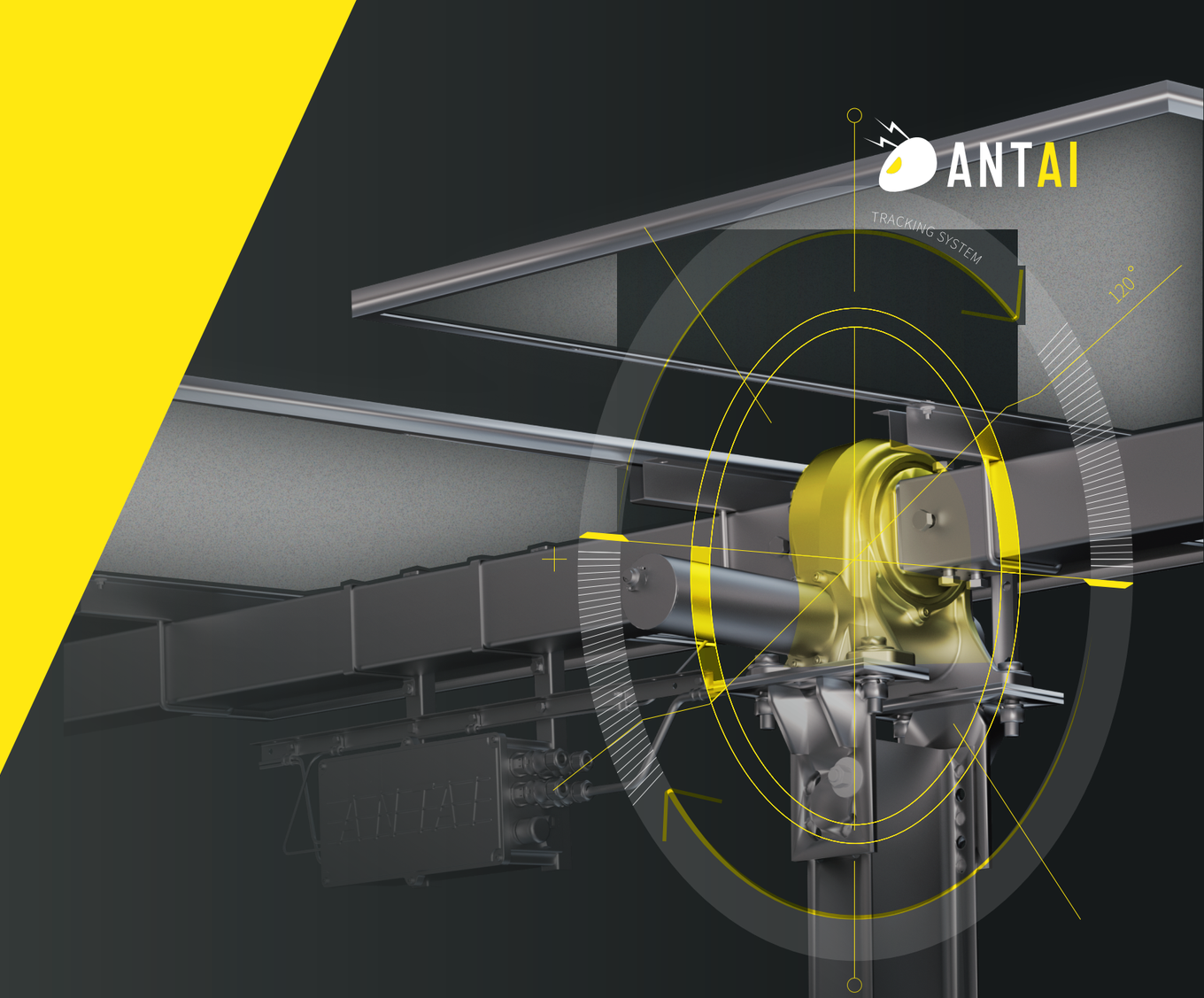
RAISE A GREEN WORLD



ANTAISOLAR
TRACKING SYSTEM

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

TRACKING SYSTEM

In our eyes
each set of solar tracker
is regarded as
an 「individual entity」

Now let us witness
how they come to life

CHAPTER OF **STRUCTURE**

FORMING A SOLID BACKBONE

Six production bases

- Manufacturing centers located in China, Southeast Asia, South Asia, the Middle East, Europe, Latin America
- Vertical integrated production with strict process control
- Annually capacity of solar tracker: 8.5GW

Comprehensive wind tunnel test

- Introduced authoritative CPP wind tunnel test data
- Completed the fourth stage of wind tunnel test,with double guarantee of strength and stability
- Offering the best solution in a cost-effective way according to different areas of wind pressure, snow pressure, geological conditions, ground roughness, corrosion, etc.

