



ONE-ROW SINGLE AXIS TRACKER SP160

The main characteristics that define SP160 tracker are:



1. Horizontal single-axis, single-row with independent slew drive permits full access between rows and enables flexible, high density site layouts.



4 .Several adjustment points to accommodate a broad range of rammed piles and installation misalignment.



2 .Reliable and proven tracking systems with many years and MW of field data.



5 .The strength of the 3-phase AC motor driven by a Variable Frequency Drive extends the system life: low speed for tracking and fast speed for protection response.



3 .Maintenance-free and patent polymer spherical bearing . Slew drive and polymer have been age tested under extreme environmental conditions to validate their high reliability.



6. Electronic board with microprocessor that integrates an advanced wind control software that considering prestow positions for tracker's safety.

TrinaPro is a smart PV solution which is designed for utility scale ground mount, floating solar projects and commercial applications. TrinaPro can significantly reduce the system LCOE through premium components combination, optimized system integration and smart O&M interconnection.

TECHNICAL SPECIFICATIONS

GENERAL CHARACTERISTICS

Solar tracker	Horizontal, single axis, one-row
Tracking range	120 ($\pm 60^\circ$)
Modules surface per tracker	Up to 180 m ²
Foundation options	Direct ramming/ Pre-drilling/ Concrete micro-piling/ Screw piles
Terrain adaptation	Up to 20% grade N-S
Ground Coverage Ratio (GCR)	Configurable: standard range (28 - 50%)
Structutre	HDG high strength steel S275, S355 and Magenlis®
Hardware	8.8 grade / ZnNi + seal
Drive unit	Slew drive
Allowable Wind and Snow Loads	Tailored to site requirements
Standards & regulation	Structural calculation according to Eurocodigo and USA standards
Modules configuration	1000V version 1500V version
Compatible solar panels	Frame, DUAL glass, thin film...
Availability	>99,5%

ELECTRONIC CONTROLLER SPECIFICATIONS

Controller	Electronic board with microprocesador
IP Marking	IP65
Tracking algorithm	Astronomical calculations (error <0.015°) with backtracking
Advanced Wind Control	High wind, Medium wind and Low wind
Night-time parking position	Configurable
Communications options	Wire option - RS - 485 / RS -422/ Ethernet/ Optical-Fiber Wireless option - Zigbee
Operating temperature	Atitude < 1000 m: -5°C to 50°C
Sensors	Analogic inclinometer
Motor type	AC motor 0,18 kW DC Motor 0.15 kW
Daily energy consumption	Control 0.06kWh/day; Motor 0.06kWh/day; Total 0.12kWh/day
Std. powersupply	Single phase 230 Vac - 50/60Hz or SelfPowered

MANTEINANCE

Maintenance-free bearings	Yes
Structure maintenance	Minium (grease gear drive once every 2 years). Optional every 10 years.

WARRANTY (Expandable)

Structure	10 years
Corrosion protection	20 years according to ISO 14713 C3