

Tracker mounting systems solution



02



Antai tracker mounting solutions

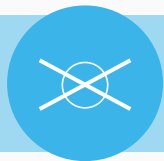
Product comparison

Product name	Driven mode	Component placement	Control mode	Communication mode	Power-supply mode	Main axis type	Purlin type	Structure type	Tracking angle	Min height
逐光S1	双推杆	单排竖放	MCU	无线Zigbee	组串取电	U型主轴		单排独立跟踪	-50~+50	50cm
逐光S2	单回转	单排竖放	MCU	无线Zigbee	组串取电	U型主轴		单排独立跟踪	-60~+60	30cm
猎光D1	三推杆	两排竖放	MCU	无线Zigbee	组串取电	方管主轴	组合檩条	单排独立跟踪	-50~+50	50cm
猎光D2	三回转	两排竖放	MCU	无线Zigbee	组串取电	方管主轴	组合檩条	单排独立跟踪	-60~+60	30cm

Push rod driving tracker mounting series



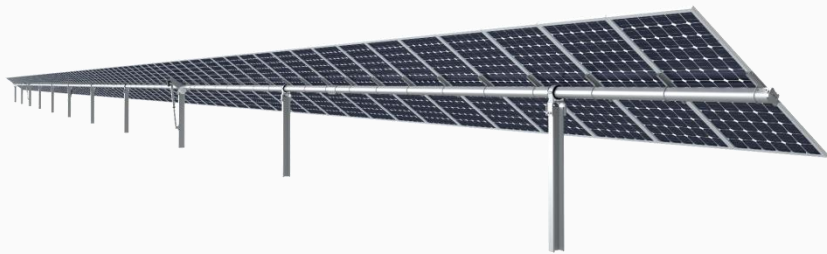
Multi-push
rod driven



Tracking angle
 $\pm 50^\circ$



Min-height
50cm



逐光S1

Patented double push rod design
Center with shock absorber
Safe and efficient

猎光D1

Patented 3 or 4 push rods are driven
simultaneously through a transmission
rod
Provide the best solution of two - sided
components

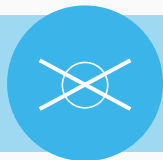


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Rotary driving tracker mounting series



Rotary driving ,
High strength



Tracking angle
 $\pm 60^\circ$



Min-height
30cm

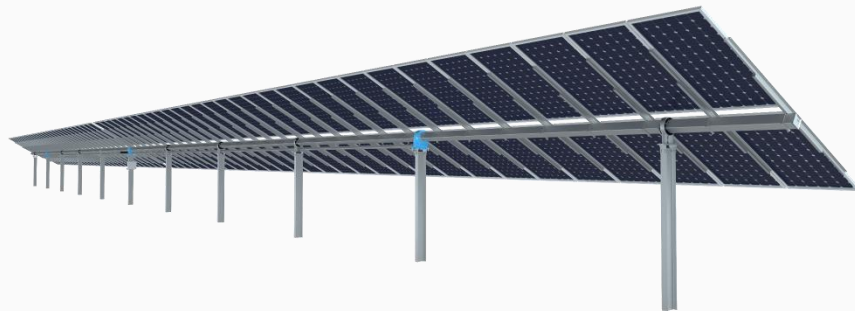


逐光S2

Patented rotary design
Both ends are equipped with shock absorbers
Protection of the main shaft

猎光D2

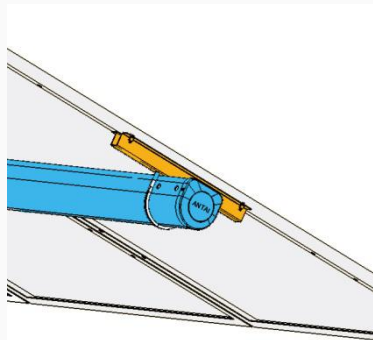
Patented three rotary driving mode
Highly adaptable to double-sided components



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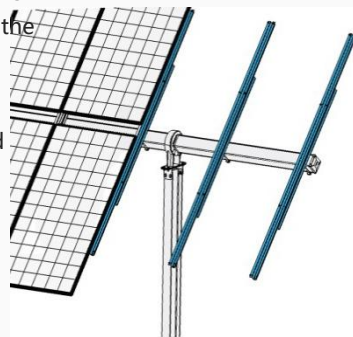
Patented products design

