



Powering the Future of Data Centers with Eos Z3 Energy Storage



Eos At a Glance

Eos is an American energy company and the world's leading innovator in designing, manufacturing, and providing static non-flow zinc-based long duration (4-16+ hours) battery energy storage systems ("BESS"), sourced and manufactured in the United States.

- + **U.S.-Based Innovation:** Headquartered in Edison, NJ with manufacturing in Turtle Creek, PA
- + **Established Track Record:** Founded in 2008 with 500+ employees, led by 30+ year veteran in the energy industry who served as CEO of GE's Power Conversion Business and CEO of Gas Power Systems for GE Power
- + **Proven Technology:** Leading provider of non-flow, zinc-based long-duration, (4-16+ hours) battery storage systems
- + **Lithium-Free Alternative:** Safe, non-flammable, flexible, and sustainable—ideal for utility-scale, microgrid, and C&I use
- + **Federal Backing:** First non-lithium-ion battery manufacturer to close a Title XVII DOE Loan—\$303M committed
- + **Private Equity Support:** \$315M commitment from Cerberus Capital Management, \$210.5M funded as of Jan 2025
- + **Real-World Impact:** More than 5 GWh of discharged energy delivered to customers

The Data Center Challenge

The U.S. is at an inflection point for grid resilience given rising energy demand to support data centers, AI, and the EV transition. **Energy storage is essential.**

Land and infrastructure limitations restrict expansion

- + **Power grid capacity and land availability** limitations have led to developers pursuing off grid or bridge to interconnect developments with mixed fuel generation to reduce time to firm power

Grid capacity constraints limiting site development

- + The **rapid deployment** and significant energy demand of data centers pose challenges for utilities requiring developers to offset and stabilize large loads

Unpredictable AI workloads and constant uptime requirements

- + **AI applications** require fast response to mitigate large, unpredictable load fluctuations due to increasing chipset capabilities

National security concerns tied to Chinese supply chain

- + Chinese technology being used in the U.S. grid, including military bases, can create **national security vulnerabilities**

Eos Provides Differentiated Performance for Data Centers

Ensures maximum energy efficiency to maximize computing capacity needed for data centers



Data Center **Purpose-Built for Data Centers**

- + Specifically designed to handle complex duty cycles and ensure uninterrupted power delivery
- + Supports multiple and partial daily cycles, ideal for peak shaving, solar shifting, and energy arbitrage

Lower Total Cost of Ownership

- + Enables multi-cycling from a single CapEx investment—reduces levelized cost of storage by up to 30%
- + Designed for long-duration discharge—aligns with renewable generation and time-of-use pricing to lower total electricity costs by up to 50%

Superior Efficiency & Safety

- + Requires only 1–2% auxiliary power
- + Avoids the need for complex cooling systems—reducing fire risk and power loss
- + Provides ~3.5% more computing capacity annually due to lower internal power draw

Durable and Sustainable

- + Minimal system degradation over time—no need for augmentation every 5–10 years
- + Delivers ~50% lower operating costs than market average over the asset's lifetime
- + Well-suited for data centers with aggressive sustainability and renewable integration goals

The Result:

- + More uptime, lower costs, and safer, cleaner power for mission-critical infrastructure

Eos Capability	Data Center Needs	Eos Impact
Multiple Cycles per Day	Lower total energy costs	30%+ LCOS Higher energy output on same capex investment 
8+ Hours Discharge	Peak load mitigation	 Up to 50% Total electricity costs
Low Auxiliary Power	Maximize power for computing	3.5% Annual computing 
Low System Degradation	Stable 24/7 power supply	 50% OPEX Cost No system augmentations required