Multiple layers of quality management

- Certified to the ISO 9001 standard
- Fully automated cold roll forming and punching production line to ensure product processing performance
- Obtained CPP, Intertek, SGS, CE, UL, TUV and DNV authoritative certification and Gamcorp structural certification.

CPP gamcorp TÜVNORD

CE IEC DNV UL SGS Intertek

Two laboratory bases

- All products pass strict node testing for ensuring its stability
- Full-process monitoring of all test data, instant feedback
- Advanced life test facility for strict quality control

CHAPTER OF **CONTROL SYSTEM**

FORMING A PRECISE NEURAL NETWORK

Antai Intelligent Algorithm

- **Traditional Tracking Algorithm:** only focused on the direct light

  Antaisolar Intelligent Algorithm: optimized tracking angle for low irradiation condition and scattering lights during cloudy days, with a 0.5%-2% power generation augment

- **Traditional algorithm:** only focused on the shadow avoiding situation

  Antaisolar Intelligent Algorithm: from the viewpoint of the overall layout plan, the algorithm iterated the optimized tracking angle for each controller, with a 0.5%-3% power generation increased

Independent R&D Control Kernel

- An independently researched and developed, highly integrated and easy-installed Control Unit
- Significantly reduced the power consumption and installation assembly error

Cooperative R&D Essential Module

- 1000VDC/1500VDC PV string power SMPS module
- Power Supply: 300-1500VDC String Powered, 90-264VAC Powered, Backup lithium battery
- -30°C low-temperature lithium battery module
- High-accuracy tilt sensor

Whole UL Certificated Accessories Assembly

- All accessories had been certificated by UL

Effcient and Reliable Communication System

- Zigbee wireless system
- Mesh Networking
- High transmission rate
- Stable communication quality

Cleaning Robot Integrated System

- Close control loop with cleaning robot that formed a perfect tracker-robot match
- Daily cleaning routine to increase the power generation

CHAPTER OF **AI SYSTEM**

FORMING A INTELLIGENT BRAIN

Big Data Supported Machine Learning Potential Risks Forewarning

- Large database formed from daily tracking load analysis
- Operation analysis from big data gathered from daily tracking
- Forecast the component’s service life to decide the maintenance and components replacement for the whole solar farm’s reliability
- Reduce the potential power losses by the O&M operation

Smart self-inspection and Commissioning

- Installation self-inspection by comparing the operation data of each component with the standard operation data after installation, it can give forewarning for installation errors in time and improve installation efficiency.
- Control Unit (CU) fast configuration via smartphone QR code scanning
- Up to 200 CU centralized control by Data Logger via smartphone

AI Weather Condition Waring Inclement Weather Protection Mode

- Introducing high accuracy AI forecasting system
- System equipped with hyetometrograph, anemometer rain and snow sensor, etc. to record the real time weather conditions. And the system combines the historical data, meteorological satellite images, and field weather conditions to generate a 30 minutes’ accurate forecasting

AI Light Source Tracking Maximum Power Generation Optimization

- Using the historical big data and the weather, terrain, scattered light conditions, together with the AI deep machine learning method to generate the optimized tracking path, and maximize the power generation

CHAPTER OF **SERVICE**

FORMING A DEDICATED HEART

Multiple quality inspection

- Simulated laboratory for testing the system rationality
- Structural inspection ensures excellent quality of solar tracker
- Whole system condition testing platform for electric

Quick response with customer service team

- 7*24 on call
- Multilingual, 1 to 1 exclusive customer service
- Designing proposal offered within 24 hours

