

**IHI Terrasun Solution, Inc.** is a solar + storage system integration and lifecycle services provider with highly-integrated hardware and software capabilities.

To date, Terrasun has 320+ MWh of energy storage projects installed, contracted, and in construction across North America. Terrasun's solutions are baked by a strong warranty and performance guarantee. With 167-years of technology experience from IHI Corporation and a skilled team, Terrasun enables customers to exceed their energy goals and maximize return on investment.

## Sample projects:



### ATHOL, MA Clearway Energy Group

**Size:** 4MWh ESS/3.3MW solar **Use case:** MA SMART, peak shifting, grid reliability, rapid ramping support

**IHI's scope:** Energy storage system integration, controls, safety & thermal design, O&M services, guarantee



### SARNIA, ON Convergent Energy + Power

Size: 10MW/20MWh
Use case: Reduce Ontario
Global Adjustment charge
IHI's scope: Hardware, control
platform and autonomous
operation, system integration,
O&M services, guarantee



## BRAINTREE, MA (BELD) Borrego Solar

Size: 2MW/4MWh

**Use Case:** Renewables support,

peak load reduction

**IHI's scope:** Control platform and autonomous operation, system

integration







## MegaWatt

The mega-watt solution seamlessly integrates AC and DC coupled solar + storage projects. These boutique projects depend on the ability to capture revenue in multiple use cases including solar generation shifting, participation in wholesale capacity markets, providing peak capacity for incentives such as the MA Clean Peak Standard or Ontario Global Adjustment, and more. Terrasun designs MegaWatt projects with robust hardware architecture and software reliability to exceed customers' needs. Includes NY, MA, Ontario, CA, TX and additional markets where solar + storage projects are developed with structured incentives.

## **GigaWatt**



The giga-watt solution is an adaptable solution for large scale energy storage with power plant ready controls. Large scale projects depend on competitive financials and highly available system operations for success, making Terrasun's technology-agnostic approach integral to the GigaWatt offering. Terrasun designs GigaWatt projects with robust hardware architecture and software reliability to exceed customers' needs. The GigaWatt solution offers financial and technological flexibility for a long-lasting, robust, and reliable project. Includes projects in NY, CA, Southwest states including NV and AZ, HI, desert large-scale solar, and more.







## **DC-Coupled Solar + Storage**

Terrasun's DC-coupled architecture offering is grounded in four key capabilities. Each core capability is supported by software, hardware, and services developed by Terrasun to provide customers with DC-coupled systems that capture the most value possible.

Flexible and robust system architecture with multiple dc-converter vendors and reverse current risk mitigation

DC-coupled architecture supports multiple market requirements

High system efficiency with industry-leading clipped capture capabilities and dynamic dispatch

Control testing in IHI's lab enables configuration testing for multiple vendor combinations to simplify field commissioning



# **Utility Scale Storage**

Utility scale storage comes with a specific set of challenges. Terrasun's solution provides core capabilities supported by hardware, software, and systems designed for large scale storage to create lasting utility-scale systems.

Robust power plant control with compliant, integrated utility scale SCADA system and robust cyber security

Modular and vendor-agnostic design for efficient augmentation and aux power management

Data driven long-term warranty management with remote software upgrades

165 years and 81GW of large-scale project execution experience with Terrasun's parent company, IHI Corporation



IHI Terrasun Solutions, Inc. takes pride in a customer-centric approach. The company is solutions and technology driven, providing solutions to meet any project need with truly interconnected hardware and software. Terrasun is committed to providing customers with relaible and safe systems that can meet all project goals.



#### **Customer focused**

Consistently excellent customer experience with a commitment to long-term success and relationships.



#### Solutions driven

Uniquely configured solutions designed to meet any project need and creatively resolve challenges



#### Reliable

Safe systems designed for longterm value, high ROI, and lowest lifetime management cost



#### Technology driven

True interconnection of hardware and software through system design and implementation

## **Contact Us:**

To learn more about this project and Terrasun's advanced software and solutions, reach out to the sales team. With expert engineers and a suite of offerings that can be tailored to fit specific projects, IHI Terrasun Solutions, Inc. is ready to create the ideal energy storage solution for your needs.



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