

SP-PowerCube Series 64-112kWh

Outdoor Commercial Energy Storage Cabinet



Air-Cooling System for
Easy Maintenance



Tier-1 LiFePO4
Cells with Long Cycle Life



Advanced BMS with
Multi-Layer Monitoring



Modular Architecture &
Flexible Scalability



Fast Installation &
Plug-and-Play Design



Multi-Level Safety
Protection & Certifications

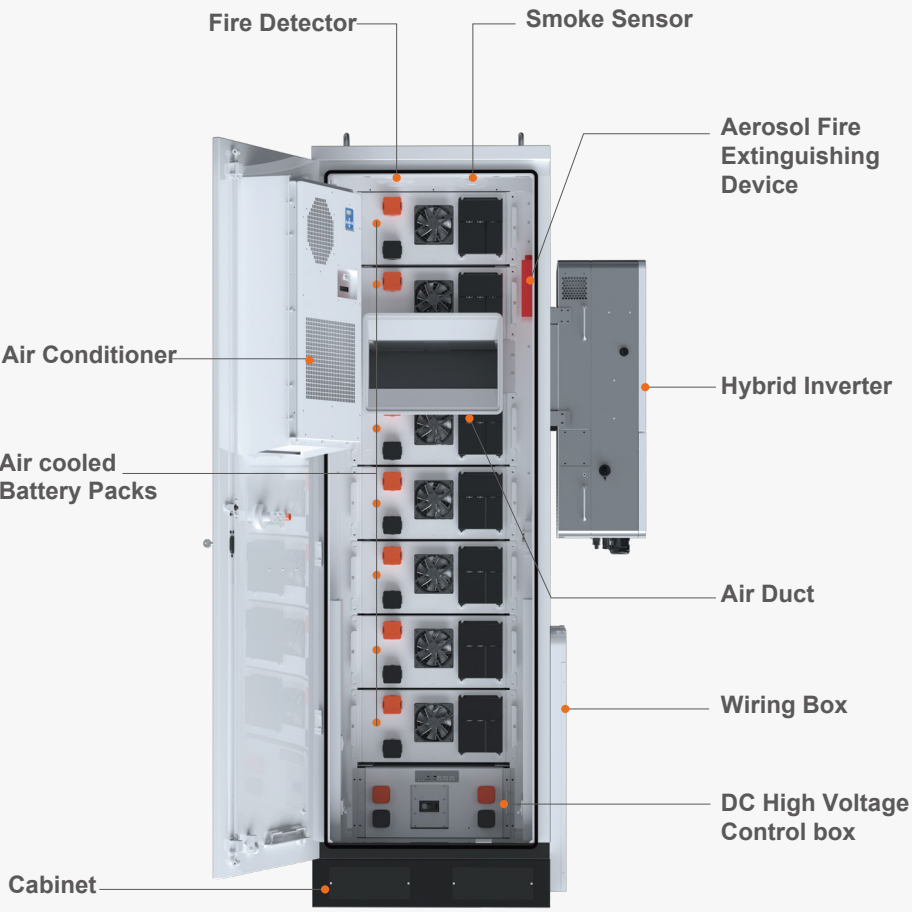


High Compatibility for
Various Applications

Commercial ESS Structure

SP-PowerCube Air-Cooled Battery Cabinet + External Hybrid Inverter — the ultimate “Lego-style” modular solution for pay-as-you-grow energy storage projects. A pure battery cabinet design, integrating only battery modules, safety components, and DC output interface:

- 16 × 7 kWh air-cooled modules (16 layers of 314 Ah Tier-1 LFP → 112 kWh per cabinet)
- Dual industrial-grade HVAC units ($\Delta T \leq 5\text{ }^{\circ}\text{C}$, filter replacement every 6 months)
- Two-level BMS (module + system)
- DC high-voltage control box with pre-wired aviation plugs (600–1500 Vdc)
- Smoke detectors + aerosol automatic fire suppression
- All AC/DC conversion and energy scheduling handled by external 50–250 kW hybrid inverter

