Unlocking the Potential of Solar Energy

Solargik

Solargik's mission is to unlock the potential of solar energy by combining versatile, cost-efficient trackers and intelligent control software.

Our Solutions increase power generation, efficiency, and profitability, while reducing overall CAPEX and OPEX.

Market Challenge - Enabling PV Growth

As PV increasingly becomes part of the grid's "baseload", it faces new challenges:

- Ideal lands for solar are becoming increasingly scarce and costly.
- Interconnection queues extend years into the future.
- Persistent supply chain challenges have kept CAPEX levels high.
- Rising Interest rates are making it harder for projects to pencil.

These market realities have pushed developers to expand their focus from standard lands and explore non-conventional terrains (odd shapes and slopes) and dual-use scenarios like rooftops, carports and Agrivoltaics.

Solargik Value



Install on slopes up to 30%



Increased tracking accuracy on challenging terrains



20-30% weight and cost reduction



10% less backside shading



Short Tracker Table increases power density



Eliminate costly grading and 'cut & fill'



Versatile installation for dual-use



Zero-Maintenance Design











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The Solargik Advantage









Hardware

SolarGik's innovative tracker has a fundamentally different design than the industry standard. Rather than focus on maximizing the number of panels per motion unit, which is optimal for conventional solar installations on big, flat, deserts, SolarGik has flipped the paradigm by designing the shortest tracker on the market - between 6-24 panels. This enables installations on slopes up to 30%, oddly shaped sites, and around obstacles - without the need for costly civil work. This is possible because we do not need to transfer power across a long, heavy, torque tube. Instead, we utilize a highly reliable and cost-effective motion unit, that allows our tracker to be significantly lighter than the industry standard, reducing overall CAPEX.

Software

Solargik's tracking algorithms are explicitly designed to enhance our unique, lightweight, 2-landscape configuration. This allows us to improve on industry-standard tracking algorithms. For example, while standard trackers are forced to employ a uniform angle across long-rows, Solargik's shorter tracker can have multiple angles across an identically sized row, helping optimize production, respond more effectively to dynamic shading, and maximize bifacial gains. Each installation integrates onsite weather sensors with satellite forecasting for highly precise tracking that preempts rather than only respond to on-site changes. This includes rotating each tracker to its optimal angle to maximize overall production while accounting for inter-row shading, bi-facial gains, diffuse irradiance, panel cooling, and more.

The Synergy

The combination of our unique hardware solutions and control software create highly versatile, safe, productive, and optimized PV arrays. The tracker's short length allows smaller "building blocks" that permit both highly optimized site layouts and improved tracking precision. These smaller building blocks enhance the ability to preempt and respond to real time changes and optimize for overall performance. Counterintuitively, this could be an outcome other than maximizing electricity generation. For example, this could mean intermittency smoothing of energy generation to avoid big drops in production or balancing the use of sunlight between crops and panels in Agrivoltaics settings.

Our configurable tracker helps boost power density on non-traditional terrains that were previously impossible to install. Combined with our tracking algorithms and software controls, our solutions allow developers to pencil deals and "unlock" projects by creating a competitive LCOE in places previously considered not financially viable – steep slopes, oddly shaped, sites, rooftops, and Agri-PV.

