

CESS

Energy-Type Containerized Battery Energy Storage System



PRODUCT DESCRIPTION

This series of ACE energy storage systems are mainly composed of the battery, battery management system (BMS), monitoring system, fire-proof system, temperature control system, and container auxiliary equipment. The product is applicable to power plants and power grids (grid side and user side) and can be customized according to actual requirements. This series can be used for 0.5C or lower charging/discharging current application scenarios.

PRODUCT FEATURES

- ◆ Highly integrated
- ◆ Highly reliable: employing high-security LFP batteries with 4-level management design, DC-side 3-level fuse protection, composite fire-proof design, pre-warning mechanism, and precise temperature control
- ◆ Improved efficiency: DC cycle efficiency $\geq 94\%$
- ◆ Modular and standard design
- ◆ Certification: IEC and UN (cell/ battery pack)

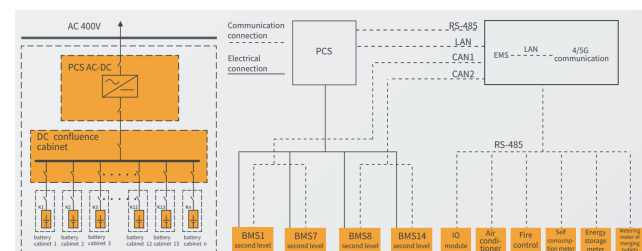
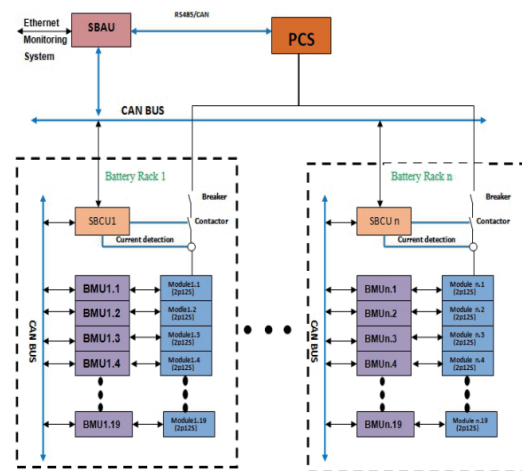
Shenzhen ACE Battery Co., LTD.

Add: Block B, BAK Industrial Park, Kuipeng Rd., Dapeng, Shenzhen, China
Tel: +86-755-8887 8567
Web: www.acebattery.com

APPLICATION SCENARIOS

- ◆ User-side peak shifting, demand control and demand response
- ◆ Power plant side peak shifting, new energy electricity generation and consumption, and electricity quality improvement
- ◆ Grid-side peak shifting, line loss reduction, and electricity quality improvement
- ◆ PV ESS integration and micro grid construction
- ◆ Emergency power backup

CIRCUIT TOPOLOGY





Energy-Type Containerized Battery Energy Storage System

Specifications

Item	Cell	Cell pack	Cell Cluster
Rated Voltage [V]	3.2	44.8	761.6
Rated Capacity [Ah]	280	280	280
Rated Energy [KWh]	0.896	12.544	213.248
Charge cut-off voltage [V]	3.65	50.4	856.8
Discharge cut-off voltage [V]	2.5	39.2	666.4
Max. Continuous Charge Current [C]	1	0.5	0.5
Max. Continuous Discharge Current [C]	1	0.5	0.5
Operating Temperature	Charge: 0~45°C Discharge: -20~60°C		
Dimensions (L*W*H) [mm]	173*71*200	504*230*686	1040*717*2290
Weight [Kg]	5.44	95±2	1800

	Features	Parameter
Environment Condition	Installation environment	Outdoor
	Ambient temperature	-20~45°C
	Humidity range	0~90%
	Altitude [m]	≤2000
AC Grid Connection Parameters	Connection mode	3 Phase/PE
	Rated voltage [V]	AC380/400
	Rated frequency [Hz]	50
	Power factor	±1
DC Side Parameters	Output harmonics	≤3%
	Nominal battery voltage [V]	729.6
	Battery voltage range [V]	DC666.4~856.8
Power / Capacity Parameters	Split type [kW/kWh]	250- 1260/500-2500
	All-in-one [kW/kWh]	250-630/500-2500
Other Parameters	Heat dissipation mode	Air conditioning cooling
	Noise	≤65dB
	Seismic grade	UBC Zone4
	Wind resistance grade	Category 15 hurricane
Standards and Certification	Battery	IEC62619, UN38.3, GB/36276
Size	40FT container (12192* 2438 * 2896mm)	