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ALUMINIUM SYSTEMS SINCE 1969

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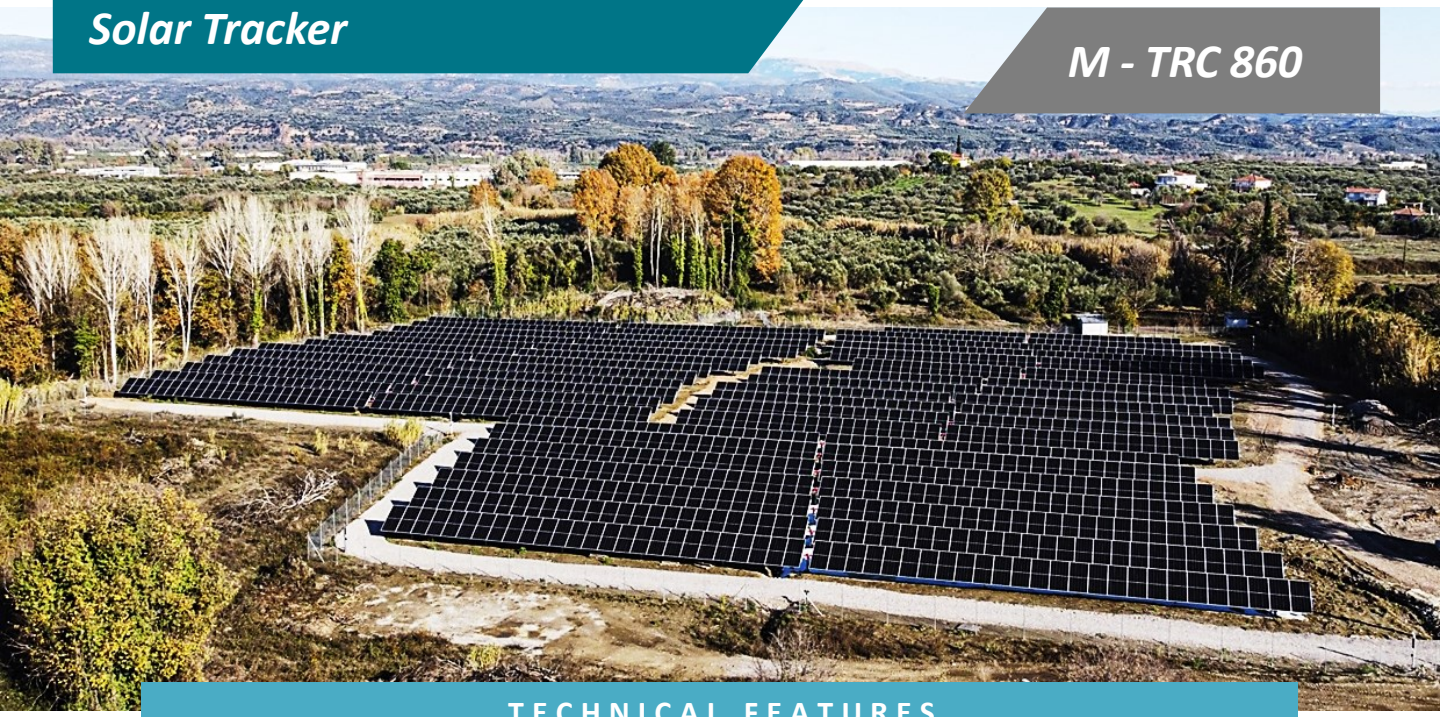
Horizontal Single - Axis Electrical Solar Tracker

