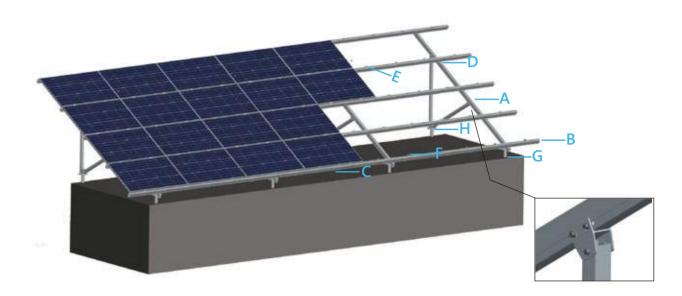


Application	Flat roof, landfill, open terrain
Elevation angle	Up to 60°
Distance between footings	Depending on load condtion, refer to manual
Snow load	Up to 150cm
Wind speed	Up to 88m/s(316.8kmh/196.9mph)
PV module	Framed, unframed
Module orientation	Landscape, portrait
Material	Anodized aluminum 6005 T6 stainless steel 304
	galvanized steel Q235B
Standard	AS/NZ1170.2:2011, JIS C 8955:2011

Flexible, robust,
tailored for
different
ground conditions

The NW ground mounting system is a convenient solution designed for ground mount installations, from commercial to utility level. The supporting beam is delivered pre-assembled, fast and easy at site and it's robust enough for high wind speed and snow loads. Made of aluminum, the system is an extremely low-maintenance system during its entire life span, and fully recyclable, aesthetically pleasing system ideal for quick installation.

NW ground mounting system



Components



A: Pre-assembled beam



E : Inter clamp



B : Rail



F : End clamp



C : Rail splice



G : Ground screw



D : Rail clamp



H : Foot seat

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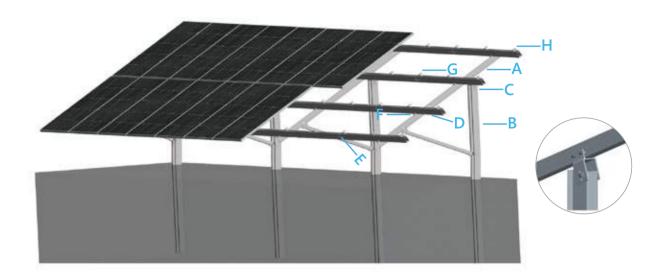


Application	Open terrain			
Elevation angle	Up to 60°			
Foundation	Pile in or pre-cast, bored pier			
Snow load	Up to 150cm			
Wind speed	Up to 88m/s(316.8kmh/196.9mph)			
PV module	Framed, unframed			
Module orientation	Landscape, portrait			
Material	Anodized aluminum 6005 T6 stainless steel 304, 410			
	Hot-dipped galvanized steel Q235B			
Standard	AS/NZ1170.2:2011, JIS C 8955:2011			

Ideal for uneven terrain, economical for large projects

The pile ground mounting system is a very economical solution for large commercial and utility scale installations, especially on uneven terrain. The use of ramming posts eliminate the need for additional excavation works, and pile-driven machine reduce labor and time remarkably on site, piling finishes in less than 3 minutes, for large projects, this means high cost savings. Single post system allows for easy maintenance around and under the modules. Double post optional for larger span and bigger array.

Pile ground mounting system



Components







E: Rail splice



B : Pillar



F : Rail clamp



C : Pillar cap



G: Inter clamp



D : Rail



H: End clamp

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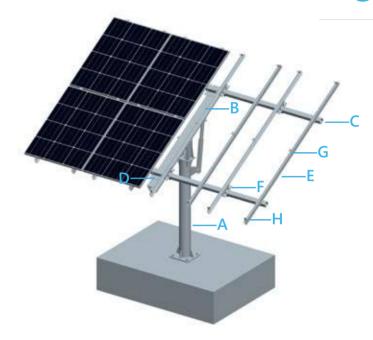
Application	Open terrain		
Adjustable angle	15°- 60°		
Size of module array	6 panels, 8 paenls, 12 panels		
Snow load	Up to 100cm		
Wind speed	Up to 88m/s(316.8kmh/196.9mph)		
PV module	Framed, unframed		
Module orientation	Landscape, portrait		
Material	Anodized aluminum 6005 T6 stainless steel 304		
	Hot-dipped galvanized steel Q235B		
Standard	AS/NZ1170.2:2011, JIS C 8955:2011		

Sturdy for small area, off-grid PV, arranged beside water pump

The pole mount is a very sturdy solution for small area solar photovoltaic needs. With its manu-adjustable angle settings, it can support installations in a wide range of locations.

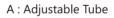
The small on-grid or off-grid power station can be arranged in garden, farmland, mountain, or beside water pump, telecom tower or the outdoor electrical house. The structure is available for manu-adjustable angle according to the season changing.

