

# Vanguard - 2P

## Single-Row/Multi-motor System



### Compatible with Latest Modules

Compatible with N/P-Type modules up to 700W+.



### Multi-motor System

Better synchronization, better installation and O&M efficiency of driving system.



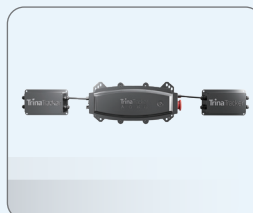
### SuperTrack Smart Tracking Algorithm

Compared with the conventional tracking algorithm, increases energy generation by as much as 8 percent.



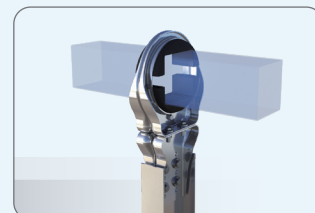
### Fewer Piles Per MW

Less pile design for lower BOS in difficult scenarios of piling.



### Multi-function modes improve reliability

- Multistage wind speed protection mode
- Load current classification determination
- Heavy snow protection mode



### Optimized bearing design

- Global patented spherical bearings allow up to 30% angle adjustability.
- Alleviate the damage caused by uneven foundation settlement during operation.
- Release the extra stress caused by the deformation of the tracker system, reduce the load and failure rate of each component.

### Low motor failure rate

- Overcurrent protection reduces excessive motor consumption
- Lower single motor power consumption



Warranty period of 10 years for the structural set of elements which comprises the tracker and have been supplied by Trina Solar.

Warranty period of 5 years for commercial components. (including but not limited to drive system, electrical system, bearing set, fasteners, etc.)

### GENERAL FEATURES

Solar tracker type	Single row, single axis
Tracking range	±55°(110°)
Driver	Multi-motor linear actuator
Configuration	Two module in portrait (2P) Up to 4 strings per tracker (1500V string)
Solar module supported	Framed
Foundation options	Direct ramming / Pre-drilling + ramming / Micropile / PHC piles
Pile section	W, compatible with IPE, IPEA
Modules attachment	Bolts, Rivets
Piles per MW(690Wp module)	~112 piles/MW <sup>(1)</sup> (90 modules per row)
Terrain adaptability	15% W-E, 15 % N-S <sup>(2)</sup>
Wind and snow loads tolerance	Tailored-to-site requirement
GCR	≥25%
Design wind speed	55 m/s (This value depends on project conditions)

### STRUCTURE

Material	High Yield Strength Steel
Coating	HDG, Pre-galvanized & ZM <sup>(3)</sup>

### CONTROLLER

Controller	Electronic board with microprocessor
Ingress protection marking	IP66
Tracking method	SuperTrack Smart Tracking Algorithm <sup>(4)</sup> / Conventional Tracking Algorithm
Advanced wind control	Customizable
Anemometer	Cup / Ultrasonic
Night-time stow	Configurable
Communication with the tracker	Wireless option: LoRa / Zigbee
Operating conditions	Altitude < 4000m <sup>(5)</sup> Temperature: -30~60°C <sup>(5)</sup>
Sensors	Digital inclinometer
Power consumption	0.2kW·h / Day
Power supplier	String-powered / Self-powered / AC-powered

\*1 Depending on layout

\*2 N-S: max 15%, for slopes higher than 10% consult with TrinaTracker  
E-W: slope higher than 10% consult with TrinaTracker

\*3 Standard configuration. Other coating under request

\*4 Includes smart tracking algorithm and smart backtracking algorithm

\*5 Standard configuration. Different conditions under request, please consult TrinaTracker

