

AES CABINET ENERGY STORAGE SOLUTION

Energy Storage for Community, Commercial and Industrial Applications

This cabinet-based BESS delivers robust performance in a smaller footprint, ideal for commercial, industrial, and distributed energy projects—providing the versatility needed for industrial self-consumption, grid stabilization, microgrid/off-grid support, and EV charging infrastructure. A compact, modular cabinet solution engineered for 1500 VDC or lower applications. Designed for seamless integration with a wide range of advanced Power Conversion Systems (PCS), it offers a flexible, scalable approach to energy storage.



Battery Configuration	104S1P (2 packs @ 52S1P)	156S1P (3 packs @ 52S1P)	208S1P (4 packs @ 52S1P)	260S1P (5 packs @ 52S1P)	312S1P (6 packs @ 52S1P)	364S1P (7 packs @ 52S1P)	416S1P (8 packs @ 52S1P)
Battery Chemistry	Lithium Iron Phosphate						
Nominal Energy Capacity	106 kWh	160 kWh	212 kWh	266 kWh	318 kWh	372 kWh	426 kWh
Usable Energy Capacity	104 kWh	157 kWh	209 kWh	261 kWh	313 kWh	366 kWh	418 kWh
Battery Max. Continuous Power	52 kW	79 kW	104 kW	131 kW	157 kW	183 kW	209 kW
Round-trip Efficiency	94% (25°C, 0.5C)						
System Nominal Voltage	332.8 V	499.2 V	665.6 V	832.0 V	998.4 V	1164.8 V	1331.2 V
System Operating Voltage	312 - 358.8 V	468 - 538.2 V	624 - 717.6 V	780 - 897 V	936 - 1,076.4 V	1,092 - 1,255.8 V	1,248 - 1,435.2 V
Nominal Cell Capacity	320 Ah						
Usable Cell Capacity	314 Ah						
Max. Continuous Current	157 A (C/2)						
Internal Fuse Rating	315 A						

MECHANICAL SPECIFICATIONS

Product Dimensions (WxDxH)	1,300 x 1,300 x 2,374 mm (51 x 51 x 93 in)						
Net Weight	1,770 kg (3,990 lb)	2,130 kg (4,700 lb)	2,490 kg (5,490 lb)	2,850 kg (6,285 lb)	3,190 kg (7,050 lb)	3,570 kg (7875 lb)	3,930 kg (8675 lb)
Material and Finish	Steel - Corrosion Resistant Powder Coat						
Thermal Management System	Integrated Liquid Chiller/PTC System						
Max TMS Power Input	4.5 kW (Cooling) 3.5 kW (Heating)						
Coolant Type	50% Water / 50% Ethylene Glycol						
Chiller Refrigerant	R-513A						
Operating Temperature	-30°C to 55°C (-22°F to 131°F)						
Storage Temperature	-20°C to 45°C (0°F to 110°F)						
Relative Operating Humidity	0-95% (non-condensing)						
Ingress Rating	Outdoor IP55 (NEMA 3R)						
Noise Level @ 1m	≤ 75 dB						
Auxiliary AC Input	208/240 VAC Single Phase						
Certifications & Testing	UN38.3, UL1973, UL9540A, UL9540 DC ESS, IEC62619, IEC62933, IEC61000						

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.

FEATURES

Space-Efficient. High energy density cabinet with optimized thermal management.

Scalability. Configurable to meet power and capacity requirements, simple to expand.

High Efficiency. Up to 94% round-trip efficiency (RTE) for DC charge and discharge.

Enhanced Safety. Audible and visual alarms with E-stop, heat and smoke detection, aerosol fire suppression and passive deflagration vent.

Flexible Integration: Compatible with third-party PCS, SCADA, and EMS systems.

Durable and Long-Lasting: Engineered for a 20-year service life, designed for easy maintenance and serviceability.