Pole ground mounting system



Components







E : Vertical Rail



B: Supporting Beam



F: L Connector



C : Horizontal Purlin



G: Inter clamp



D : Angel Steel



H : End clamp

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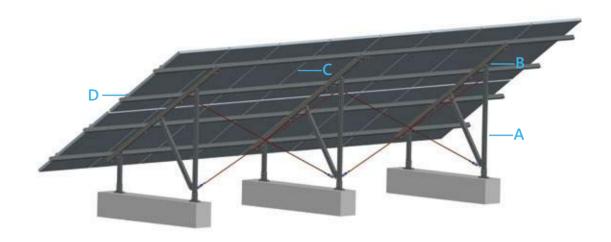


Application	Open terrain			
Size of module array	Any layout up to site condition			
Clearance	Up to request			
Snow load	Up to 150cm			
Wind speed	Up to 88m/s(316.8kmh/196.9mph)			
PV module	Framed, unframed			
Module orientation	Landscape, portrait			
Material	Stainless steel 304, 410			
	Hot-dipped galvanized steel Q235B			
Standard	AS/NZ1170.2:2011, JIS C 8955:2011			

Most economical ground mount structure in steel

The steel ground mounting creates an economical solution and is also very solid, reliable for photovaltaic projects on a free surface. Its simplest design uses most commonly available galvanized U steel as legs, beams and rails, resulting to a ground mount system ideal for a wide range of system sizes and modular configurations. Strong steel structures helps maximize the span between footings and thus decreasing the total number of supports. Furthermore, it's is compatible with ground screws, optimizing it for different terrains and saving for site modification.

Steel ground mounting system





A: Legs, beams, rails



B: Joint



C : Inter clamp



D : End clamp

Our accessories

Key elements to a successful PV installation

Our full range of useful accessories diversify the portfolio of Antaisolar PV mounting systems, and constantly being complemented in line with the market needs. Highly customization, flexibility, convenience to install, quality is the primary concern.

Accessories for example



Thin film end clamp



Thin film mid clamp



Adjustable end clamp



Adjustable mid clamp



Adjustable roof hook



Roof hook



Hanger bolt



Tile roof bracket



Roof bracket



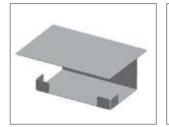
Shingle flashing



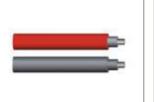
Hanger bolt flashing



Earthing and cabling plate



Isolator cover



Cable M0



MC4 connector



Plug and socket



Plastic cable clip



Stainless steel cable clip



Bonding jumper



Earthing clip



Grounding lug



US grounding lug

You can check with Antaisolar sales team for more accessories or customization.



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Hot-dip galvanized steel ground screw

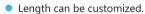
High cost performance foundation for ground mount

Ground screw foundation allows for a streamlined design and a very cost-effective ground mount system. Using less concrete, no excavation, especially useful for sites with restricted access or environmental sensitivity.

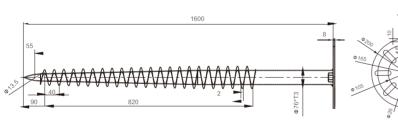
High adaptability can be widely used in all kinds of geological conditions, such as foreshore, desert, grassland, etc.

Average 80µm galvanization ensures high corrosion resistance without additional treatment.

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







Different options of screws can be applied to specific project condition. (Length, diameter, tube thickness, helices thickness, flange size)





Screw in

- Manual piling machine
 Easy operation, cost effective for small size ground mount project.
- Pile driver machine
 High installation efficiency, 30-75s for
 one screw in, ideal for large scale project.

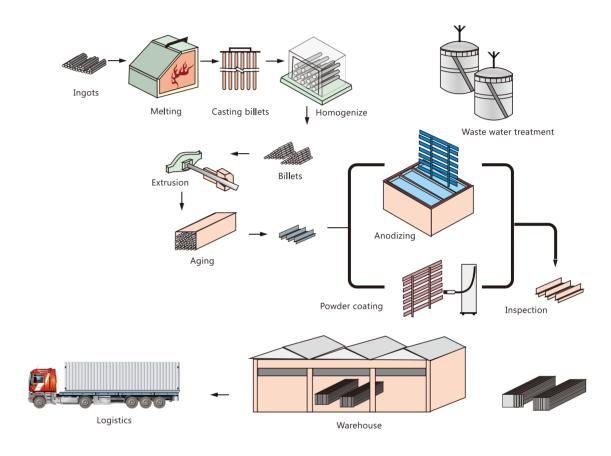




Production & logistics

Fully supply chain means you are guaranteed with highest quality check through. Due to the manufacturing capacity of our factory, we can respond quickly and ensure availability of all of our regular products.

Delivery of regular order within 7days, project-specific customized package acceptable, cost-efficient shipment planning.





Anodizing Fine machining Ship out

31/32