Self-owned logistics team

- Customized logistics services provided for fast access to case site
- Directly cooperate with ocean, air, land, rail carriers to reduce intermediate links and reduce logistics costs
- Global agency network, all-the-way tracking of cargo transportation
- Overseas warehouses established with stocks of general-purpose supplies

Experienced engineering & site support

- Conduct site survey before the project to optimize the project plan
- On-site project managers for controlling the entire process from delivery, schedule coordination to product inspection for Utility projects
- On site technical installation guidance if necessary

Global network & localization service

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

CHAPTER OF **R&D**

FORMING THE POWERFUL MATRIX

Global Four Major R&D Bases

- Owns four major R&D bases for solar tracker, fixed structure and high performance material
- Highly educated R&D team composed of 120 persons
- Research fields spanning electrical, mechanical, materials, engineering, Internet of Things, AI, etc.
- As the industry's top technical innovation talents, the core members have been engaged in the R&D of solar tracker for more than 19 years, obtained a number of national patents and participated n a large number of domestic and foreign projects

Technical Advantages

Top technical innovation talents

19 YAERS

Years of designing experience

CPP

CPP wind load automatic data

Case design experience for Europe, Americas,Middle East,Asia and other markets

Good master of design and architectural standards for global regions

TRACKING SYSTEM

TAI **Simple**

Slew-Drive Single-Axis
Independent Tracking System—1P

Patent single-slew-drive design

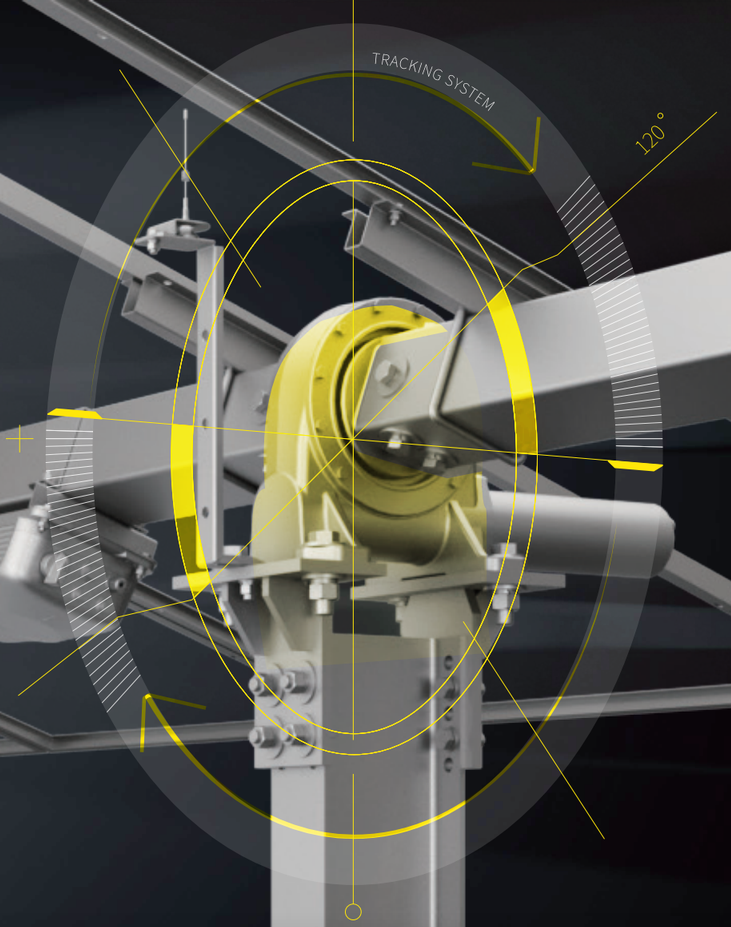
Dampers Protect

Fewer column for fast installation

Wider range of tracking

Match for bifacial modules

Match for auto-cleaning robots



- 1P, with the length up to 97m
- Up to 55 m/s wind speed per ASCE 7-10
- Slope Tolerances: Unlimited E-W direction N-S Up to 20% (11°)
- Tracker Rotation Range: Up to ±60°

