

TerraTrak 2P



Built tough for reliable performance, TerraTrak 2P will maximize energy output and returns, conquering even the most challenging sites. Employ PV where you never thought possible through durable mechanics and intelligent control technology.




Durable Mechanics

- Eliminate refusal risk with a tracker that is compatible with ground screws
- Significantly reduce grading with racking that can accommodate 20% N/S slopes and unlimited E/W slopes, and an adaptable a-frame with legs that have 36" of adjustability
- Ensure reliable performance in extreme weather with a durable a-frame, torque tube, gear box, and self-locking hardware that increases strength
- Structurally optimized tracker rows and reduced part count simplify installation, making it easy and affordable to employ PV anywhere
- Comprehensive wind tunnel analysis and patent pending self-locking hardware increase stability during weather events
- Torque tube significantly reduces pounds per foot and loading in max capacity, yielding lower material costs and increased strength


Best in class controls

NEW! Peak Production Package



Topography informed backtracking


Our proprietary algorithm can increase production by up to 3%. It incorporates three-dimensional site conditions and neighboring tracker positions to avoid shade. This is ideal for sites with uneven or undulating terrain.



Irradiance optimized tracking


Our proprietary algorithm can increase production by up to 2%. The algorithm uses irradiance forecasts to improve energy capture under diffuse or cloudy conditions. Instead of strictly following the sun path, the system reorients modules upward when diffuse light is more productive. Unlike others, our tracking utilizes cloud-based irradiance forecasting over on-site sensors.

Perform easier O&M




Row level control

View row level performance and control each individual row for easy O&M. This allows you to move individual rows or perform routine maintenance while the rest of your site continues tracking.




Remote access

This allows for faster troubleshooting without rolling a truck on site. The admin panel allows users to see inside the project site, view real-time data, and investigate historical data that often leads to identification of the issue.



Dashboard

Real-time, user-friendly dashboard allows you to view all sites. View all alerts and row-level detail. Through the dashboard, you can view real time issues and historical performance.



Real time alerts

Notifications via email or SMS push alerts in real time, allowing you to react quickly.

Specifications

Module orientation	2 high in portrait
Tracking	120°
Range of motion	± 60°
Weather monitoring	Wind, snow, hail
Corrosion	ISO 9223 C2, C3
Max slope grade	20% N/S, Unlimited E/W
Modules per row	Up to 93 standard framed modules (2m x 1m)
Foundations per MW	200-300
Drive system	Independent row design / 12 VDC motor (10A Nominal) / IP-65 / Zero grid power consumption
Bushings	High impact polymer / Lubricant-free, Dry bushings
Bearing housings	Hard stop at each foundation / Integrated torque tube translation mitigation
Fasteners	Standard sizes / Self-locking / No special tools required

Material coating	HDG, Inline, Pre-galvanization, Powder coating
Electrical subsystem	Highly advanced BMS hardware & software
GCR	No minimum, typical 28% to 50%
Foundation	Ground screw
Wind load	Standard design wind speed: 105mph per ASCE 7, higher wind load available
Wind stow angle	60-degree stow
Snow load	Up to 100 psf
Flood clearance	66.6 inches (Grade = top of screw)
Leading edge	24.5 inches (Grade = top of screw)
Modules	Compatible with most standard modules and large format modules
Warranty	10 year structural, 5 year on drive and control system, 20 years on foundations, extended terms available
Certifications	UL3703, UL2703, & IEC 62817

Electrical Specifications

Power requirements	18-24VDC as provided by included pony panel(s) and/or TTAC
Pony panel	<ul style="list-style-type: none"> • 150W monofacial module, $V_{mp} \sim 17.93V_{dc}$, $I_{mp} \sim 8.37A$ • 1150 × 620 × 35 mm
TTAC (HEP-150-24A)	<ul style="list-style-type: none"> • Input: 100-240 VAC, 50-60 Hz • Output: 24 VDC @ 6.3A

Network controller

Battery	LiFePO4 (nominal 3.2V cells)
Battery capacity	15.2Ah
Peak power consumption (typical)	70W
Operating temperature	-30°C to 60°C

Weather station

Battery capacity	15.2Ah
Peak power consumption (typical)	50W
Sensors supported	<ul style="list-style-type: none"> • Wind (speed / gust / direction) • Snow depth • Ambient temperature • 8 additional I/O ports (24V)

Tracker controller

Battery	<ul style="list-style-type: none"> • LiFePO4 (nominal 3.2V cells) • Quick access battery cover with captive screws • Isolated battery compartment, avoids exposing internals when changing battery • Integrated pack heater
Low battery detection	The tracker controller will automatically stow when the battery level drops below 15% and resumes tracking when it has charged back to 30%
Battery capacity	6.4Ah
Peak power consumption (typical)	120W
Operating temperature	-30°C to 60°C
Environmentally tested	<ul style="list-style-type: none"> • MIL-STD-810G tested • NEMA 4X/IP65 enclosure • Lightning surge protection