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Storage

Elementa 3

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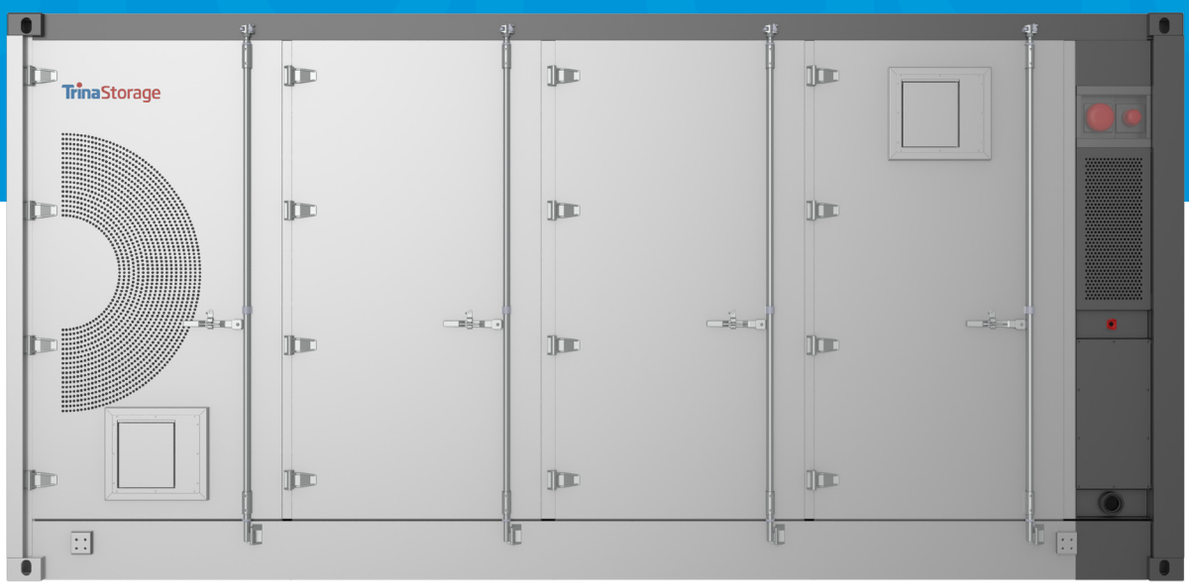
6.25 MWh | 587 Ah Battery Cell



Enhanced Efficiency

- High-performance 587Ah cells with an industry-leading 417Wh/L energy density
- Optimized space effciency, featuring top-mounted cooling chillers that increase site energy density by 24.7%, maximizing land utilization
- Advanced intelligent temperature control maintains cell ΔT ≤2.5℃, 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

Improved Flexibility

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

Smart O&M

- The two-way stop valve streamline maintenance procedures, improving efficiency and reducing downtime
- Module dispersible tooling reduces maintenance time by 50%
- One-click upgrades enable seamless system optimization, minimizing operational disruptions and maintenance costs

Comprehensive Safety

- EV-grade battery cells undergo rigorous abuse testing, ensuring intrinsic safety and long-term reliability
- Electrolyte leakage sensor with 20% higher sensitivity,detects leaks early and provides ultra-early warning of thermal runaway in battery cells
- 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
- Electrical protection with an emergency stop button enables millisecond-level fusing, offering robust electrical defense
- Sandwich-type composite wall with 2-hour fire resistance delivers ultimate protection in critical scenarios

Note: The Flyers should be as comprehensive and detailed as possible based on existing information. The Company reserves the right to modify the data, parameters, and other information in this Brochure. The right of nal interpretation shall belong to Jiangsu TrinaStorage Co., Ltd.

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TECHNICAL DATA

BATTERY PARAMETERS

Cell Type	3.2V, 587Ah
Battery Configuration	416S8P
Nominal Capacity	6250 kWh
Typical Operational Duration	2-8 hours
Nominal Voltage Range	1123.2V - 1497.6 V

SYSTEM PARAMETERS

Dimensions (W*H*D)	6058*2896*2438mm (Standard 20ft High Cube Container)
Weight	~47 T
Degree of Protection	IP55-Excl.TMS (Temperature Management System) IP67-Module
Operating Ambient Temperature	-35°C - 55°C
Altitude	≤4000 m
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	≤75dB (35°C) ≤65dB (Optional with noise mitigation kit)
Communication protocols	CAN/RS485/Ethernet
Standard	IEC61000-6-2/4, IEC62477-1, IEC62619, IEC62933-5-2, UL1973, UL9540, UL9540A.

Note: Please read the safety and installation instructions before using this product.
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