U-shape torque tube



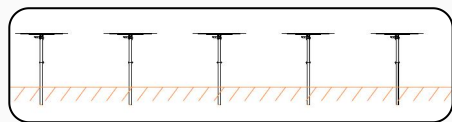
- 1 Save material**
Compared with the traditional square and circular section, the U section is more economical
- 2 Save cost**
Span can be increased to 8m, reduce the number of piles used
- 3 Protect main axis**
Lower the bary center of main axis to reduce the influence of the centrifugal force

Combination purlin

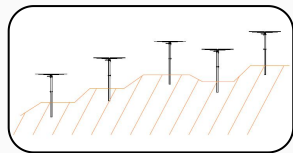


- 1 Improve working efficiency**
By increasing the distance between the double-sided components and the main axis, the output of the photovoltaic panel can be improved by 2-3%
- 2 Safe&stable**
Original combination purlin, high strength, improve the component safety factor
- 3 Easy installation**
Simple installation design, no site welding

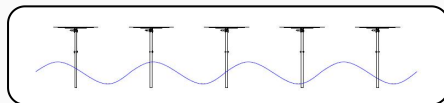
All-terrain mounting solution



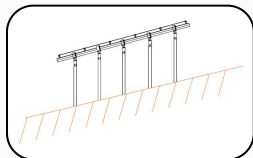
Flat ground (S1/S2/D1/D2)



Uneven ground (S1/S2/D1/D2)



Shallow water (S2/D2)



Slopes&hills (S2/D2)

Different
terrain,
different
solutions

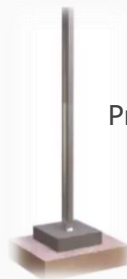
Applicable
to different
foundations



Piling-type steel pile



Bored concrete pile

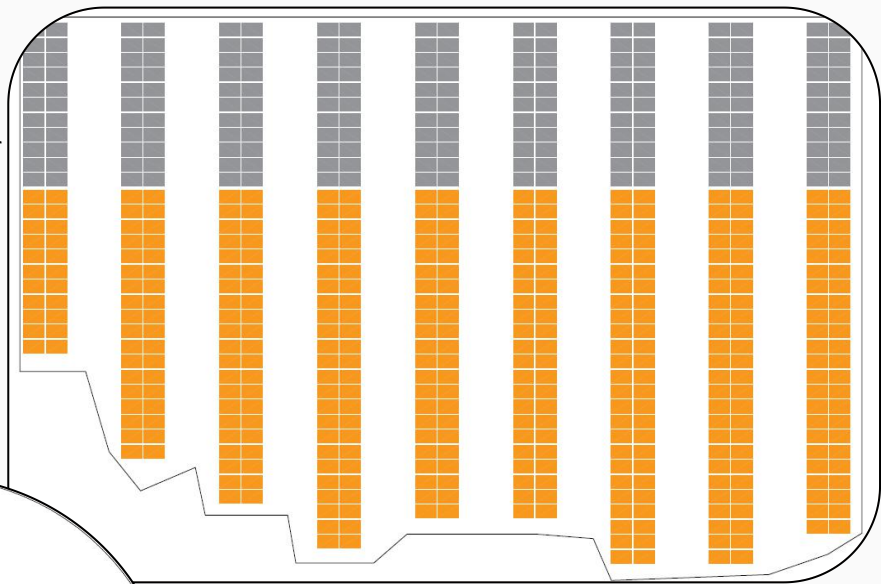
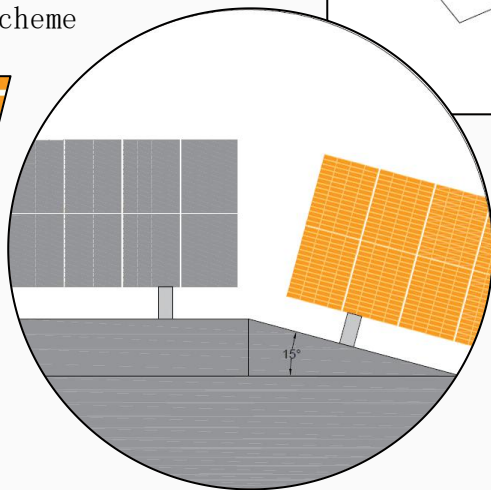
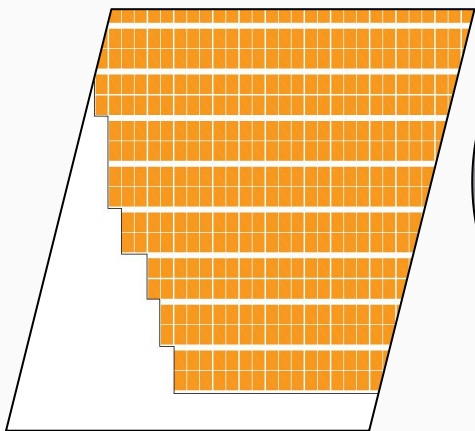


