

SolarAnywhere® Forecast

Maximize grid stability and asset profitability with global solar power forecasting



- ✓ Optimize energy trading outcomes to maximize ROI
- ✓ Reduce operational risk
- ✓ Intelligently manage dispatchable PV
- ✓ Support DERMS, ADMs and utility operations
- ✓ Meet utility PPA requirements
- ✓ Understand marginal risks with day-ahead probabilistic forecasts



About SolarAnywhere

SolarAnywhere solar resource data and intelligence supports the entire solar lifecycle—from prospecting and development, to asset management and production forecasting. To learn more about industry-leading data and services from Clean Power Research®, visit solaranywhere.com.

SolarAnywhere® Forecast provides insight into expected PV production for the next weeks, days, hours or minutes

Variability from localized cloud movement and weather events is a challenge inherent to the solar industry. However, with an advanced understanding of expected irradiance, solar stakeholders can reduce risk and enhance operational performance.

Using a research-backed blend of numerical weather prediction, satellite cloud motion vector modeling and other meteorological inputs, SolarAnywhere Forecast delivers the data necessary to make strategic business decisions. Forecast enables asset operators to confidently participate in energy markets, Independent Power Producers (IPPs) to meet their PPA requirements and hybrid operators to efficiently manage dispatchable PV systems.

Reduce financial risk with leading solar resource forecasting technology



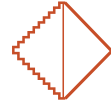
Optimized model

Curated blend of forecasts for increased accuracy



Energy modeling

Advanced energy modeling
Bifacial, soiling, snow loss, capacity derate scheduling & more



1-minute resolution

High-resolution forecasts reflecting cloud motion modeling technology



Global coverage

Available everywhere you operate



Enterprise-class API

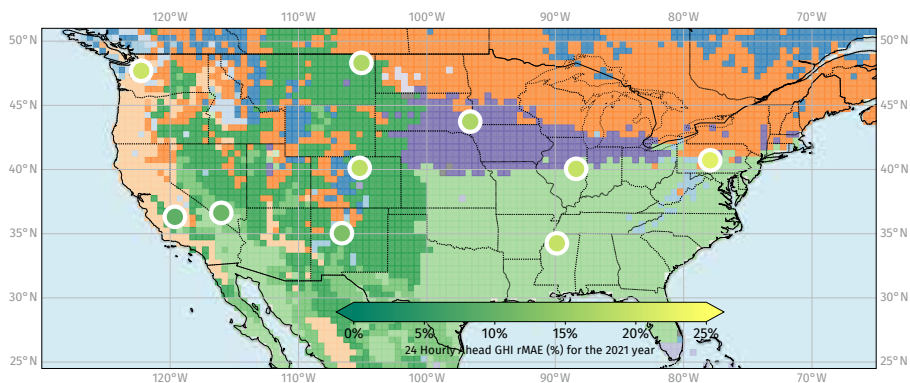
Unlimited API calls
Easy-to-use, reliable & secure



Industry expertise

Active research team and technical experts

SolarAnywhere Forecast rMAE (%) at 24 Hours Ahead



Accuracies noted in the above figure are indicative of the irradiance forecast skill in their respective climate region. Validation of global horizontal irradiance (GHI) at ground sites in various Koppen Geiger climate zones throughout the continental US yields an average relative mean absolute error (% rMAE) of 14% at 1 hour ahead and 16.5% at 24 hours ahead. Translating this to power forecasting at utility scale sites, SolarAnywhere achieves a mean absolute error of less than 5% at 24 hours ahead.

License Types & Specifications

	Basic	Standard	Advanced	Hindcast
Overview	<p>Basic solar and power forecasts for DER and grid operational insights</p> <p>Support DERMS, ADMS and commercial operations</p>	<p>Industry leading forecasting for delivery prediction and flexibility</p> <p>Bid into day-ahead energy markets</p> <p>Meet utility PPA requirements</p>	<p>The most accurate data for maximizing profits</p> <p>Inform real-time energy trading</p>	<p>Test the Standard Forecast model using site-specific historical data</p> <p>Forecast validation and trialing</p>
Numerical Weather Prediction Models (NWP)	✓	✓	✓	✓
Satellite Cloud Motion		✓	✓	
Intelligent Model Blending		✓	✓	✓
High Resolution (1-minute) Data			✓	
Probabilistic Forecast Access			✓	✓
Delivery Options	API, Dashboard	API, SFTP, AWS 3, email, Dashboard	API, SFTP, AWS 3, email, Dashboard	API, SFTP, email
Forecast Resolution	1-hour 25 km	1-hour, 30-minute, 15-minute 10 km	Standard + 10-, 5-, 1-minute 1 km	1-hour, 30-minute, 15-minute 10 km
Forecast Horizon	5 days ahead	14 days ahead; 75 days ahead, climatology	High resolution up to 1 hour ahead	Up to 7-day hindcast 3-year lookback
Geography¹	Global up to 80° N/S	Global up to 60° N/S	Global up to 60° N/S	Global up to 60° N/S
Product Support	SolarAnywhere's highly responsive customer support team is available for site-specific forecast set up, modeling, delivery and troubleshooting			
Data Fields	<p>Irradiance</p> <p>GHI DNI DHI</p>	<p>Weather</p> <p>Temperature Wind speed Snow depth² Relative humidity² Liquid precipitation² Solid precipitation²</p>	<p>Power Modeling</p> <p>AC energy (kWh) AC power (kW) DC power (kW) Snow losses Bifacial PV Clear sky power (kW)</p>	<p>Plane-of-array irradiance (POAI) Capacity derate scheduling Fixed tilt, single-axis trackers, backtracking</p>

¹Learn more about SolarAnywhere geographical coverage at solaranywhere.com/support/geographic-coverage

²Field availability dependent on license type

Learn More

Interested in finding out more about SolarAnywhere Forecast?

Visit our website

Go to solaranywhere.com/products/solaranywhere-forecast to learn more about SolarAnywhere Forecast

Ask a question

Email our sales and technical teams at support@cleanpower.com

Request a trial

Ready to try it out? Request a Forecast trial at solaranywhere.com/contact