

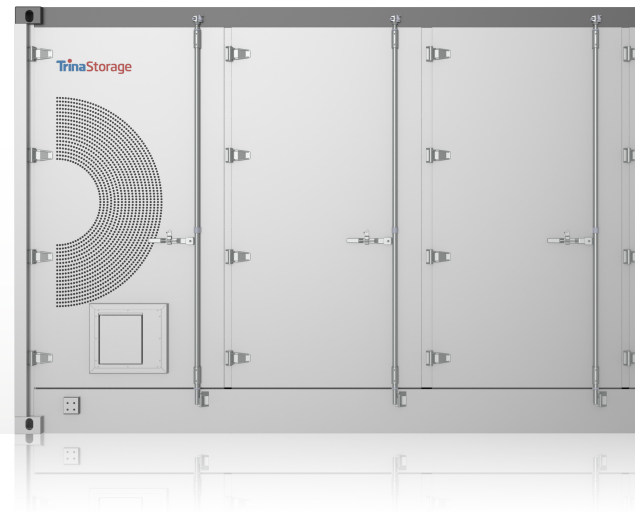
Elementa 3



THE FULL-SCALE UPGRADE TO THE ELEMENTA 3

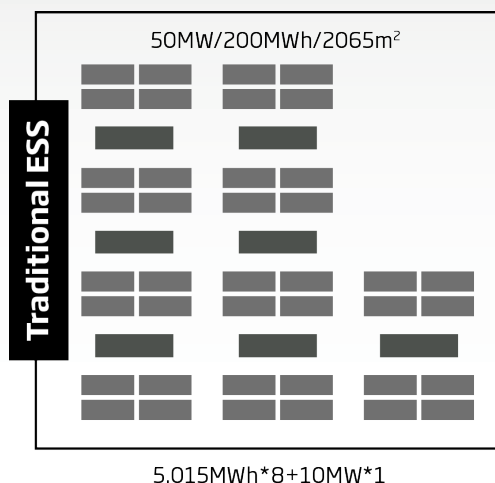
Elementa 3 moves beyond individual cell energy density, with a focus on holistic system-level innovation via spatial optimization and integration to boost overall density.

ENGINEERED FOR MARKETS. BUILT FOR PERFORMANCE



- Upgraded Cell**
314Ah **>587Ah** **↑87%**
Capacity Increase
- Upgraded Module**
Module **>Module Pro** **↑12.3%**
Energy Density Increase
- Upgraded Cabinet**
5,015MWh **>6.25MWh** **↑24.6%**
Capacity Increase

Compact container design improves the space utilization of products and reduces the CapEx:



VS



- 20%**
Site Area Reduction
- 20%**
Cable Length Reduction
- 24.7%**
Site Energy Density Increase



Enhanced Efficiency

- High-performance 587Ah cells with an industry-leading 417Wh/L energy density.
- Advanced intelligent temperature control maintains cell $\Delta T \leq 2.5^{\circ}\text{C}$, ensuring thermal stability and efficient operation.
- Chip-level active balancing technology, supporting flexible current adjustment to achieve 96% balancing efficiency and significantly extending overall throughput.



Smart O&M

- The two-way stop valve streamlines O&M maintenance procedures, improving efficiency and reducing downtime.
- Module dispersible tooling reduces maintenance time by 50%.
- Efficient upgrades enable seamless system optimization, minimizing operational disruptions and maintenance costs.