TRACKING SYSTEM

TAI **Universal**

Multiple Slew-Drive Single-Axis
Independent Tracking System—2P

Multi-slew drive though mechanical synchronously

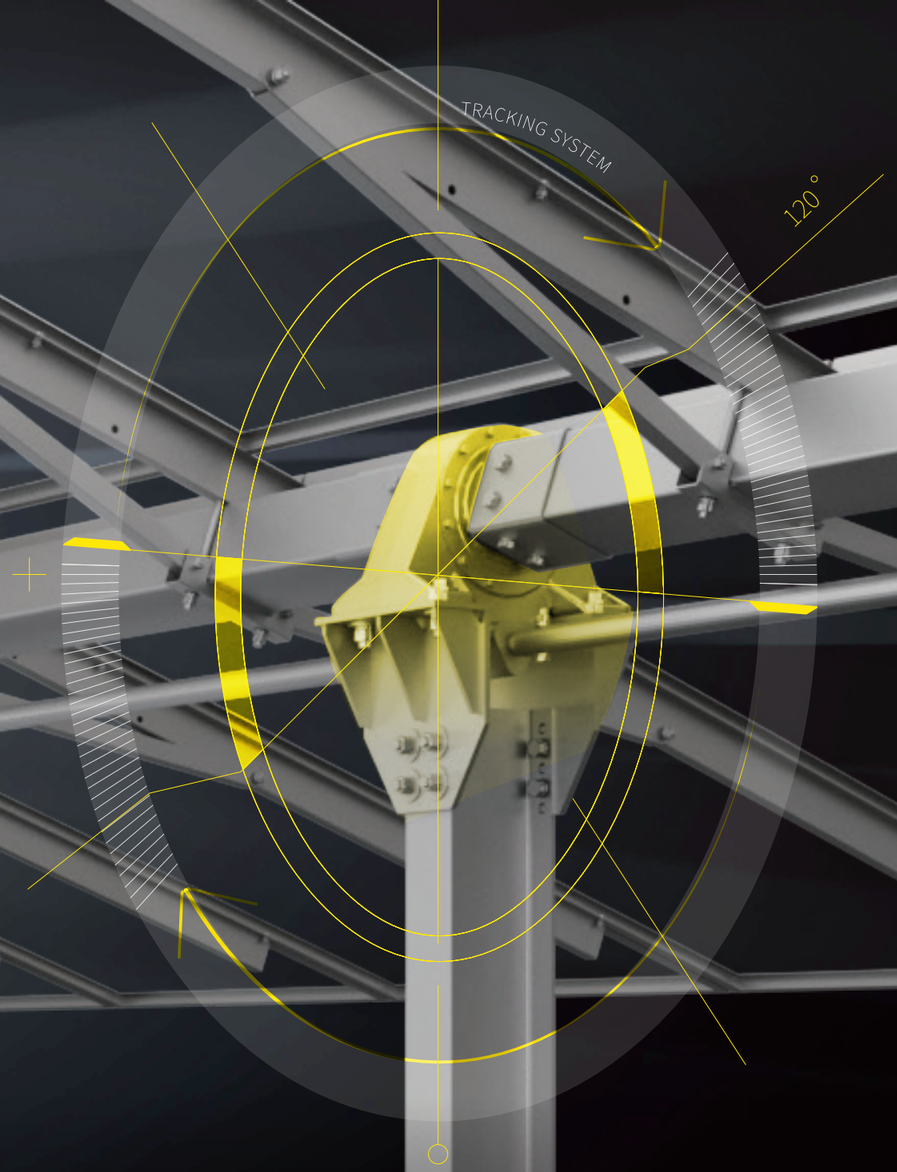
Higher system nature frequency, Wind resistance increase by nearly 3 times

Great slope terrain adaptability

Wider range of tracking

Match for bifacial modules

Match for auto-cleaning robots



- 2P, with the length up to 70m
- Up to 55 m/s wind speed per ASCE 7-10
- Slope Tolerances: Unlimited E-W direction N-S Up to 20% (11°)
- Tracker Rotation Range: Up to ±60°

