

A photograph of a long, brightly lit aisle in a data center. On both sides are rows of server racks with glowing lights. The floor is highly reflective, mirroring the racks and lights. In the distance, a door is visible at the end of the aisle. Small signs with labels like "A3", "B3", "A4", and "B4" are visible on the ceiling.

NexEnergy: Powering the Future of AI and Critical Infrastructure

Overview

Data centers are the backbone of the digital economy and the rise of AI, cloud and mission critical infrastructure is pushing power systems to their limits.

- AI workloads create unpredictable spikes in demand, requiring instant power availability.
- Diesel generators are costly, polluting and unable to scale fast enough for hyperscale loads.
- Lithium-ion batteries degrade quickly, require cooling, and pose fire risks.

NexEnergy delivers the next generation of long-duration storage engineered to meet the unique challenges of AI-driven data centers, hyperscale expansion, and mission-critical infrastructure.

Our Portfolio for Data Centers & Critical Infrastructure

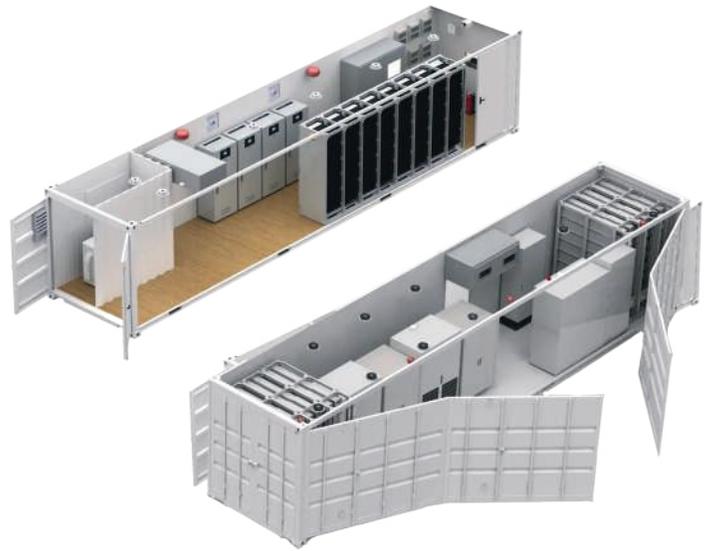
NexPack

Containerized Solutions

Mobile or fixed MW-scale containerized storage, nanosecond response, multi-hour backup, scalable from kWh to multi-MWh. Ideal for AI clusters and hyperscale sites.

FEATURES

- Available in DC or AC-coupled variants
- 20ft & 40ft ISO container options.
- Smart EMS + Remote Monitoring



NexRack

High-Density Rack Storage

Compact rack-based system for UPS backup, 85% smaller footprint vs VRLA/Lithium, no cooling required, modular and hot-swappable. Built for dense AI training halls.

FEATURES

- Plug-and-play design
- Scalable up to 100 kWh+
- Rack-mounted EMS integration
- Minimal cooling requirements

NexWall

On-Site Distributed Storage

Wall-mounted distributed systems for modular data halls and edge facilities, providing resilience for financial services, healthcare, and telecom infrastructure.



Key Value Propositions for AI & Data Centers

- Unmatched Longevity**
 25-year lifespan, >500,000 cycles, zero degradation (ideal for continuous AI workloads).
- Instant Response**
 Nanosecond switching, up to 12C discharge for UPS ride-through and GPU cluster protection.
- Safety First**
 No thermal runaway, no chemicals, fire-safe operation lowers risk and insurance costs.
- Scalable Design**
 From rack to container, deployable across hyperscale, colocation, and edge environments.
- Extreme Conditions Ready**
 Operates from -30°C to +65°C with no cooling load, avoiding additional HVAC strain.
- Lowest LCOS in the industry**
 Reduces OPEX vs diesel and lithium solutions.
- Sustainability & ESG Compliance**
 Eliminates diesel emissions, enables carbon-neutral AI growth.

Addressing Today's Biggest Challenges

Challenge	With Diesel	With Lithium BESS	With NexEnergy
Uptime & Response	Minutes to start	Seconds	Nanoseconds, instant switchover
AI Workload Readiness	Not scalable for GPU clusters	Degrades under continuous cycling	500,000+ cycles AI-ready
Lifespan	10-15 years	7-10 years (with degradation)	25+ years, no degradation
Fire & Safety	Fire/fuel risks	Thermal runaway, fire hazard	No fire risk, chemical-free
Cooling & Energy Use	Not applicable	Requires HVAC load	No cooling required
Carbon Emissions	Very high	Medium	Zero
OPEX	High (fuel + maintenance)	High (cooling + replacements)	Low (maintenance-free)

Powering the AI Era

AI training and inference workloads drive 10–50x higher power density than traditional data halls. NexPack and NexRack are designed for continuous cycling, instant switchover and multi-hour capacity, making them the ideal solution to power GPU clusters without interruption.