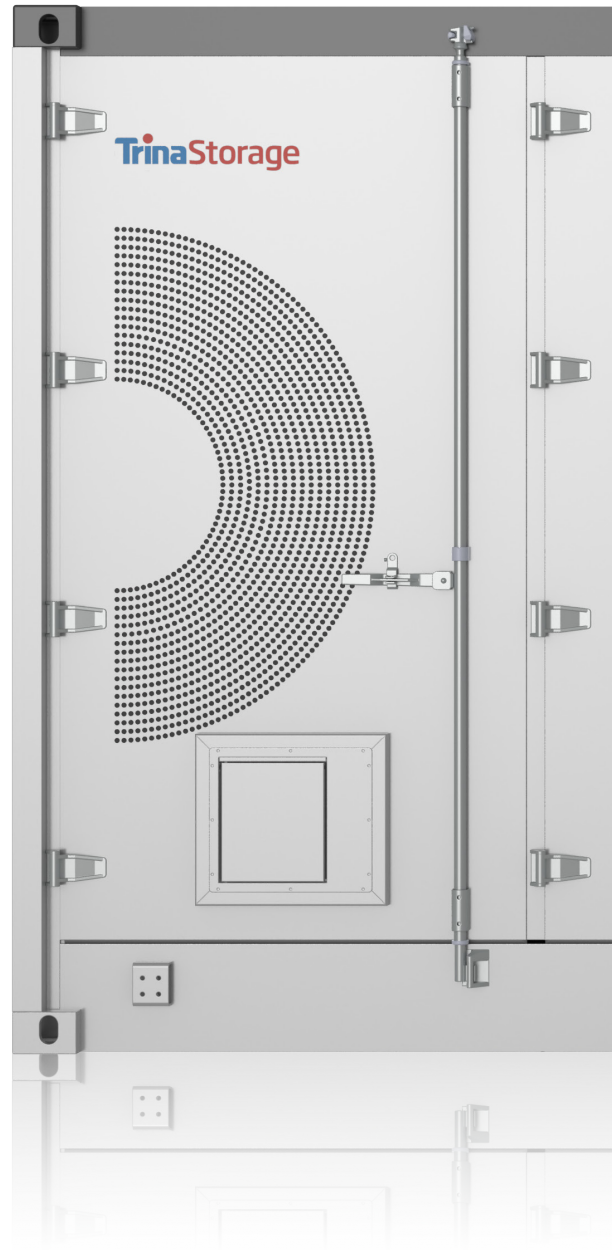
Improved Flexibility

- Advanced high-temperature refrigerant technology ensures peak performance in extreme heat up to 55°C , enhancing system reliability.
- Engineered for extreme conditions and uninterrupted operation, withstanding dust storms, extreme temperatures, salt mist, earthquakes, and high humidity, moisture, and altitudes.
- Multiple system configurations for diverse applications, with dual DC outputs that enhance operational flexibility and integration options.



Comprehensive Safety

- EV-grade cells with rigorous testing for intrinsic safety.
- Millisecond-level early warning system with 1:1 NTC monitoring, enabling proactive risk detection and enhanced safety.
- Top-tier UL94-5VA flammability-rated modules provide rapid hazard suppression, effectively preventing thermal propagation.
- Sandwich-type composite wall with 2-hour fire resistance delivers ultimate protection in critical scenarios.



Bionic Cooling System

Designed to maintain temperature difference less than 2.5°C , Trina Storage's superior thermal management capability has been awarded the industry's first UL Vmark verification.



MASSACHUSETTS

BESS Projects Strengthening Grid Resilience

CASES OF BATTERY ENERGY
STORAGE PROJECTS

**Operational – 1GWh+
In Development**

Five operational BESS projects totaling around 19MW systems in the communities of Wakefield, Groton, Holden, and Paxton, MA. Two of the four sites delivered ahead of schedule during Northeastern US summer heatwaves, as electricity demand peaked. Trina Storage has expanded this strategic partnership to supply more than 1GWh of ESS equipment.



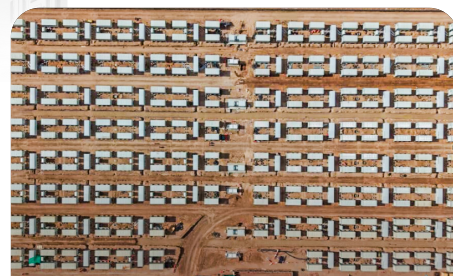
TEXAS

Houston Battery Energy Storage Project

CASE OF INDEPENDENT ENERGY
STORAGE PROJECT

160MW / 320MWh

This project plays a key role in enhancing grid flexibility and supporting the integration of renewable energy. This project underscores Trina Storage's commitment to driving energy transition and providing innovative storage solutions.



CHILE

BESS Arena Independent Energy Storage Power Station Project

CASE OF INDEPENDENT ENERGY
STORAGE PROJECT

400MW / 1200MWh

Trina Storage developed a high-durability desert solution for Elementa 2 to withstand the Atacama Desert's extreme heat and sandstorms, ensuring reliable performance and lower lifecycle O&M costs.

TrinaStorage

www.trinasolar.com/us/elementa3