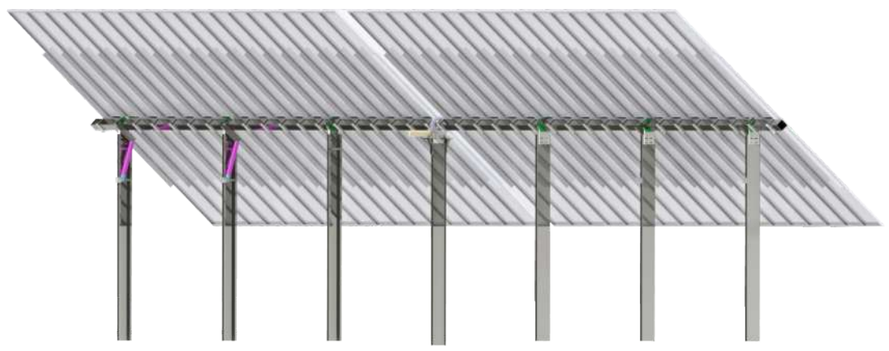
GS-Light Intelligent Tracking System Solution

Intelligent Tracking System (Independent Single Row) - 2P



● System Introduction

The independent single-row tracking 2P system developed independently has the advantages of strong slope adaptability, large tracking angle, quick installation, and convenient operation and maintenance. The number of columns in the 2P system is reduced by more than 40% compared to the general tracking system, which greatly reduces the cost of civil engineering. It is specially designed for double-sided modules, and the back side can be unobstructed. In the mode of using tracking system + double-sided modules, the power generation of PV modules can be greatly improved.

● Suitable Power Plant Project

It is suitable for all kinds of power plant projects, especially in the power plant with double-sided modules or high civil engineering cost.

● Features

· Specially designed for double-sided modules and compatible with single-sided modules;

· Optimal cost budget;

· AI intelligent control system can increase production capacity output by 6%;

· The north-south slope can be adapted to 20%;

· Higher utilization rate of irregular land;

· DC string and lithium battery backup power supply, reducing LCOE cost.

● Technical Information

Mechanical Aspect

Number of tracker drive modules	2X45
Number of motors per tracker	1
Tracking range	±60°
Material	Hot-dip galvanized steel + aluminum-magnesium-zinc plate + pre-galvanized
East-west land slope	Unlimited
North-south land slope	< 20%
Module arrangement	Double row vertical
Ground clearance	> 500mm, (customizable)
Foundation form	Static pressure pile, cement precast pile, concrete foundation
Standard wind speed	< 47m/s, 3 seconds gust, (customizable)
Protection wind speed	18m/s
Mechanical tracking accuracy	±2°
Land occupation rate	30%
Grounding method	Self-grounding

Electrical Aspect

Drive way	Rotary drive
Motor Power	150W
Flat time	< 8minutes
Controller	MCU
Control tracking accuracy	< 2°
Control mode	Independent GPS time control + tilt sensor hybrid control
Limit protection	Mechanical limit + motor hard limit + soft limit
Motor protection	Overheat protection, overcurrent protection, self-locking protection
Operating temperature	-40-+70℃
Protection level	IP65
Power consumption	< 0.08kWh/day
Power supply	String power supply/external power supply
Communication method	RS485 Modbus agreement
Signal transmission method	Wired/wireless optional