Trusted for Critical Infrastructure

From hyperscale data centers to hospitals, financial institutions, telecom hubs, and defense sites, NexEnergy delivers mission-critical reliability. Unlike lithium, which requires regular replacement, NexEnergy offers a true 25-year solution with no degradation, ensuring uninterrupted power for the world's most essential facilities.

Proven in the Field

- Data Centre (EU): 1MW load, NexPack replacing genset reliance.
- Data Centre (Canada): NexRack replacing VRLA UPS systems.
- Automotive Facility (LATAM): NexRack reduced outages, stabilized systems, and cut electricity bills by 95%.
- ADNOC Drilling Rig (UAE): Hybridization eliminated one of four gensets.

Why NexEnergy?

- Only electrostatic storage provider with field-proven deployments worldwide.
- Designed for AI-driven workloads, hyperscale expansion, colocation growth, and critical infrastructure.
- Delivering safe, sustainable, and cost-efficient alternatives to diesel and lithium.

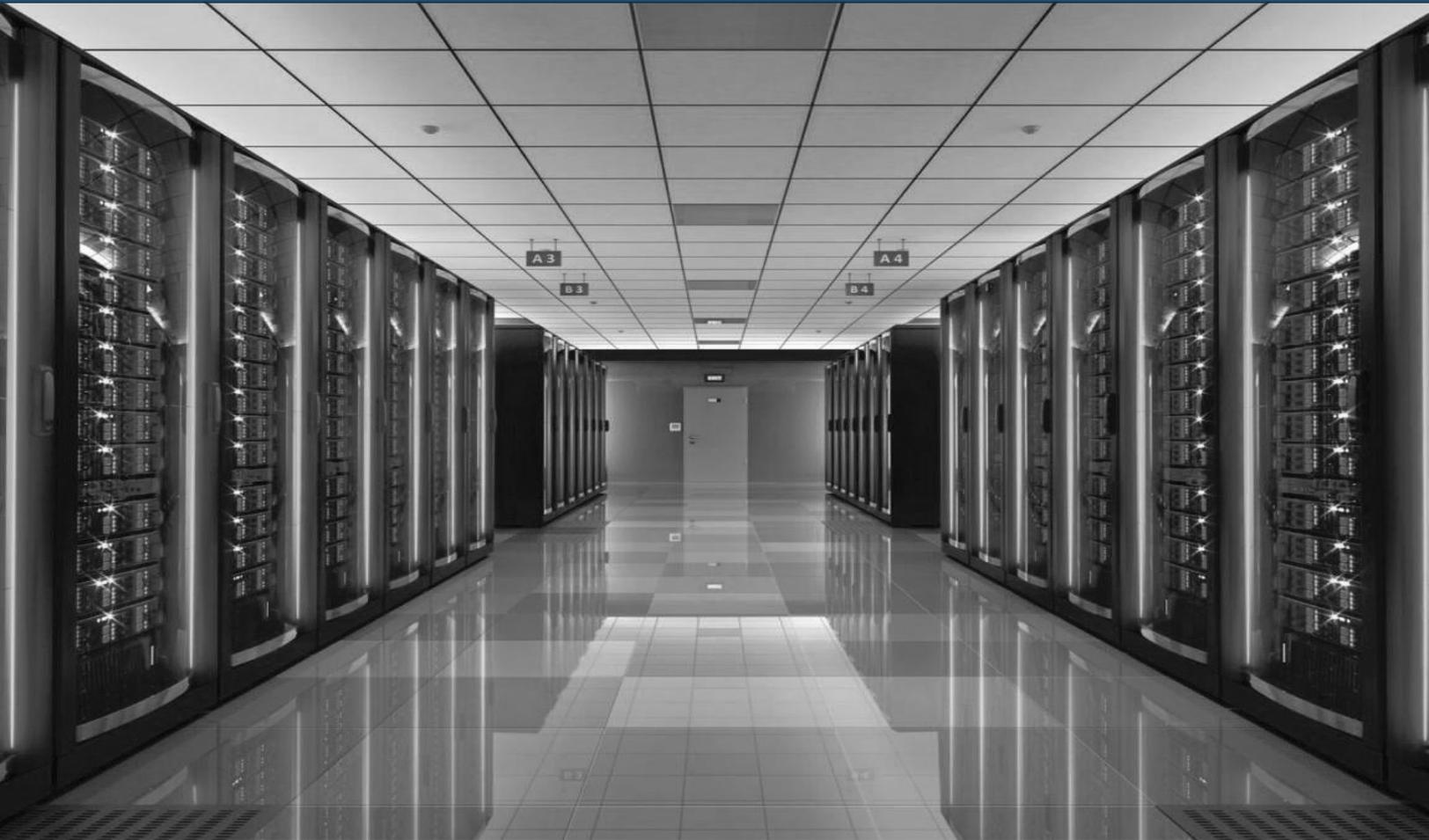
NexEnergy is powering the AI era and safeguarding critical infrastructure where uptime, efficiency, and sustainability are non-negotiable.



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