GS-Light Intelligent Tracking System Solution

Intelligent Tracking System (Independent Single Row) - 1P

● System Introduction

The self-developed independent single-row tracking bracket 1P system can adapt to the 20% slope of the north and south slopes, keep close to the ground, and have strong wind resistance. The standard product can install up to 90 modules, and the number of installed modules can be adjusted according to the string configuration and the size of the terrain. It is the best choice for irregular land power stations. The electronic control adopts the most advanced AI intelligent controller, which can be equipped with self-powered strings and small lithium battery panels.

● Suitable Power Plant Project

It is suitable for various power plant projects, especially in power plant projects with irregular land.

● Features

· Installation is more convenient;
· Customized quick control system debugging system;
· 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	1X90
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	Single row Portrait
Ground clearance	> 500mm, (customizable)
Foundation form	Ramming post, PHC pile, Concrete
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	Slew driver
Motor power	150W
Flat time	< 8 minutes
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	< 0.02kWh/day
Power supply	String power supply/external power supply
Communication method	LoRa/Zigbee wireless communication or RS485
Signal transmission method	Wired/wireless optional