

# TRACKING SYSTEM SOLUTION

## AKCOME TRACKING MOUNTING SYSTEM SOLUTION

PV MOUNTING SYSTEM  
Smart System · New Value



# AKCOME SMART TRACKING SYSTEM

Born To Sun,Stand Against Light

Part 01  
Product  
Parameter

Part 02  
Product  
Advantages

Part 03  
Product  
Displays

Part 01

# SMART TRACKING SYSTEM

## Product Parameter

1P

Single-row Independent  
Tracking System

2P

Independent Single-Row  
Multipoint Tracking System



# SMART Tracking System

## SMART-R 1P Single-row Independent Tracking System



### CHARACTERISTICS



Large Angle Protection  
High Stability



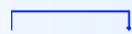
Single Point Drive  
Lower Installation Cost



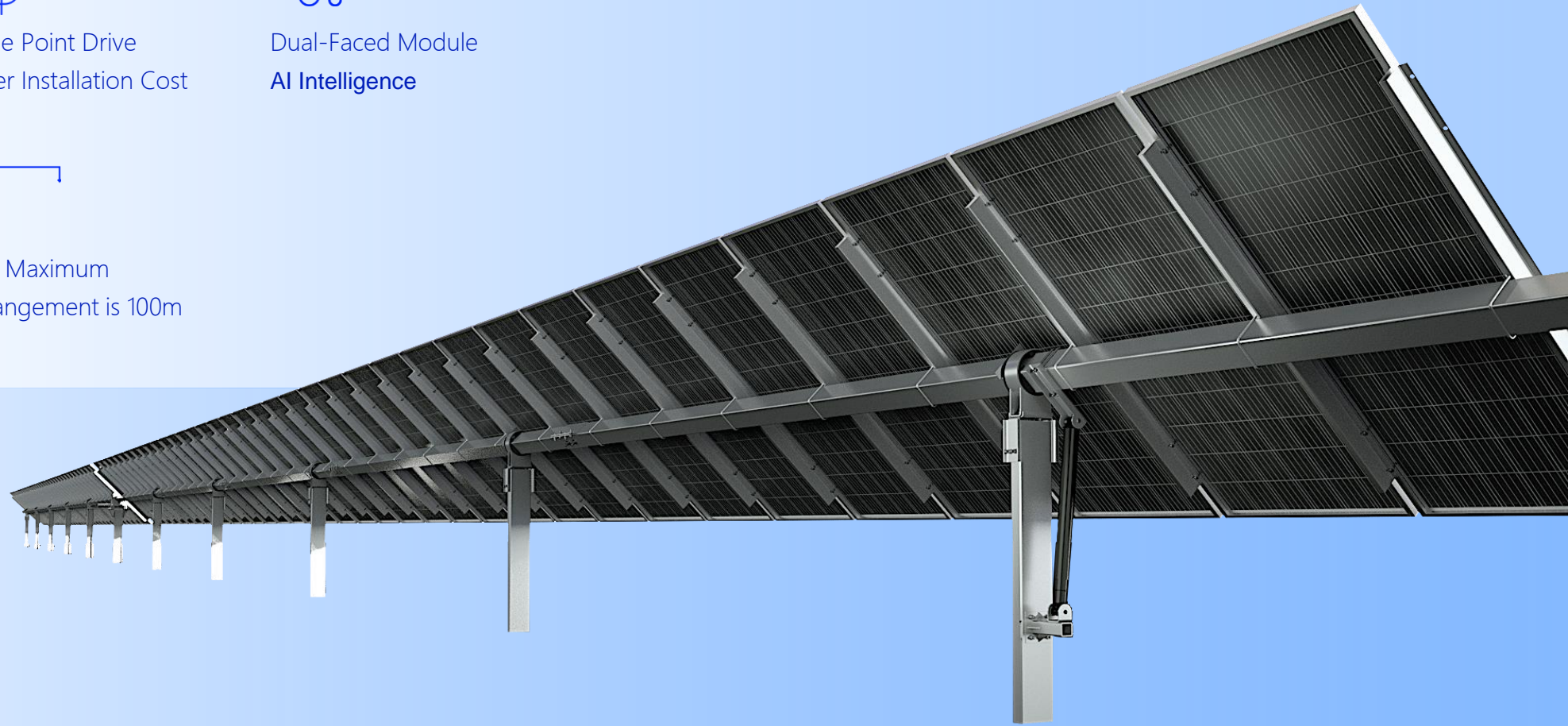
Dual-Faced Module  
AI Intelligence



N-S 20% Slope  
Adaptability



The Maximum  
Arrangement is 100m



# SMART Tracking System

## SMART-R 1P Single-row Independent Tracker



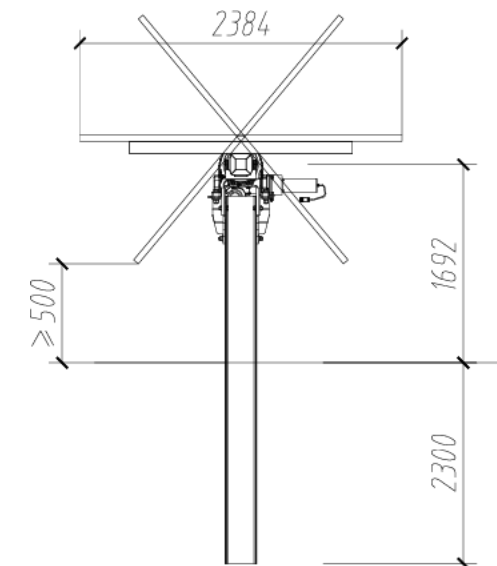
### PARAMETERS

Type	1P-Single-row Independent Tracker
Tracking Range	$\pm 45^\circ/\pm 60^\circ$
Drive system	Driven by rotary reducer; DC24V DC motor
Tracker Capacity	48.6KW (540wp) (1X90)
System voltage	1000/1500V
GCR	$\geq 25\%$
Material	HDG Steel/Magnesium
Power supply	Self-powered high voltage series (Lithium battery reserve)
Foundation type	Punching Pile/Filling Pile/PHC
Slope adaptation	N-S 20%; E-W unlimited
Working wind speed	65Km/h (18m/s) (3S-gust)
Max wind resistance	170Km/h (47m/s) (3S-gust)
Module Type	Compatible to all kinds module
Operation temperature	$-30^\circ\text{C}\sim 60^\circ\text{C}$

### CONTROL SYSTEM PARAMETERS

Control mode	AI algorithm+ Real-time Big data closed-loop control
Accuracy	$\leq \pm 2^\circ$
Inverse Tracking	Possess
Communication Mode	RS485,LORA and Zigbee
System Function	Night return mode/Rain Washing/Snow removal

