

Utility Energy Storage System

2.5MW/5MWh

Integrated AC+DC ESS



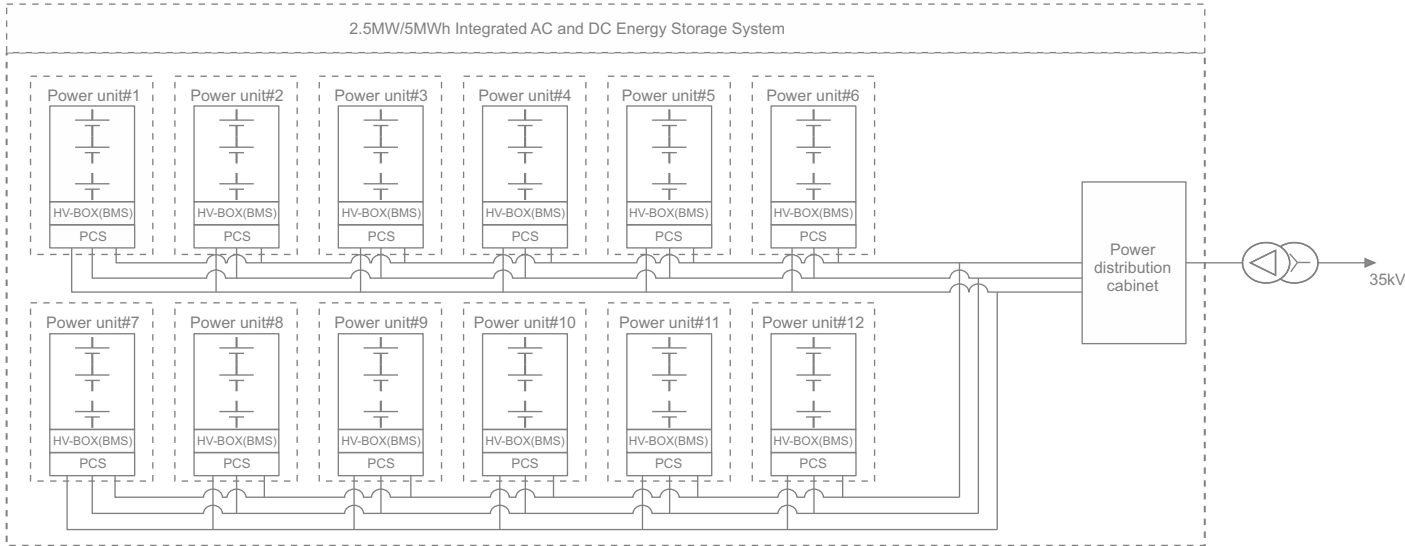
- The modular PCS solves the circulating current between battery racks

It increases energy density by 18%
- The discharge amount of the whole life cycle is increased by 6~8%, LCOE reduced by 3%~5%

It reduces the footprint by 30%
- 20' standard container

It reduces O&M time by 20%

Topology



Specification

MODEL	2.5MW/5MWh Integrated AC and DC Energy Storage System
AC-side	
Rated AC output power	2500kVA
Max. AC output power	2750kVA
Max. output current	2510A
Number of AC input	12
Rated output voltage	690V
Grid type	3P+PE
AC grid frequency	50Hz(45Hz~55Hz)
Grid voltage range	586.5V~759V
Power factor	>0.99(rated power)
Adjustable reactive power factor range	-1~+1
AC current distortion rate	<3%(rated power)
Isolation method	Non-isolated
DC-side	
Cell	LFP 3.2V/314Ah
System battery configuration	12P416S
Battery rated capacity	5015.96kWh
Battery voltage range	1123.2V~1497.6V
System parameters	
Dimensions(W×H×D)(mm)	6058x2896x2438
Weight	≤48T
Protection degree	IP54
Operating temperature range	-30℃~60℃
Operating humidity range	0%~95%(No condensation)
Max. operating altitude	4000m
Cooling method	Liquid cooling
Fire protection system	Flammable gas detection+active ventilation+PACK-level fire protection(optional)+water firefighting
System communication interface	LAN
External system communication protocol	Modbus TCP, IEC61850
Certification	GB/T-34120, GB/T-44026, UL9540A, IEC62619-2022, IEC63056-2020, IEC/EN62477-1-2023, IEC62933-1-2024, UL1973-2022, UN38.3, IEC61000-6-2, IEC61000-6-4, EN50549-2