

TrinaTracker Vanguard™ -1P

Single-Row



Compatible with Larger Modules

Compatible with modules up to **670W+**.



Higher Stability

Bi-damper system improves the tracking system's resistance to wind by **20%**.



Higher Reliability

Optimized torque tube improves the torsional resistance by **29.6%** and the bending resistance by **12.4%**.



Quick Installation Design

Trina Clamp is a proprietary product that is quick and easy to use with the 1P configuration, reducing the installation time and costs.



SuperTrack Smart Tracking Control System

Compared with conventional tracking control system, increase energy generation by up to **3-8%**.

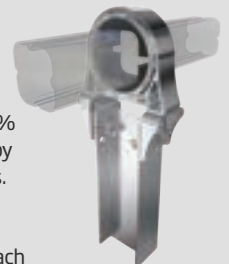
BILATERAL DAMPER SYSTEM

The bilateral damper system can shorten the tracker oscillation time, thus preventing oscillation. Dynamic responses are reduced and the critical wind speed increased



SPHERICAL BEARING

Global patented spherical bearings with up to 30% angle adjustability, alleviate the damage caused by uneven foundation settlement during operations. The spherical bearings dissipate the extra stress caused by the deformation of the tracker system, thus reduce the load and failure rate of each component.





TECHNICAL SPECIFICATIONS

GENERAL FEATURES

| | |
|-------------------------------|--|
| Solar tracker type | Single row Single-Axis |
| Tracking range | ±60°(120°) |
| Driver | Slewing drive |
| Configuration | One modules in portrait (1P) up to 95 modules per tracker(1000/1500V string) |
| Solar module supported | Framed |
| Foundation options | Direct ramming / Pre-drilling+ramming/Micropile / PHC piles |
| Pile section | W,compatible with IPE, IPEA, HEA and HEB |
| Modules attachment | Bolts, Rivets and Clamps |
| Piles per MW(670Wp module) | ~242 piles/MW ⁽¹⁾ (68 modules per row) |
| Terrain adaptability | 15%W-E, 15% N-S ⁽²⁾ |
| Wind and snow loads tolerance | Tailored to site requiriment |
| GCR | ≥25% |
| Design wind speed | 55 m/s (This value depends on project conditions) |

STRUCTURE

| | |
|----------|--|
| Material | High Yield Strength Steel |
| Coating | HDG, Pregalvanizde & ZM ⁽³⁾ |

CONTROLLER

| | |
|--------------------------------|--|
| Controller | Electronic board with microprocessor |
| Ingress protection marking | IP65 |
| Tracking method | SuperTrack Smart Tracking Control System ⁽⁴⁾ / Conventional Tracking Control System |
| Advanced wind control | Customizable |
| Anemometer | Cup / Ultrasonic |
| Night-time stow | Configurable |
| Communication with the tracker | Wireless option: LoRa/Zigbee |
| Operating conditions | Altitude < 4000 m ⁽⁵⁾ Temperature: -30~60°C ⁽⁵⁾ |
| Sensors | Digital inclinometer |
| Power(motor drive) | DC motor: 0.15 kW |
| Power supply | Grid connection / String powered / Self-powered with battery |

WARRANTY

Warranty period of 10 years for the structural set of elements which build the tracker up 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.)

*1 Depending on layout

*2 For scenarios beyond the scope of use, please consult TrinaTracker

*3 Standard configuration, Other coating under request, please consult TrinaTracker

*4 Includes smart tracking algorithm and smart backtracking algorithm

*5 Standard configuration, Different conditions under reques, please consult TrinaTracker

CAUTION:READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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