### Dimensional Diagram



# SMART Tracking System

## SMART-R 2P Independent Single-Row Multipoint Tracking System



### CHARACTERISTICS



Multipoint Parallel  
Drive Higher Critical  
Wind Speed



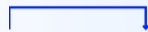
Perfect Matching  
182/210 Module



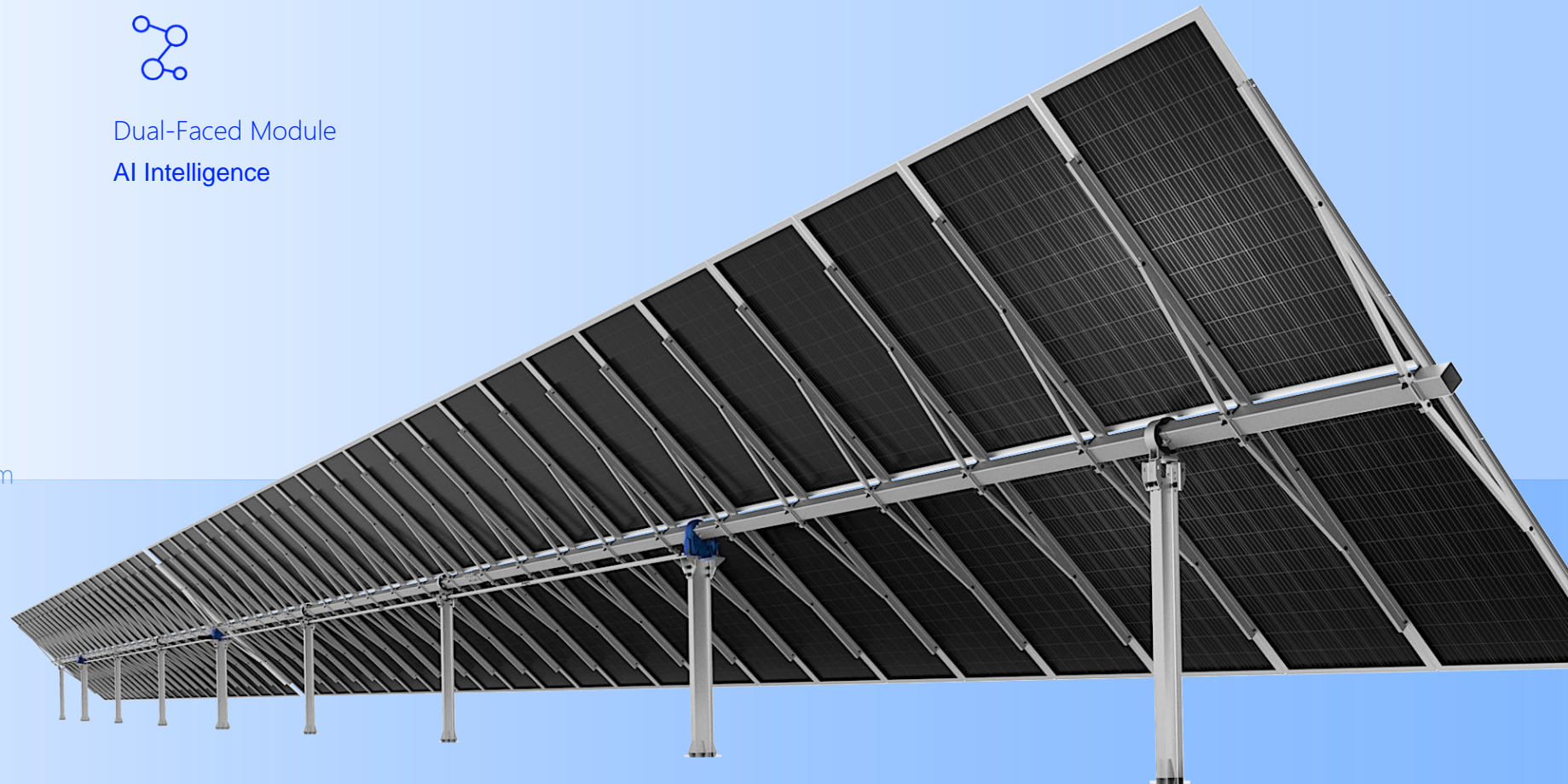
Dual-Faced Module  
**AI Intelligence**



N-S 20% Slope  
Adaptability



The Maximum  
Arrangement is 68m



# SMART Tracking System

## SMART-R 2P Single-row Independent Multipoint Tracker



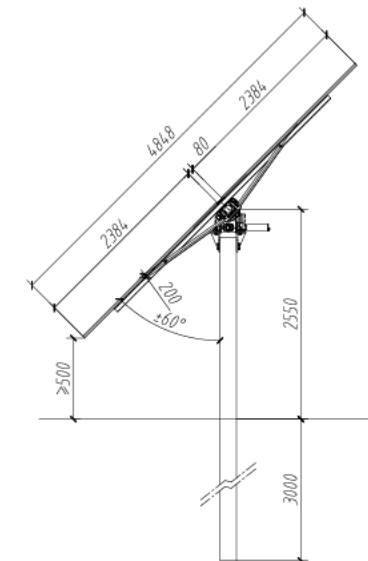
### PARAMETERS

Type	2P-Single-row Independent Multipoint Tracker
Tracking Range	$\pm 45^\circ/\pm 60^\circ$
Drive system	Driven by rotary reducer and multipoint Parallel; DC24V DC motor
Tracker Capacity	64.8KW (540wp) (2X60)
System voltage	1000/1500V
GCR	$\geq 25\%$
Material	HDG Steel/Magnesium
Power supply	Self-powered high voltage series
Foundation type	Punching Pile/Filling Pile/PHC
Slope adaptation	N-S 20%; E-W unlimited
Working wind speed	65Km/h (18m/s) (3S-gust)
Max wind resistance	170Km/h (47m/s) (3S-gust)
Module Type	Compatible to all kinds module
Operation temperature	$-30^\circ\text{C}\sim 60^\circ\text{C}$

### CONTROL SYSTEM PARAMETERS

Control mode	AI algorithm + Inclination sensor closed-loop control
Accuracy	$\leq \pm 2^\circ$
Inverse Tracking	Possess
Communication Mode	RS485, LORA and Zigbee
System Function	Night return mode/Rain Washing/Snow removal