M - TRC 860



TECHNICAL FEATURES

Tracking type	*1P Single-Axis Independent Tracking System*
Module Quantity per row	*Up to 120 modules (4 strings)*
Driving System	*Electrical multi-point Slew Drives*
Design Wind Speed	*65 m/s (ASCE 7-10), adjustable based on project*
Tracking Angle Range, Accuracy	*±60°*
Pile Foundation Type	*PHC Pile / Cast-in / Direct Ramming / micro-hole+Ramming*
Posts Section Type	*H-type for Drive Post, H/C-type for Side Post*
Number of Posts per MW	*190-240 according to layout*
Structural Material	*S350-S550*
Anti-corrosion Coating	*Hot-dip Galvanizing / Zinc-Aluminum-Magnesium Coating*
Terrain Adaptation	*North-South slope 20%, East-West slope unlimited*
System Voltage	*300VDC-1500VDC*
Power Supply Method	*String Power Supply /Grid Power*
Electrical Connection	*1 Master Controller + Max 3 Slave Controller*
Daily Power Consumption	*0.04kWh*
Operating Temperature	*-40°C~+60°C*
Control Modes	*Backtracking, Heavy Rain, Heavy Snow, Strong Wind, Flood, and Farm Mode*
Stow Position	*Low angle (based on CPP/RWDI)*
Heavy Snow Protection Mode	*Maximum Tracker Tilt Angle (optional)*
Rainy Day Mode	*Adjust tracker angle based on solar irradiance (optional)*
Control Algorithm	*Astronomical Algorithm+Tilt Sensor Closed-loop+AI Intelligent Algorithm*
Communication Interface	*LoRa/Zigbee Wireless Communication, RS485 cable*
Product Certification	*ETL/TUV/CE/UL*

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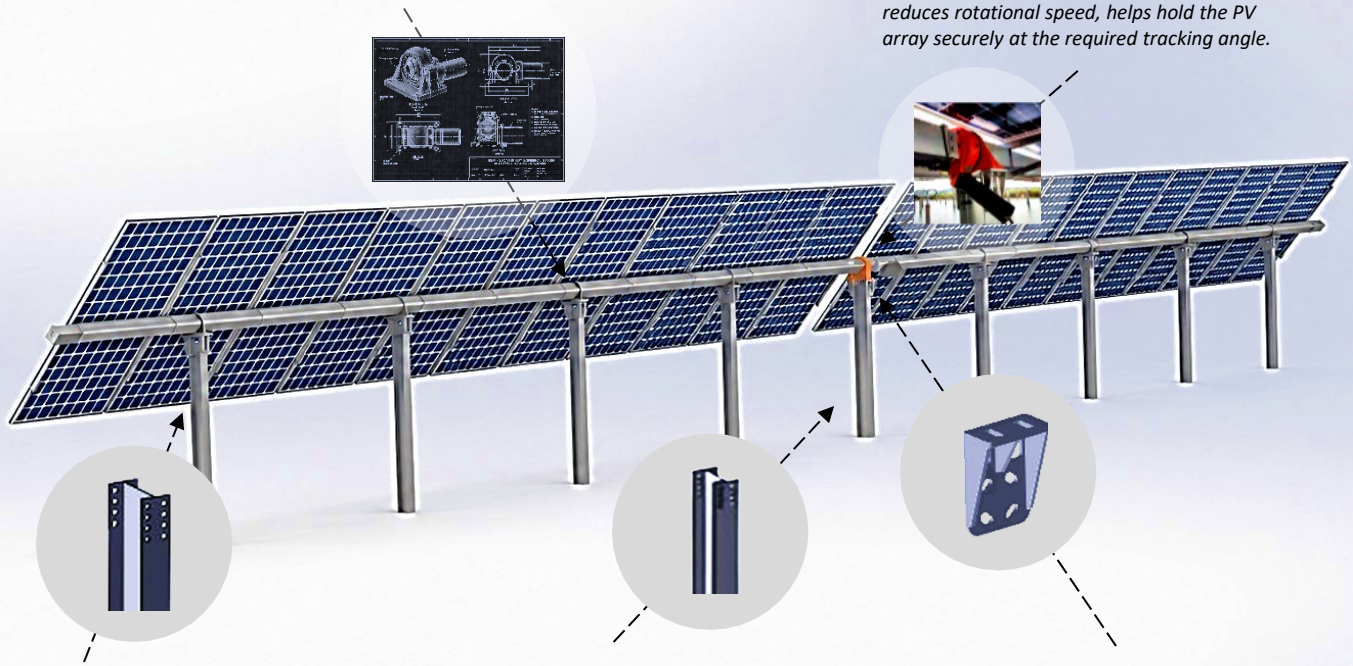
Bearing Adapter Seat & Spherical Bearing

