TURNKEY SOLAR TRACKER With BalanceTrac

TDP is a trademark of Solar FlexRack

Tough, Reliable Tracker & Team of Experts at Your Service

Solar FlexRack's new TDP 2.0 Turnkey Solar Tracker with complete project support services for commercial and utility-scale solar installations introduces an advanced design featuring new BalanceTrac. This next-generation technology enables solar power plants to increase energy yield while significantly reducing project risks. That translates to smart installation cost-savings across your project budget.



The Only Tracker Solution with:

- Full Design
- Installation
- Commissioning Services

Increased Energy Yield

TDP 2.0 with new BalanceTrac is efficiently designed to support more modules per row, a rotational range of up to 110°, and is compatible with 1,000 and 1500V modules. These key features enable significant energy production gains in solar power plants.

Greater Adjustability To Maximize Performance

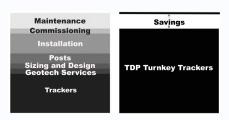
TDP 2.0 Tracker has up to a 10% slope tolerance that can eliminate the need to level land. Independently driven rows provide easy access for mowing, cleaning and maintenance. Autonomous tables increase design flexibility to maximize ground coverage on irregular and non-adjacent lots. Programmable granular backtracking, snow shedding and new wind damper technology mitigate inclement climatic events and reduce risk of tracker damage. All of these features compound to increase system performance.

Installations Flv with Solar FlexRack

No special equipment or additional steps are required to square your racking. The proprietary design allows modules to easily slide into place, accelerating the process, and reducing installation time.

Complete Support Services Reduce **Project Risks And Costs**

A tracker solution that comes with all the critical associated support services and an unmatched team of experts that will significantly reduce your risks and project costs. Project management is simplified, redundancies are eliminated, and you have one highly-experienced supplier-instead of many.



Increased Yield & Reduced Costs

- More modules per row (up to 90)
- Rotational range of up to 110° (±55°)
- Optimized for 1,000 & 1,500V modules
- Lower per-unit fixed costs for balance of system savings
- Allows shorter piles
- Programmable technology to mitigate inclement climatic conditions
- installations fly with no prying, adjusting or special tools
- Built to last, the robust design reduces amount of tracker components and wear
- Autonomous tables increase design flexibility to maximize land use
- Smart backtracking reduces row shading to optimize energy production
- Independently driven rows provide easy access for mowing, cleaning and other maintenance

TDP™ 2.0 Turnkey Solar Tracker with BalanceTrac

TESTING

Rain, wind, sleet, snow, heat – every day and everywhere, our products are battling the elements.

We perform ongoing extensive testing in these key areas: wind tunnel, structural load, electrical bonding, and life cycle.

Solar FlexRack trackers also undergo wind tunnel testing performed by RWDI, per American Society Of Civil Engineers Standard ASCE 7.

UL COMPLIANCE

All Solar FlexRack systems have gone through UL testing.

Each component-connection point within the system conforms to NEC codes for electrically bonded and conductive systems.

Testing is performed by TUV Rheinland in accordance with UL 2703.

Certification covers both United States and Canada.

Find out more about Solar FlexRack product reliability and testing at www.solarflexrack.com/prod ucts/testing



Learn more about our Preferred Installer Program: http://solarflexrack.com/resources /preferred-installer-program/

TRACKING	
Tracking method	Single-axis horizontal, distributed drive
Backtracking	Smart backtracking - customized to terrain for maximum production
Tracking range	Up to 110° (± 55°)
Ground coverage ratio (GCR)	Configurable (0.33 to 0.50)
Tracking accuracy	2°
Stow Angle	Configurable

ARRAY CONFIGURATION		
Panels per tracker	Up to 90	
Trackers per controller	1	
String voltage	Up to 1,500 Volts	
Panel configurations	1 in portrait (crystalline)	
	2 in landscape (crystalline)	
	4 in landscape (thin film)	
Drive type	Slew	
	24 Volts dc	

OPERATIONS & MAINTENANCE		
Scheduled maintenance	None	
Warranty	10 Years: Structural	
	5 Years: Controls and drive	
Certifications	UL 2703	
Dynamic load	Limited progressive	
management	damping technology	
Snow management	Programmable snow shedding	

INSTALLATION & TOLERANCES	
North-south slope	Up to 10%
tolerance	
North-south post spacing	± 1.5 inches
East-west post alignment	± 0.625 inches
Post height	± 1 inch
Post plumb	± 1°
Post twist	± 2°
Tube twist	± 2°

CONSTRUCTION	
Structural materials	Hot dip galvanized steel
Bearings	UV-rated engineering plastic, no lubrication needed
Mechanical connections	Bolted - no welding, drilling or cutting required

CONTROL SYSTEM	
Data feed	Ethernet, Zigbee, SCADA
Power consumption	31 kWh per tracker per year

ENVIRONMENTAL	
Operating temperature	-30 °C to +60 °C
Wind Stow	105 mph (Up to 130 mph) 35 mph
Snow load	10 psf (standard)
	Higher snow load available upon request



TDP 2.0 TURNKEY SOLAR TRACKER
With BalanceTrac

Support Services

- √ Geotechnical Services
- Structural Analysis
- ✓ Layout & Design
- Foundation Design Services
- ✓ Post Driving
- ✓ Pull Testing
- ✓ Tracking System Installation
- √ Visual Inspection of Trackers
- ✓ Preferred Installer Network
- ✓ Post, Rack & Module Installation
- ✓ Configuration of Tracker Controls
- Configuration of Network Controls
- Project Management
- ✓ PE Stamp
- ✓ Onsite Training
- Commissioning
- Remote Data Monitoring & Reporting

Over 1.5 Gigawatt of Solar FlexRack Installed

Solar FlexRack, a division of Northern States Metals, is an integrated solar company that offers custom-designed fixed tilt ground mount and single-axis solar tracker systems in the commercial and utility-scale solar mounting industry. We also offer full turnkey services packages to address the actual site conditions of an installation. Solar FlexRack has completed over 1.5 GW of solar racking installations in 32 states across America and five countries globally.

For more information on Solar FlexRack visit: www.solarflexrack.com