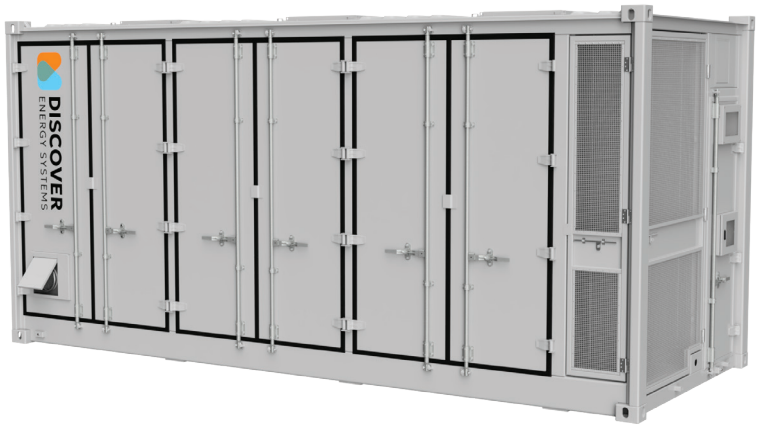
DISCOVER ENERGY SYSTEMS

CAES

CONTRAINERIZED BESS

Container Energy Storage Solution

The CAES system is a turnkey, high-capacity 20-foot container designed for rapid deployment and scalable energy storage. Engineered for high energy density and fast dispatch, it features integrated liquid thermal management, aerosol fire suppression, dry pipe connection, passive deflagration venting, and active ventilation. Ideal for industrial and utility-scale applications requiring reliable, resilient, and easily integrated storage.



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.

CUSTOMIZABLE
- Flexible design configuration with doors and thermal management systems positioned to suit installation requirements.

PRODUCT SPECIFICATIONS

CAES Configuration	2.5H-CAES	3.4H-CAES	4.2H-CAES	5.1H-CAES
Usable Energy	2.51 MWh	3.34 MWh	4.18 MWh	5.02 MWh
Continuous Power	1.25 MW	1.67 MW	2.09 MW	2.51 MW
Continuous Current	157 A			
Cells/Rack	416			
Racks	6	8	10	12
Nominal Voltage	1331.2 V			
Voltage (Max)	1476.8 V			
Voltage (Min)	1164.8 V			
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	24,000kg (53,000lbs)	30,000kg (66,000lbs)	36,500kg (81,000lbs)	43,000kg (95,000lbs)
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/Fiber Optic			

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 renewable by delivering energy rapidly to balance supply and demand and stabilize frequency.

Microgrid & Off-Grid Support: Enable micro-grids 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.

SAFETY AND STANDARDS

Certifications	UL1973, UL9540A, UL9540, IEC62619, IEC62933, IEC61000

WARRANTY

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

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