Precast concrete pipe pile

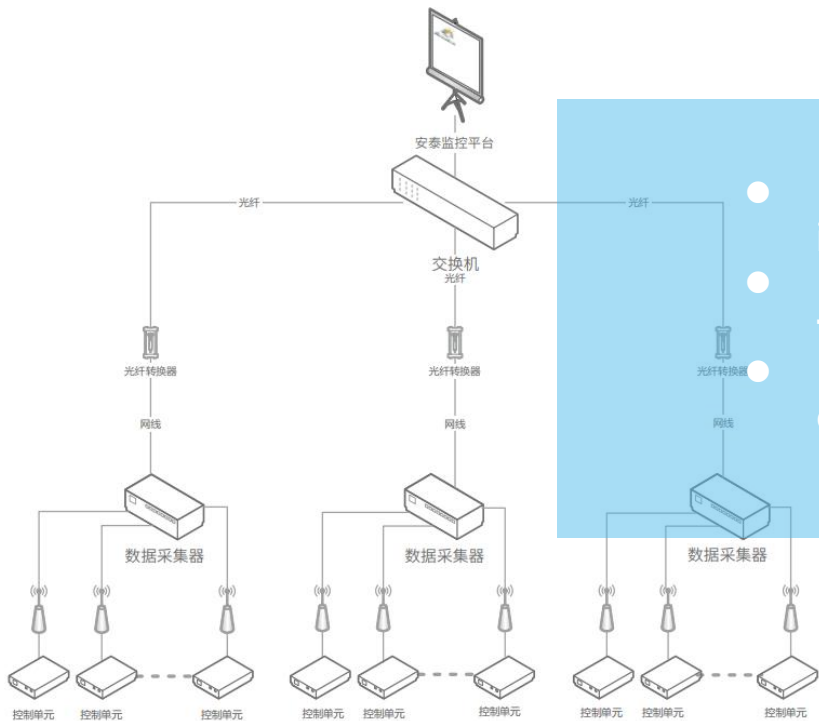
High coverage tracking mounting

Rational use of land, increase the number of components, efficient power generation

- ✓ **Increase** land utilization
- ✓ Single row spacing decreases **4M**
- ✓ Resistant to steep slopes up to **15°**
- ✓ Provide **Best** configuration scheme



Intelligent&Efficient operation and maintenance



- Professional monitoring platform, convenient installation, efficient operation and maintenance
- Installing alarm , operation and maintenance alarm function
- Fast mobile phone debugging, mobile remote operation and maintenance



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Problems in common push rods



1: Insufficient load force

The push rod itself is not rated for load and retention. The push rod broke during the operation of the equipment.



2. Water risk

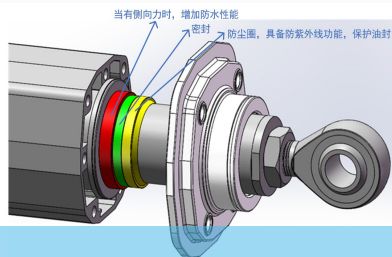
The exposed installation of the motor will lead to a much greater risk of water inflowing in the motor parts and screw parts.

3. Design defects

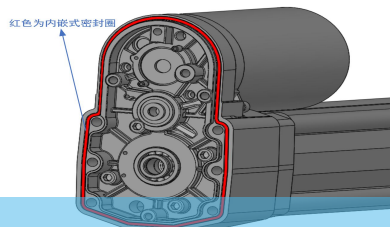
There is a certain Angle between the horizontal installation of the push rod and the running direction of the swing arm. An additional lateral load is added to the push rod, which makes it easy to break.

Optimized and upgraded product solutions

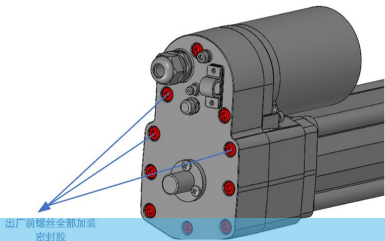
Improved screw sealing property



Use third-class seal ring (the industry is generally first or second seal mechanism), automotive grade rubber material.



