



# Shoals Power Hub

OUR BESS RECOMBINER FOR CRITICAL INFRASTRUCTURE



As data center energy demand accelerates, driven by AI and high-density compute, developers face growing pressure to deliver reliable power at speed. Grid constraints, interconnection delays, and evolving architectures are driving the need for more flexible, resilient solutions.

Battery energy storage (BESS) is central to this shift, enabling power quality, grid interaction, and faster time to power. Shoals' Power Hub complements these systems by simplifying power distribution, while delivering standardization, scalability, and flexibility across modern data center infrastructure.

## What Is Shoals Power Hub?

Shoals Power Hub is designed to combine direct current (DC) inputs from multiple sources, enabling BESS charging and discharging to deliver consistent, reliable power to the grid. It allows BESS to function as both backup support and an active asset for power quality, load balancing, and grid interaction.

Leverage Shoals' expertise in solar and storage infrastructure to optimize your data center projects, reduce risk, and maximize the value of energy assets. Future-proof your facilities with faster deployment, enhanced reliability, improved cost efficiency, and long-term performance.



## How Does Shoals Power Hub Work?



Shoals Power Hub collects and combines DC inputs from battery storage systems, solar combiner boxes, gas generation, and other microgrid components into a single or multi DC output.



It enables optimized site layouts, reduces inverter count, and enhances safety by protecting critical infrastructure and maintenance personnel while lowering operational risk.



Available in 1200A, 2000A, and 4000A configurations, it supports up to 24 circuits with customizable fuse ratings. Optional input-side disconnects and contactor controls provide flexible operation, with multiple cabinet configurations to meet diverse project needs.



Facilitates bidirectional power flow between batteries and PCS, supporting grid-forming and grid-firming behavior, ride-through capability, and backup power during outages.



Offers a customizable, scalable platform, including standard, tailored, and skidded solutions, providing flexibility and confidence in system design and future expansion.

## Key Benefits

-  **Simplify design and reduce project risk**  
Streamline project layouts with a standardized framework that helps reduce connection points, minimize equipment, and lower margin for error through factory-built quality.
-  **Accelerate deployment and lower costs**  
Enable faster installs and shorter timelines with configurable solutions that reduce onsite labor, mitigate interconnection delays, and lower total system costs.
-  **Ensure quality and durability**  
Build with high-current solutions engineered in-house and tested beyond industry standards, including by NREL, for proven long-term reliability.
-  **Deliver scalable, future-ready infrastructure**  
Leverage modular, configurable solutions designed to grow with demand while maintaining long-term performance and operational flexibility.
-  **Enhance power quality and performance for AI workloads**  
Stabilize power delivery under dynamic load conditions, managing spikes and fluctuations to support consistent high-density compute performance.
-  **Streamline sourcing and support sustainability**  
Partner with a single trusted supplier while optimizing material use, reducing waste, and improving overall system efficiency.
-  **Enable flexible, grid-interactive energy strategies**  
Support bidirectional power flow, grid-forming and firming capabilities, and both behind-the-meter and grid-facing applications as energy needs evolve.
-  **Improve reliability and resilience**  
Strengthen uptime with integrated backup support, ride-through capability, and stable operation in mission-critical environments.
-  **Withstand extreme fault currents**  
Support up to 250 kAIC at very fast time constants, enabling highly configurable system architectures with potential for even higher ratings.

## Why Shoals?

-  **Extensive high-voltage DC power expertise**  
Since 1996, Shoals has led the 1500 V renewable energy space with cutting-edge technologies and power distribution solutions for DC architectures.
-  **Leader in EBOS and power distribution solutions**  
Configurable, plug-and-play systems reduce material, labor, installation, and O&M costs across the system lifecycle.
-  **Engineering capabilities and long-term care**  
Our engineering and customer care teams offer continuous support to optimize your energy storage installations' layout and performance.
-  **Both standardized and configurable solutions**  
We offer standard options or collaborate with you to customize our solutions to meet your data center project's unique needs.
-  **Directly involved in shaping industry standards**  
Our partnership with SEIA and ACP ensures that we shape the regulatory landscape and future standards for solar and storage technologies.
-  **Simplified procurement**  
We offer an extensive portfolio of power distribution solutions for all your BESS and other critical energy infrastructure needs.
-  **Innovation is in our DNA – Inventing Simple**  
With 67+ patents worldwide, we keep innovating to meet the evolving needs of critical power infrastructure.
-  **Proudly made domestically, in Tennessee**  
Our products are manufactured locally to ensure quality, precision, and reliability.

## Contact Us

[Talk with Shoals](#) about your data center goals. Share your drawings to discover Shoals Power Hub and our other battery storage and power distribution solutions.

