

# 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.



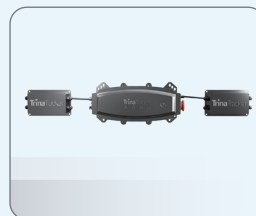
### SuperTrack Smart Tracking Algorithm

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.

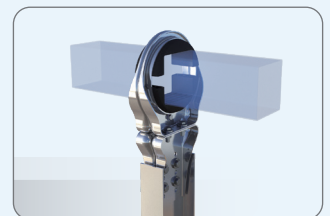


### Multi-function modes improve reliability

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

### Low motor failure rate

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



### 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.



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	60° (120°)
Driver	Multi-slewing drive
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	~125 piles/MW (4 string module)
Terrain adaptability	15% W-E, 15 % N-S <sup>(1)</sup>
Wind and snow loads tolerance	Tailored-to-site requirement
GCR	≥25%
Design wind speed	45 m / s (This value depends on project conditions)

### STRUCTURE

Material	High Yield Strength Steel
Coating	HDG, Pre-galvanized & ZM <sup>(2)</sup>

### CONTROLLER

Controller	Electronic board with microprocessor
Ingress protection marking	IP65
Tracking method	SuperTrack Smart Tracking Algorithm <sup>(3)</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>(4)</sup> Temperature: 30~60°C <sup>(4)</sup>
Sensors	Digital inclinometer
Power consumption	0.2kW·h/Day
Power supplier	String-powered / Self-powered / AC-powered

\*1 N-S: max 15%, for slopes higher than 10% consult with TrinaTracker..

E-W: for slopes higher than 10%, consult with TrinaTracker.

\*2 Standard configuration. Other coating by request.

\*3 Includes smart tracking algorithm and smart backtracking algorithm.

\*4 Standard configuration. Different conditions under request, please consult TrinaTracker.

