

CUSTOMER BRIEF: OMNIDIAN

How Omnidian's Solar Performance Guarantee Is Built to Scale

Learn how Omnidian® uses best-in-class machine learning tools and SolarAnywhere® real-time data to automate O&M

Challenge

Solar assets aren't a set-and-forget solution, but Omnidian makes it feel that way. During their 20-plus year lifecycles, PV systems require maintenance to ensure optimal performance. Omnidian removes that burden from solar owners, operators and investors with 24/7 monitoring, servicing and a performance guarantee.

Using advanced software, machine learning and irradiance data, Omnidian automatically identifies underperforming systems and dispatches on-site services accordingly. High-quality irradiance data is critical to detecting performance issues by benchmarking actual against expected energy production.

Solution

The standard datasets used to benchmark solar performance include typical meteorological year (TMY), on-site meteorological measurement equipment, nearest neighbor and real-time satellite data. Each has pros and cons, but real-time satellite data offers significant benefits for an automated software system. Omnidian uses SolarAnywhere® SystemCheck®, the best-in-class satellite-based solar resource data service from Clean Power Research.

Omnidian chose SystemCheck over other data options for its consistency, high resolution (1 km precision, near real-time refresh rate) and accuracy. In addition, SolarAnywhere was affordable (significantly less expensive than on-site equipment) and able to integrate with their monitoring software via a powerful and well-documented API.

Results

With SystemCheck, Omnidian can detect PV performance issues in real-time with high confidence. Knowing their benchmarking data is consistent, reliable, cost-effective and global enables Omnidian to efficiently scale their business. Furthermore, by using SystemCheck in combination with machine learning, Omnidian has made it possible to rapidly diagnose the reason for PV asset underperformance. The intelligent alerts generated by their software using these diagnostics are more actionable, drive faster field technician responses, improve prioritization and avoid unnecessary truck rolls.



Omnidian was founded by solar industry veterans to provide end-to-end peace of mind for owners of residential and commercial solar energy systems and portfolios. Omnidian's state-of-the-art proprietary technology provides 24/7 monitoring and real-time system diagnostics for more than 1.5 GW of energy generation. Proactive service alerts, live customer support and field service give Omnidian customers a hassle-free ownership experience and guaranteed return on investment.

"Because of the way SolarAnywhere SystemCheck data is consistently derived across the entire U.S., the actionable intelligence built into our machine learning models carries a high degree of confidence—and that radically simplifies our development process and ability to deliver high value to the customer."

— Jeff Berg
V.P. of Engineering, Omnidian

For more information about Omnidian, visit www.omnidian.com

SolarAnywhere supports the entire solar lifecycle—from prospecting and development, to asset management and production forecasting. To learn more about industry-leading data and intelligence services from Clean Power Research, [contact us](#).