### Dimensional Diagram





Part 02

# SMART TRACKING SYSTEM

---

Product Advantages



# SMART Tracking System

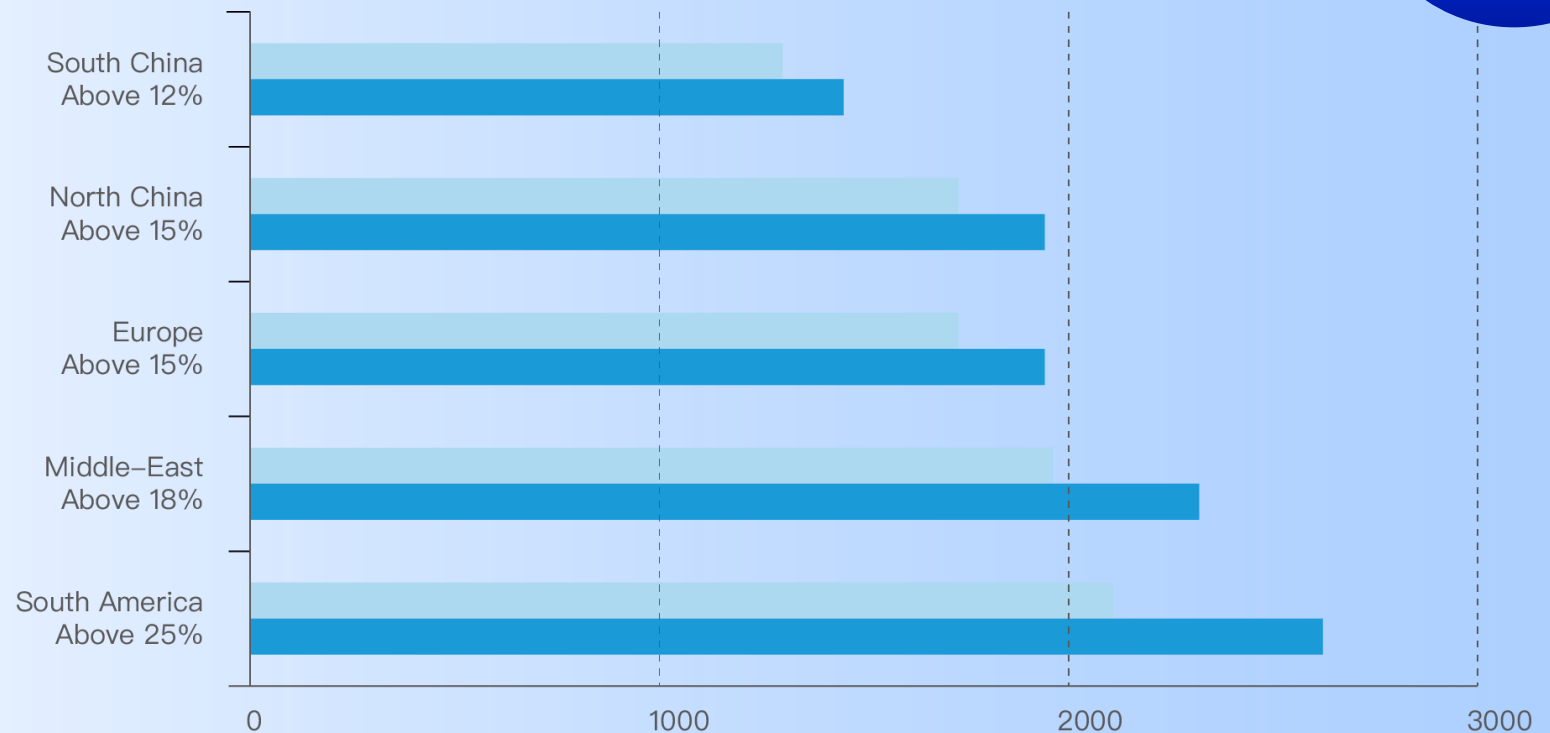
## High Power Generation Gain



### Flat Single-post Tracking System VS Fixed Mounting System

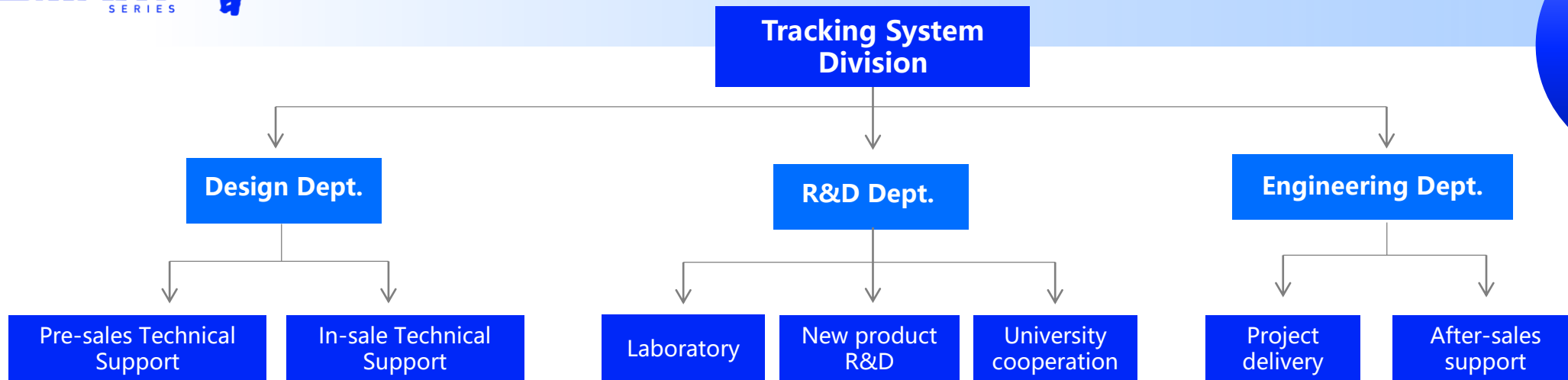
### Power Generation (MWh/MWp)

- Fixed
- Tracker



# SMART Tracking System

## Independent Research and Development Team



With the technical team of new product research and development, pre-sale technical support to late on-site project delivery and after-sales technical support, from front to back seamless

**One-Stop Service.**

The professional background of the technical team covers structural, mechanical, electrical, software engineering, wind engineering and other related professional to provide the most comprehensive and

**Professional Technical Services.**

# SMART Tracking System

## Rigorous Process of Research and Development



# SMART Tracking System

## Comprehensive And Authoritative Test And Certification



### Comprehensive And Authoritative Test And Certification

- CPP Wind Tunnel Test
  - CFD Mock Test
  - Key Node Of Overload Test
  - Full Life Cycle Accelerated Push-pull Cycle Test
  - A variety of static load, dynamic load, salt spray, high and low temperature, UV resistance and other technical tests
- 





# SMART Tracking System

## Comprehensive And Authoritative Test And Certification



### CPP Wind Tunnel Test

A comprehensive and complete wind tunnel test can provide researchers with a large amount of experimental data and form important basic parameters for wind resistance design of photovoltaic bracket structures.

