

## SINGLE-ROW SINGLE AXIS TRACKER SP160



The differentiating features of the TrinaPro SP160 tracker are:



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



5. Several adjustment points create a broad window for raming and assembly tolerances.



2. Field proven, robust, and reliable tracking systems. More than 3 GW installed worldwide.



6. The strength of the 3-phase AC motor driven by a Variable Frequency Drive enables low speed for tracking, but high speed protection response. This extends reliable system life.



3. Maintenance-free patented polymer spherical bearings. Field tested under harsh environmental conditions to validate their high reliability



7. Industrial-grade control system based on a microprocessor features an advanced wind control software with prestow positions for tracker safety.



4. Most adaptable bearings in the industry - TrinaPro is easy to install and operate in complex terrains.



8. Wireless Zigbee communication system between independent rows.

TrinaPro is designed to reduce project risks for utility scale applications, integrating premium performance modules, time-tested tracker design, and high quality inverters from one bankable source. With smart O&M, monitoring, and power guarantees TrinaPro enables LCOE reduction from individual components, system, and performance. TrinaPro is an intelligent, service-supported, high-return utility solution.

## TECHNICAL SPECIFICATIONS

### GENERAL CHARACTERISTICS

Solar tracker	Horizontal, single-axis, single-row
Tracking range	120° (±60°)
Module surface per tracker	Up to 1937 ft <sup>2</sup> /180 m <sup>2</sup>
Foundation options	Direct ramming /Pre-drilling /Concrete micro-piling
Terrain adaptation	Up to 20% grade N-S; E-W terrain adaptability is unlimited
Ground Coverage Ratio (GCR)	Configurable: standard range (28-50%)
Structure	HDG high strength steel S275 and S355 and Magnelis®
Hardware	8.8 grade / ZnNi + seal
Drive unit	Slew drive/Linear actuator
Allowable Wind and Snow Loads	Tailored to site requirements
Standards & regulations	Structural calculations according to IBC and USA standards
Module configurations	1000 V version 1500 V version
Compatible solar panels	Framed Standard, Dual Glass, Bifacial

### ELECTRONIC CONTROLLER SPECIFICATIONS

Controller	Electronic board with microprocessor
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
Communication options	Wire option - RS - 485 / RS -422/ Ethernet/ Optical-Fiber Wireless option - Zigbee
Operating temperature	Altitude < 3280 ft.: 23 °F to 122 °F
Sensors	Analogic inclinometer
Motor type	AC motor 0.18 kW; DC Motor 0.15 kW
Parasitic power consumption	Control 0.06 kWh/day; Motor 0.06 kWh/day; Total 0.12 kWh/day
Required power supply	Single phase 230 Vac - 50/60 Hz or Self-powered

### MAINTENANCE

Maintenance-free bearings	Yes
Structural maintenance	Minimum (grease gear drive once every 2 years); Optional maintenance every 10 years

### WARRANTY (Expandable)

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