



# ESEEK-ANCHOR

**Dual-Mode Intelligent Control for Long-Term Asset Security.** Engineered for centralized PV power plants in complex terrains, this system centers on safer high-wind stowing, streamlined O&M, and field-proven structural stability, maximizing energy yield throughout the project lifecycle. Supporting up to 6 strings per row and extending over 180 meters, the tracker delivers exceptional load-bearing capacity and terrain adaptability. Powered by a high-speed worm gear slewing drive, the system integrates a triple-protection mechanism: torque tube distributed self-locking, dual-angle stow protection, and zero-gravity drive, ensuring rapid response and ultra-high system reliability.



**Dual-Lock Protection**  
Defying Extreme Wind & Snow

- Combines anchor-type small-angle and large-angle self-locking for multi-point rigid support. Achieves second-level stow response to guarantee complete safety under sudden gales and heavy snow.



**Zero-Gravity Balance**  
Lower Capex  
Higher Stability

- A proprietary self-balancing system drives a breakthrough 180m span, 6 strings per row, with a single motor. Minimizes component wear and cuts investment costs for massive utility plants.



**Octagonal Torque Tube**  
Next-Gen Torsional  
Resistance

- Features a non-uniform octagonal design that pushes past traditional mechanical limits. Drastically improves bending and torsional stiffness to eliminate tube twisting in extreme environments.



**Quick-Install Purlins**  
Doubling Construction  
Efficiency

- Features an innovative tool-free latching design for second-level locking. Eliminates traditional bolting to shorten construction cycles and accelerate on-site installation.



**Closed Octagonal  
Posts Lean Engineering**  
Uncompromised Safety

- Optional closed octagonal posts leverage optimized profiles for superior compression rigidity. Minimizes procurement costs while maintaining maximum system stability in high-load terrains.



**Smart Algorithm &  
Intelligent O&M**

- With the integration of NCU, TCU, and SCADA for seamless smart control, the system ensures rapid response and efficient operation and maintenance.

Reliable Support Sustainable Future



## BASIC SPECS



● System Parameters	Tracking Type	Horizontal Single-Axis Tracker (HSAT)
	Tracking Range	±60° (120° total)
	Drive Unit / Quantity	Slewing driver (single point)
	Protection Strategy	60° large angle + 10° small angle + global self-locking
	Modules per Tracking System	≤180 modules
	System Supply Voltage	≤25 V (module-powered) / ≤1500 V (string-powered)
	Pile Type	Ramming pile / Concrete pile / PHC pile
	Structural Materials	Hot-dip galvanized steel / Zinc-aluminum-magnesium high-strength steel
	Daily System Energy Consumption	Approx. 0.03 kWh/day
	Design Wind Speed	Customizable, up to 70m/s
	Module Type	Compatible with all modules
	Operating Ambient Temperature	-40 to +85°C
	Terrain Adaptability	North-south slope ≤20%, east-west unlimited
Warranty	10 years for structural components 5 years for drive and electrical control components	
● Control Parameters	Control Algorithm / Controller	Astronomical algorithm +Diffuse Light Optimization + closed-loop control with tilt sensor
	Tracking Accuracy	≤1°
	Backtracking	Yes
	Communication Design	Wireless communication (LoRa, ZigBee)
	Other Special Modes	Heavy snow mode, flood mode, cleaning mode, etc.
	Power Supply Method	Small module / string / AC power supply

