

CAES 3.4M CONTAINERIZED BESS

Container Energy Storage Solution

The CAES 3.4 M Containerized Energy Storage Solution is a rapidly deployable and scalable 20-foot container solution engineered for high-energy density, high-capacity energy storage and dispatch. It features exceptional round-trip efficiency, integrated fire suppression, and advanced thermal management.



FEATURES

HIGH ENERGY DENSITY

- 20-ft container with advanced liquid thermal management.

EXCEPTIONAL EFFICIENCY

- Up to 96% round-trip efficiency (RTE) for DC charge and discharge.

SCALABLE

- Configurable to meet power and capacity requirements and is simple to expand.

EASY INSTALLATION

- Scalable, customizable, and compatible with third-party SCADA and EMS systems.

RAPID DEPLOYMENT

- Preassembled, plug-and-play design for fast installation.

ENHANCED SAFETY

- Includes heat, smoke and gas detection, aerosol fire suppression, and active deflagration ventilation.

NFPA855

- System is 9540A tested to the current standards and compliant with NFPA 855 Standards.

PRODUCT SPECIFICATIONS

Model	CAES 3.4M		
Battery Chemistry	Lithium Iron Phosphate (LiFePO ₄)		
Energy Options	3.44MWh	3.09MWh	2.75MWh
Configuration	(384S1P x 10)	(384S1P x 9)	(384S1P x 8)
Continuous Power (Max)	1.7MW (180kW x 10) C/2		
Rated Output Voltage	1,075-1,400Vdc		
Cell Capacity	280Ah		
Maximum Discharge Current	173A (10 or 9 or 8)		
Operating Temperature	-30°C to 55°C (-22°F to 131°F)		

MECHANICAL SPECIFICATIONS

Product Dimensions (WxDxH)	6.1 × 2.5 × 2.9 m (20 × 8 × 9.5 ft)
Weight	36,000kg (79,200lbs)
Material and Finish	Steel - Corrosion Resistant Powder Coat
Thermal Management System (TMS)	Integrated Liquid Chiller/PTC System
Cooling Method	Liquid Cooling
Ingress Rating	Outdoor IP55 (NEMA 3R)
Communication	CAN, RS485, TCP/IP

SAFETY AND STANDARDS

Certifications	UL1973, UL9540A, IEC62619, IEC62933, IEC61000
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WARRANTY

Base Performance Warranty	10 years
Warranty Extension	10 years, 15 years, 20 years

APPLICATIONS

Industrial Self-Consumption (Arbitrage). Store energy while demand is low or when renewable output is high and discharge it during peak demand.

Grid Stabilization. Integrate renewables by delivering energy rapidly to balance supply and demand and stabilize frequency.

Microgrid & Off-Grid Support: Enable microgrids and remote off-grid systems with reliable energy storage.

EV Charging Support: Expand EV charging infrastructure by storing energy on-site without upgrading the utility service connection.