Support the rotating torque tube and allow smooth rotation and limited angular self-alignment. They accommodate minor structural or installation misalignments, reduce friction and stress, and transfer tracker loads to the supporting post.

Slew Drive

Converts electric motor's output into controlled, high-torque rotational movement. Provides precise positioning, reduces rotational speed, helps hold the PV array securely at the required tracking angle.



Simple Post

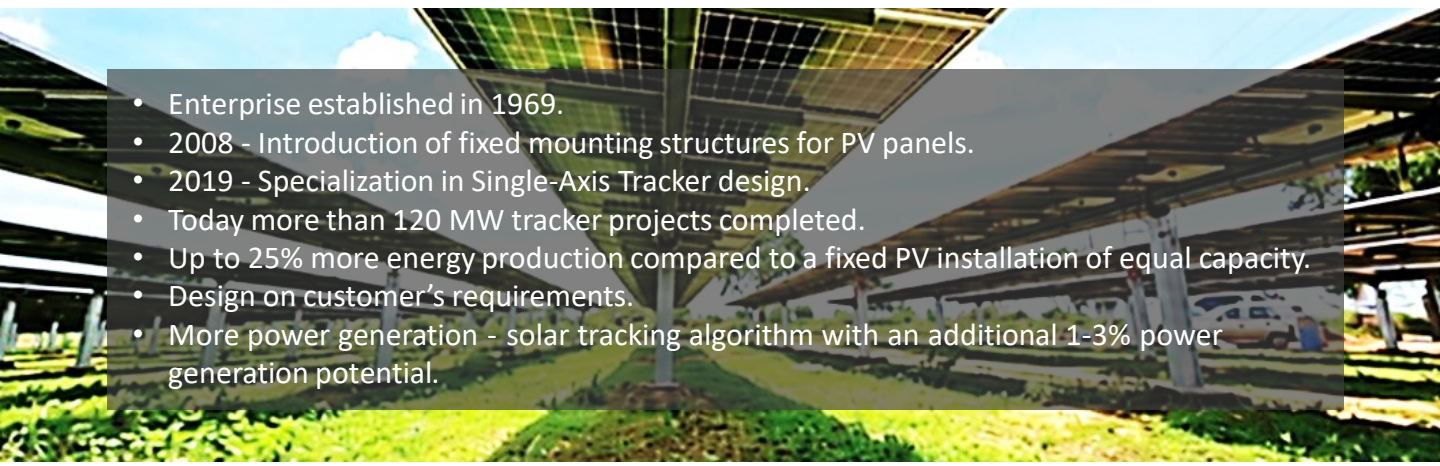
Carries vertical and lateral loads, supports the torque tube through bearing or bushing, maintains alignment, allows the tube to rotate freely.

Driver Post

Structural support. Carries the electric drive mechanism and transfers rotational force to the torque tube. Anchors the drive assembly, withstands resulting mechanical loads, initiates controlled rotation positioning the PV modules toward the sun.

Motor Base

Structural mounting element. Supports and positions electric motor and drive unit on the Driver Post. Maintains alignment with the rotating mechanism. Transfers motor-generated forces safely into the tracker structure.



- Enterprise established in 1969.
- 2008 - Introduction of fixed mounting structures for PV panels.
- 2019 - Specialization in Single-Axis Tracker design.
- Today more than 120 MW tracker projects completed.
- Up to 25% more energy production compared to a fixed PV installation of equal capacity.
- Design on customer's requirements.
- More power generation - solar tracking algorithm with an additional 1-3% power generation potential.

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