Akcome Metals, together with CPP, an international authoritative wind engineering laboratory carried out comprehensive wind tunnel tests on the SMART series tracking system, which fully verified the high reliability and stability of the series tracking system under various extreme wind conditions.



CPP Wind Tunnel Test

# SMART Tracking System

## Comprehensive And Authoritative Test And Certification



### Key Node Of Overload Test

In order to ensure the high reliability and stability of products in application scenarios, we make overload test for all the key nodes of tracking system, and do life test for polymer bearing and rotary support.

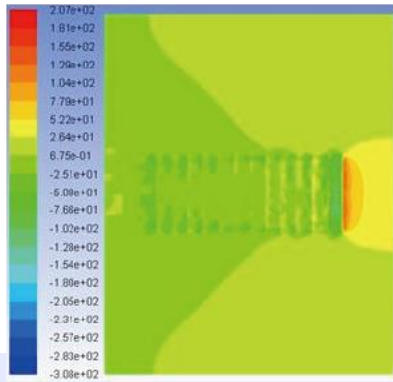


# SMART Tracking System

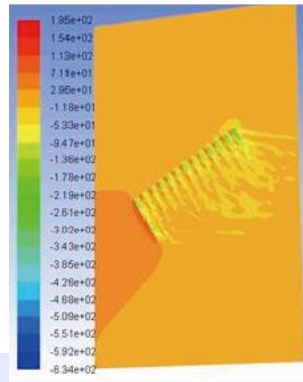
## Comprehensive And Authoritative Test And Certification



