



# Solar FlexRack *TDP™* 2.0 Trackers + First Solar Series 6

## The High Yield Advantage

Solar FlexRack is one of the market's most trusted brands in solar racking solutions. Innovative, dependable and cost-competitive solar trackers, fixed tilt racking and project services, dramatically reduce project risks for solar project asset owners and EPCs.

Combine Solar FlexRack's proven track record with First Solar's next generation thin film Series 6 modules for the highest project energy yields and ultra-dependable solar project installations.

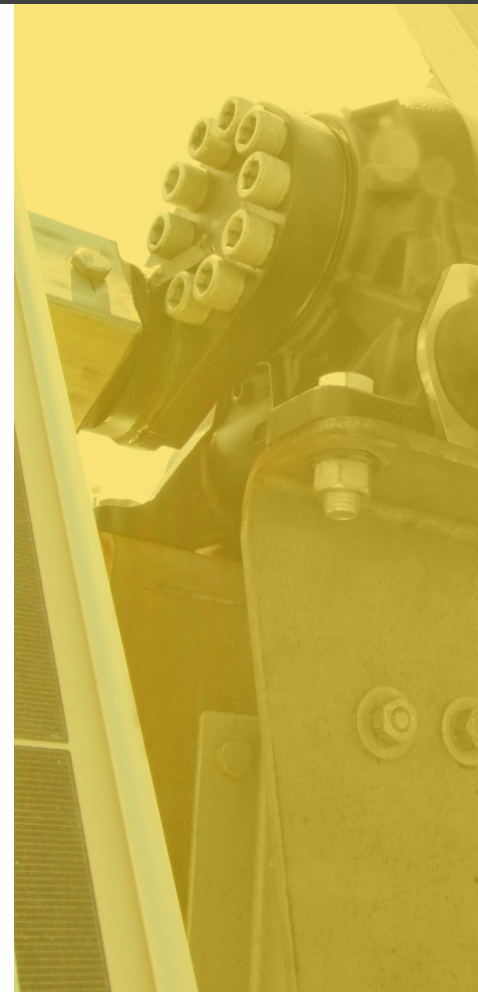


### Solar FlexRack Tracker Features

- First Solar Series 6 modules mounted 1 high in portrait to maximize energy density
- Flexible configurations are available for 1,000V or 1,500V systems supporting up to 1 x 70 (1000V) and 1 x 72 (1500V)
- Vertical rail system that safeguards modules' construction, reducing installation time and costs
- Simple, robust module mounting clamp design allows for rapid and secure installation
- Independent high-density rows coupled with more watts per panel and lift, reduce structure and labor installation costs

### The System Features

- The high-density design provides a completely integrated & efficient solution
- Higher performance than conventional modules in high temperatures, high humidity, and extreme desert and coastal environments
- Proven track record of reliability and industry-leading durability
- A fully bankable solution with a lower levelized cost of energy that delivers better system performance in real world conditions



# Solar FlexRack *TDP™* 2.0 Trackers for First Solar Series 6

## Materials

<b>Module Mounting Hardware</b>	Aluminum, Sanoprene™ and Magni 500 coating
<b>Racking Hardware</b>	Hot Dip Galvanized (HDG)
<b>Racking Structure</b>	G90, ASTM 1057, Hot Dip Galvanized (HDG) per ASTM123 or greater for high corrosion areas
<b>Foundations</b>	Hot Dip Galvanized (HDG) per ASTM123

## Design

<b>Orientation</b>	One high in portrait
<b>Array Configuration</b>	Optimized for 1000V (1x70) or 1500V (1x72)
<b>Rotational Range</b>	+/- 55°
<b>Environmental</b>	Up to 50 psf snow and -30° C temperatures
<b>Racking Slope Tolerance</b>	10% e/w and n/s slope accommodation governed by post installation capabilities (does not adversely affect design)
<b>Racking Snow/Wind Loading</b>	Per ASCE7-10 local site specific requirements
<b>Ground Coverage Ratio (GCR)</b>	Combined racking and module solution is flexible & tolerates higher than typical GCR (.33 to .50)
<b>Foundations</b>	SAT is designed to incorporate optimal string sizes allows for 10 posts per 72 modules
<b>Foundation Types</b>	W-sections, roll formed smartpost, round post, ground screw, and helical pier
<b>Module Mounting Types</b>	Pre-assembled aluminum clamps
<b>Warranty &amp; Design Life</b>	10-year controls, 20-year product, 30-year service on (HDG) components
<b>Design Standards</b>	Per ASCE7-10 local site-specific requirements, UL2703

## Controls & Actuation: Single Axis Tracker (SAT)

<b>Drive</b>	Distributed (slew drive), 24 volts dc motor, 1Ø
<b>Controls</b>	Integrated and optimized with self powered (optional) and wireless communication
<b>Bearing</b>	Bearing UV-rated PTFE – no lubrication needed
<b>Wiring</b>	No external wiring to controller for power or comms.
<b>Construction</b>	Mechanical connections bolted

## 40 Years & 1.8 Gigawatts

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 tracking systems in the commercial, community solar and utility-scale solar mounting industries. Solar FlexRack offers full turnkey packages including engineering, geotechnical, pullout testing, field, layout, and installation services to address the actual site conditions of an installation and provide a full scope of services from design to delivery and installation. Solar FlexRack has completed over 2 GW of solar racking installations in 40 states across America and five countries globally. Learn more at [solarflexrack.com](http://solarflexrack.com).