TRACKING SYSTEM

TAI Space

Multiple Slew-Drive Single-Axis Independent Tracking System—1P

Maximum length of 240m with mainstream large-format module

Synchronous Multi-point Slew Drive

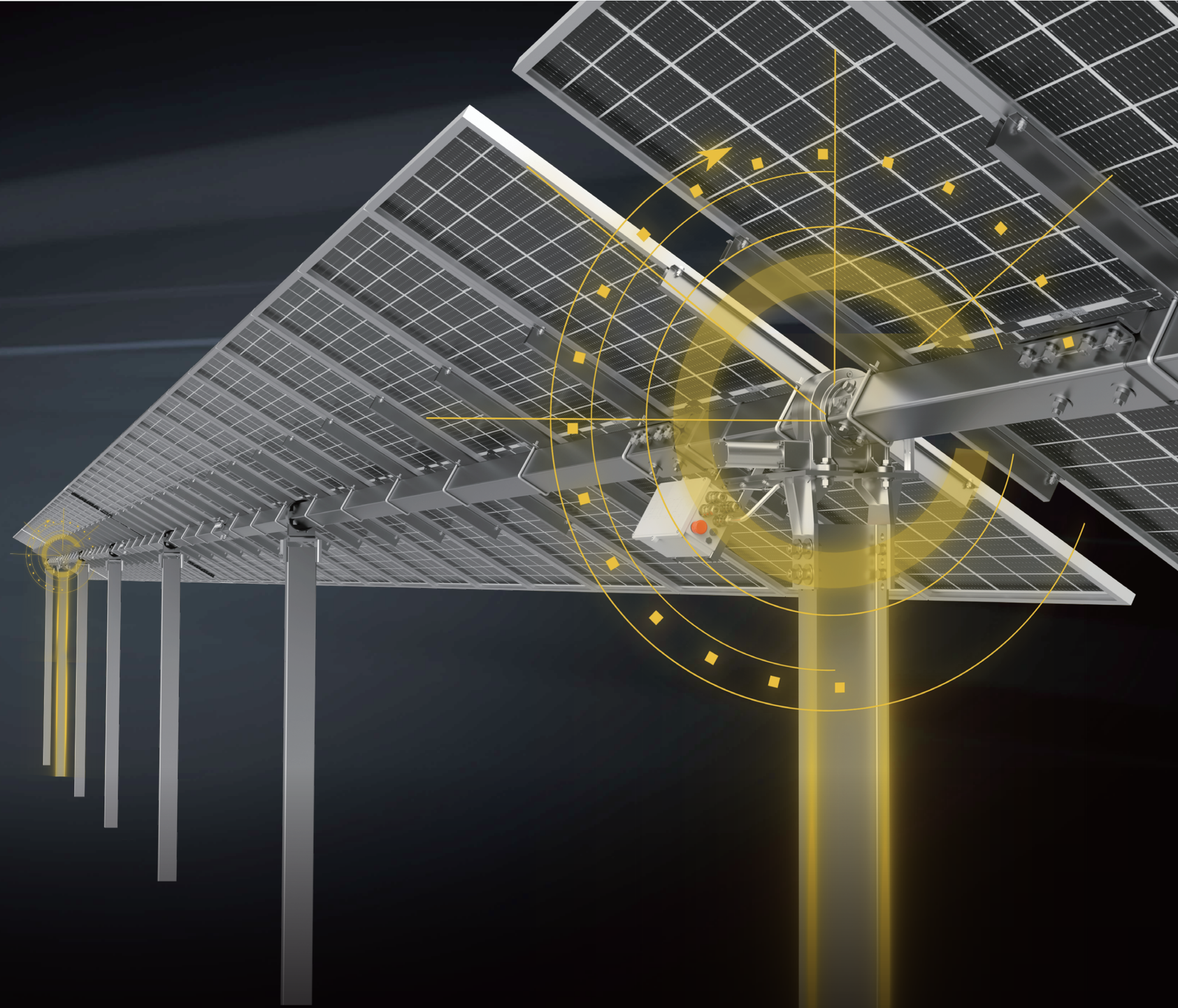
BLDC system with more than 30 years' maintenance-free serviced life

Wider range of tracking

Match for bifacial modules

Match for auto-cleaning robots

- 1P, with the length up to 240m
- Up to 55 m/s wind speed per ASCE 7-10
- Slope Tolerances: Unlimited E-W direction N-S Up to 20% (11°)
- Tracker Rotation Range: Up to ±60°



TRACKING
SYSTEM

RAISE A GREEN WORLD

— Antaisolar

MEMO