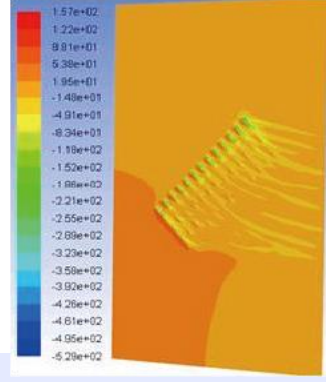
### CFD Mock Test



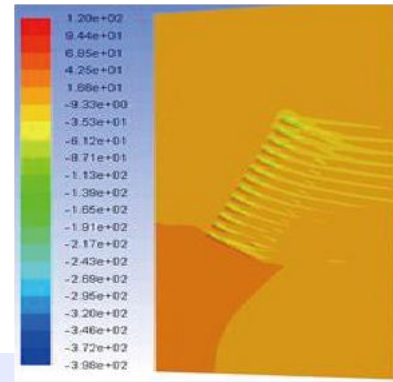
(a) 0° Wind Angle



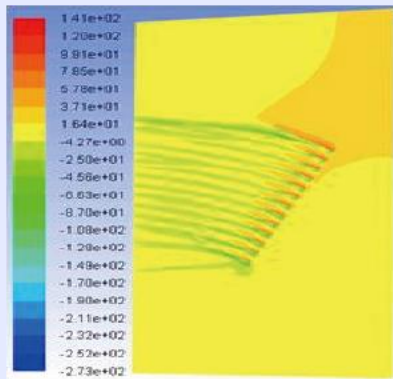
(b) 30° Wind Angle



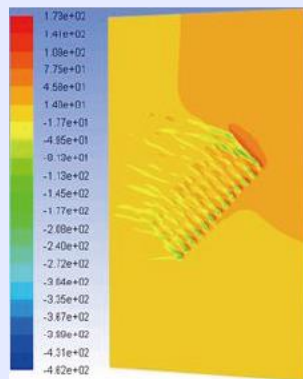
(c) 45° Wind Angle



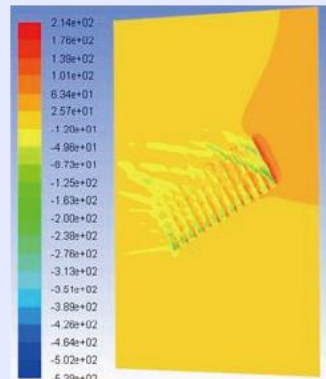
(d) 60° Wind Angle



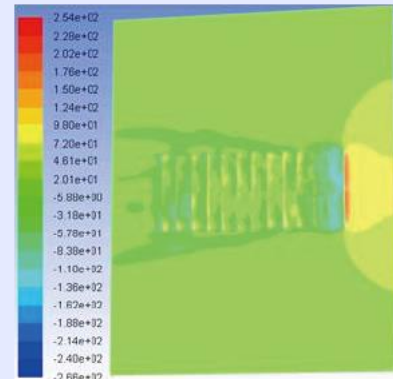
(e) 120° Wind Angle



(f) 135° Wind Angle



(g) 150° Wind Angle



(h) 180° Wind Angle





# SMART Tracking System Series

Comprehensive And Authoritative Test And Certification



IEC Standards Committee  
Tracking System Standard



TUV Certificate



UL Certificate



# SMART Tracking System Series

## Intelligent Q&M



The intelligent working mode is hierarchical and visual, the string-level monitoring is directly linked to each TCU machine motor.



Through the intelligent online monitoring and operation and maintenance platform, it helps customers achieve 24-hour remote real-time monitoring, thus realizing intelligent operation and maintenance of the power generation terminal, and reducing operation and maintenance costs. It can also carry out preventive alarm and remote control of an operational tracking system, so as to increase efficiency in the operation and output of the power station.

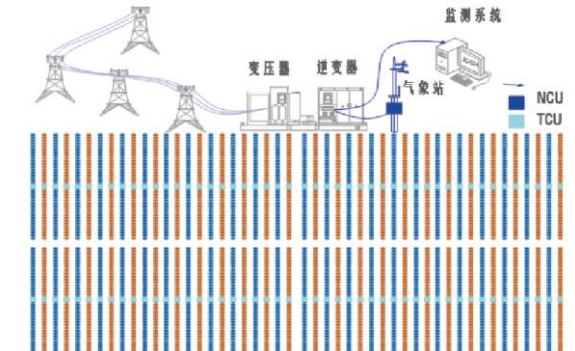


It can monitor the working status of the mounting system in real time and quickly identify malfunction;

Real-time visual monitoring based on system parameters such as physical location, logic topology, current and voltage of the device;

It uses tabular curve charts and histograms to display the working status and analyzes meteorological information;

The status parameters of individual device can be precisely monitored down to the minimum.





### Local Service

- More than 80 Countries and Areas Local Service Covered
- 1 hour Reaction, Fastest 1 day Arrival



### Customized Service

- Customized Product for Project Site and Customer Requirement



### Full Cycle Service

- System Design
- Structural Optimization
- Professional Installation
- 25 Years Life Service
- Full Cycle Service

Part 03

# SMART TRACKING SYSTEM

---

## Product Displays

# AKCOME Tracking System Project Cases



Danyang China, 50MW, Tracking Mounting System



# AKCOME Tracking System Project Cases



Ningxia China, 178MW, Tracking Mounting System



Arab Emirates, 20MW, Tracking Mounting System



Portugal, 80MW, Tracking Mounting System



Shandong China, 50MW, Tracking Mounting System



# THANKS!



AKCOME METALS TECHNOLOGY (SUZHOU) CO., LTD.

No.108, West Jintang Rd,  
Zhangjiagang Economic Development Zone,  
Zhangjiagang, Jiangsu P.R. China

[www.akcomemetals.com](http://www.akcomemetals.com)

**PV MOUNTING SYSTEM**  
Smart System·New Value

