

SunTracker

SMART TRACKING SOLAR PV SYSTEM

Overview

Smart Tracking Solar PV System is mainly applied to large-scale solar plant with its most affordable, efficient and sustainable solutions. System combining with single row, 1 controller per tracker, multipoint parallel drive with backtracking mode, having strong wind-resistance capability. Comparing to fixed mounting system, SunRack Smart Single-axis Tracker is first option for LSS, could increase nearly 20% power generation under same conditions.



Ground Mounting System



Tracking Angle $\pm 45^\circ$ or $\pm 60^\circ$



Ground Clearance 500-2000mm



Applicable Modules frame or frameless



Orientation Portrait or Landscape

10

Years Warranty



Advantages

Debugging by automatic tracking

Easy to install, lower O&M costs

Strong adaptability of terrain up to 25% N-S slope

Profitability and reliability for different conditions

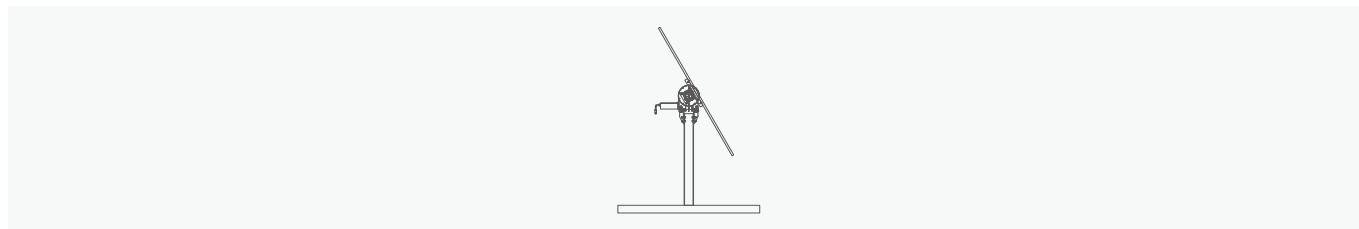
Multipoint parallel drive, strong wind-resistance capability

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Technical Parameters

GPS Module	Automatically obtain latitude and longitude and precise time Compatible with GPS + Beidou satellite positioning system	Design Support	Support Wind Protection
Installation Capacity	Maximum 90 solar modules per row		Snow Removal Mode
Tracking Angle	±60°		Rain Cleaning Mode
Wind Resistance	47m/s design standard ASCE7-10, <18m/s (shelter from wind)		Position Return Mode
Tracking Algorithm	Astronomical Algorithms +Tilt Sensors	Drive Method	Slewing Speed Reducer
Drive Device	Slewing Drive, 24V DC motor	Structure Material	Hot-dip Galvanized + POSMAC Steel
Power Supply	Self-powered/External Connection	Control System	Micro Controller Unit
Communication Method	LoRa wireless communication or 485 bus (Modbus protocol)	Protection Level	IP65
		System Warranty	10 Years
		System Daily Power Consumption	≤0.1kwh










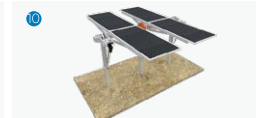
Structure



Component Details

						
Post Material : Q235B/Q355B (Hot-Dip Galvanized)	Controller Material : Q235B (Hot-Dip Galvanized)	Motor Spec : 7-9 inches	Putter Spindle Fastener Material : Q235B (Hot-Dip Galvanized)	Bearing base Material : Q235B (Hot-Dip Galvanized)	Putter Customized according to actual needs	Tilt Sensor Material : Q235B (Hot-Dip Galvanized)
						
Angle Steel Material : Q235B/Q355B (Hot-Dip Galvanized)	Motor Base Material : Q235B/Q355B (Hot-Dip Galvanized)	Putter Post Fastener Material : Q235B (Hot-Dip Galvanized)	Bearing Sleeve Material : Q235B (Hot-Dip Galvanized)	U-shaped support Material : Zn-Al-Mg Coating Steel Q355B (Hot-Dip Galvanized)	U-shaped Rail Material : Zn-Al-Mg Coating Steel Q355B (Hot-Dip Galvanized)	Spindle Spec : 120*120, 140*140 Material : Q355B(Hot-Dip Galvanized)

Installation Guide

				
1 Install the Posts according to design drawings	2 Install the Motor Base&Bearing bases on the Posts	3 Install the Motor in the Motor base	4 Install the Bearing Sleeve on the Bearing bases	5 Install the Spindle through the Bearing Sleeve&Motor
				
6 Install the Putter Spindle Fastener in the Spindle	7 Install the Putters	8 Install the U-shaped Rail	9 Install the Controller	10 Install the modules, then installation is done