Embedded automotive grade rubber sealing ring will be added in the gearbox and the motor (the industry generally adopts non-asbestos gasket, which will cause water inlet due to deformation under stress)



All bottom screws will be waterproof with sealant before delivery

Increased load rating

Antai 逐光 series is single row vertical laying, 90 components, using two push rods and a shock absorber in the middle of the scheme.

Rated load up to $11000\text{N} \times 2$ (2 push rods) = 22000N , much higher than the 10000N level of peers, and the system is much smaller. The holding torque is 160000N .

Changed push rod operating direction

The running direction of the push rod is parallel to the rotation direction of the component, without additional lateral load to avoid the break of the push rod

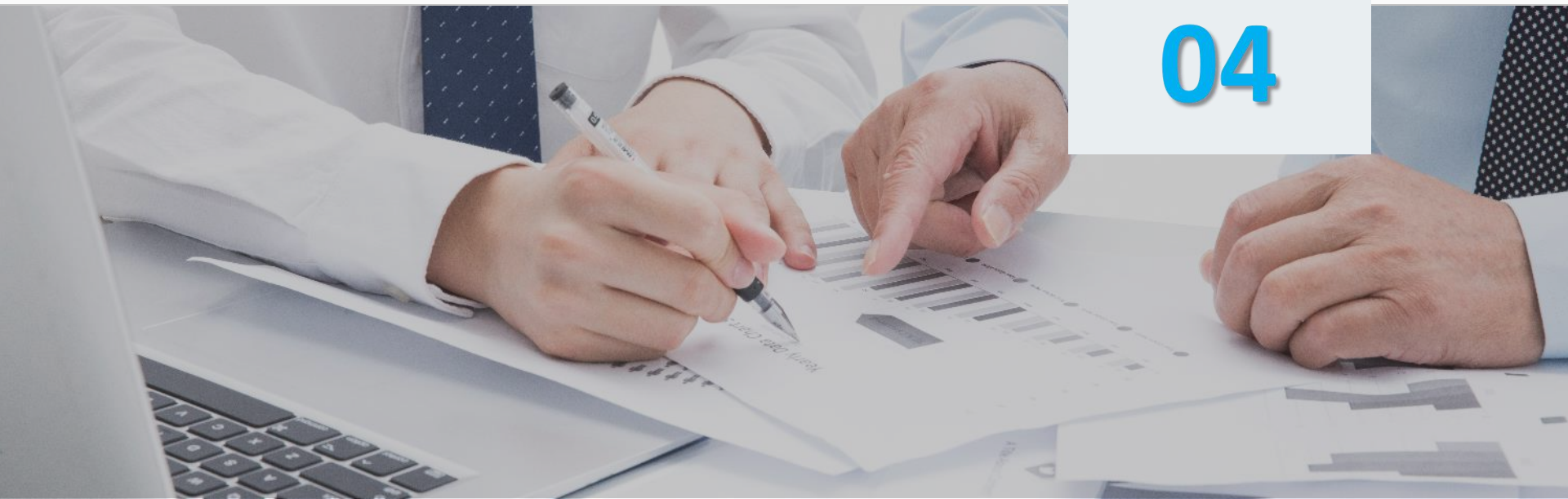
Changed push rod position

The push rod is located below the assembly. The screw and the motor parts will not be under direct rain.

Service&Support



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One-step service



Tech-team

With more than 10 years of photovoltaic experience, senior design team, specializing in electrical, mechanical, materials, engineering and other disciplines, fundamentally ensure the performance and stability of products.



Tech-scheme

Equipped with a senior design team with in-depth research on all kinds of terrain and climate, customized professional solutions to achieve optimal configuration.



Site survey

Site survey according to the demand before the project, optimize the project plan. Necessary project engineer to provide on-site support and guide installation.



Quick response

The layout will be finished in two days and the XX MW case will be delivered in two weeks.

The customer service team promises to respond to the after-sales service within 24 hours and provide solutions within 48 hours.



Own logistics team

- The professional team provides customized logistics service to ensure the products can reach the scene of the case safely and quickly
- Direct cooperation with ocean/air/land/rail carriers to reduce intermediate links and logistics costs
- With a global agent network, cargo transport tracking, emergency situation can be handled in real time
- Established overseas warehouse is part countries, stock of general supplies, can achieve quick local delivery



Project cases



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Application Cases

Solutions have been widely used and mature in a variety of complex environments



Flat terrain



Hill terrain



Snowy environment



High corrosion and high salt environment