SolarAnywhere® Forecast

Maximize grid stability and asset profitability with global solar power forecasting

- Maximize energy trading ROI
- Reduce operational risk
- Intelligently manage dispatchable PV
- Support DERMS, ADMs and utility operations
- Meet utility PPA requirements

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

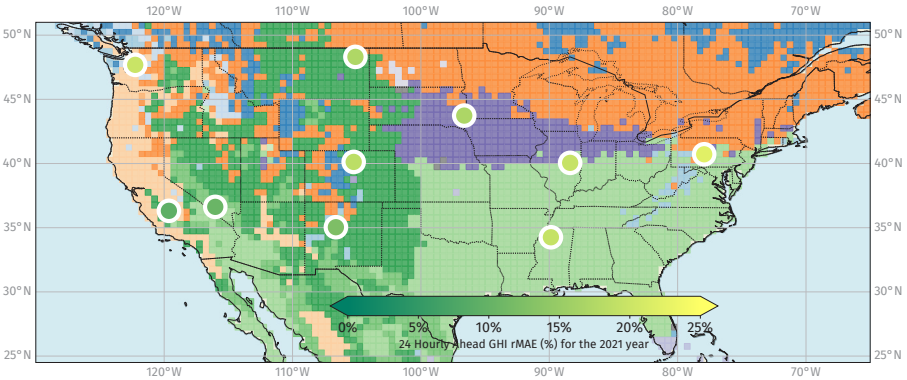
1-minute resolution
High-resolution forecasts reflecting cloud motion modeling technology

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	*Quick start* **Basic solar and power forecasts for DER and grid operational insights** Support DERMS, ADMS and commercial operations	*High accuracy and availability* **Industry leading forecasting for delivery prediction and flexibility** Bid into day-ahead energy markets Meet utility PPA requirements	*Advanced precision and functionality* **The most accurate data for maximizing profits** Inform real-time energy trading	*Test Forecast with historical data* **Test the Standard Forecast model using site-specific historical data** Forecast validation and trialing
Numerical Weather Prediction Models (NWP)	✓	✓	✓	✓
Satellite Cloud Motion		✓	✓	
Intelligent Model Blending		✓	✓	✓
High Resolution (1-minute) Data			✓	
Delivery	API only	API, SFTP or email	API, SFTP or email	User Interface or API
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
Geography[1]	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	**Irradiance** GHI DNI DHI	**Weather** Temperature Wind speed Snow depth[2] Relative humidity[2] Liquid precipitation[2] Solid precipitation[2]	**Power Modeling** AC energy (kWh) AC power (kW) DC power (kW) Snow losses Bifacial PV Clear sky power (kW)	Plane-of-array irradiance (POAI) Capacity derate scheduling Fixed tilt, single-axis trackers, backtracking

[1]Learn more about SolarAnywhere geographical coverage at solaranywhere.com/support/geographic-coverage
[2]Field availability dependent on license type

Learn More

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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

