

TrinaStorage Elementa 3 Flex

Preliminary

1.56 MWh

587Ah Battery Cell



Improved Flexibility

- 13-ton lightweight design enables global access and ensures efficient delivery across all scenarios
- The small-capacity modular design reduces DC over-sizing, supports flexible future augmentation, and minimizes lifecycle costs
- With an optimized structural design, operating noise is reduced to as low as 65 dB, making the product appropriate for residential area
- Flexible BESS solution enables support for multiple power rate PCS to make rich AC solution
- Five-dimensional hardcore protection, fearless in the face of extreme challenges, adaptable to various complex scenarios



Enhanced Efficiency

- High-performance 587Ah cells with 12,000 lifecycles
- 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, which supports flexible adjustment of balancing current and achieves 96% balancing efficiency, significantly extends the overall throughput
- The small size enables deployment on irregular terrain and solves on-site assembly challenges
- Independent cabinet design enables cell precise fault isolation, significantly improving the overall availability



Comprehensive Safety

- Passing the EV-graded cell safety abuse tests
- Top-tier UL94-5VA flammability-rated modules provide rapid hazard suppression, effectively preventing thermal propagation
- Ultra-thin Nano-insulation, with excellent heat resistance and insulation properties, effectively suppresses heat dissipation, ensuring system safety and reliability
- Sandwich-type composite wall with 2-hour fire resistance delivers ultimate protection in critical scenarios



Smart O&M

- The two-way stop valve streamline and module dispersible tooling reduces maintenance time by 50%
- One-click software upgrades enable seamless system optimization, minimizing operational disruptions and maintenance costs

Elementa

 **Technical Data**

Battery Parameters

Cell Type	3.2V,587Ah
Battery Configuration	416S2P
Nominal Capacity	15628kWh
Typical Operational Duration	4hours
Nominal Voltage Range	1123.2V - 1497.6V

System Parameters

Dimensions (W*H*D)	2000*2500*2550mm
Weight	~13T
Degree of Protection	IP55-Excl.TMS (Temperature Management System) IP67-Module
Operating Ambient Temperature	-35°C-55°C
Altitude	4000m
Cooling Mode	Liquid Cooling
Fire Safety	Dry pipe, Heat and smoke sensors, Gas sensor and active ventilation system, Automatic aerosol-based fire suppression system, Fire resistant enclosure (2h Optional), Deflagration panel (Optional)
Anti-corrosion Design	C4 (C5 Optional)
Noise	≤65dB (35°C)
Communication Protocols	CAN/RS485/Ethernet
Standard	IEC61000-6-2/4, IEC62477-1, IEC62619, IEC62933-5-2, UL1973, UL9540, UL9540A, JISC 8715-2, JC-Star, Fire Safety Report No. 200 (Material Fire Resistance).

