



ESEEK-CLIMBER

ESEEK-climber is a 1P Single Axis tracking solution developed based on the concept of **adapting to hillside and mountainous terrain**. Specially designed for complex hilly and mountainous landscapes, this system integrates innovative structural design and intelligent self-adaptive technology to significantly reduce construction costs and terrain limitations. It ensures safe and stable operation of the power plant, providing customers with higher returns on investment and lower O&M costs.



Terrain Adaptability

- **Slope Adaptation – Natural Fit.** The Torque tube features a slope-adaptive design, naturally conforming to the terrain, offering strong adaptability.



Structural Safety

- **All Posts Self-locking – Enhanced Wind Resistance.** The all posts self-locking feature enhances wind resistance, ensuring safety and stability during extreme weather conditions.



Flexible Installation

- **Retractable Connections – Simplified Modular design.** The retractable tube technology reduces installation time, while the modular design lowers costs.



Long-Term O&M Efficiency

- **Stress Control – Smart Maintenance.** By controlling stress fatigue, the system extends its lifespan, and smart algorithms support remote maintenance.

BASIC SPECS



● System Parameters	Tracking Type	Horizontal single-axis tracker (HSAT)
	Tracking Range of Motion	±60°
	Drive Device/Number	Rotary Slew driver (Single point)
	Protection Strategy	60° large-angle + all posts self-locking
	Number of Components per Tracking System	60 pcs
	Power Supply Voltage	≤30V (default, optional ≤1500V)
	Foundation Options	Ramming pile/concrete pile/PHC pile
	Structural Materials	Hot dipped galvanized/ZAM high-strength steel
	Daily Power Consumption	0~0.03 kWh/day/tracker
	Design Wind Speed	Up to 70m/s
	Module Compatibility	Compatible with all types of module
	Operation Temperature	-40 to 60°C (Optional ultra-low temperature battery is required if the temperature is below -25°C)
	Slope Adaptation	≤15%(S-N and E-W)
● Control Parameters	Warranty Period	Structural components: 10 years Drive and electrical control components: 5 years
	Control Algorithm/Controller	Astronomical algorithm & position sensor closed-loop control
	Tracking Accuracy	≤ 1°
	Backtracking	Available
	Communication Options	Wireless communication (Lora, Zigbee)
	Other Optional Modes	Snow, flood, and hailstone modes
	Power Supply	Small module/string/AC power supply, with backup lithium battery