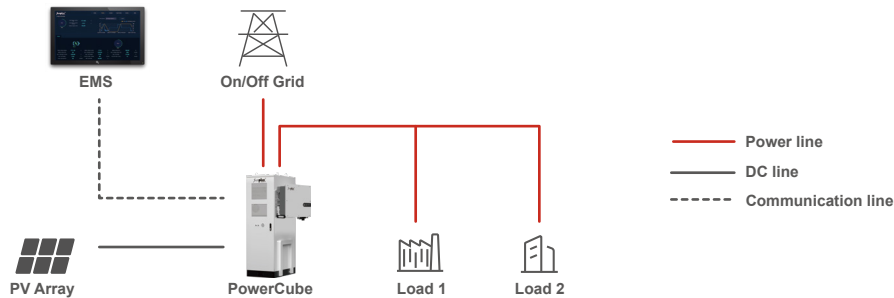


Inverter Compatibility List

Afore	Sol-Ark	inv	Sinexcel	LU POWERTEK	SOLINTEG	上能电气 SINENG	Deye
Growatt	新文电气 XINWEN	houmiles	SUN SYNK	Hopewind	solis inverters	MEGAREVO	elecod
KOYOE	GOODWE	sunways	晶石科技 GSSTES	SOSEN	KEHUA TECH	AISWEI	SERMATEC

System Architecture & Scalability

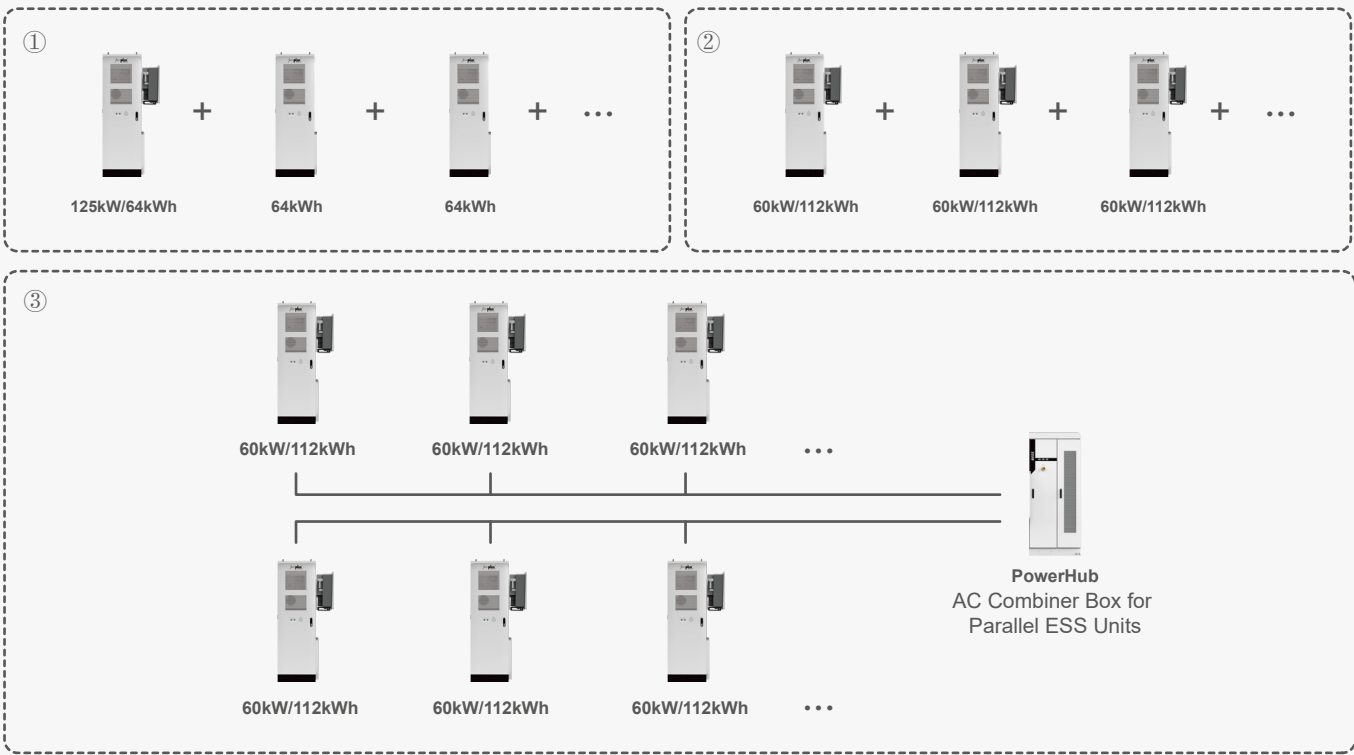
SP-PowerCube Series utilizes an external Hybrid Inverter + independent battery cabinet configuration, where energy is routed through a unified AC bus and managed by external Hybrid Inverter coordinated via EMS. This setup allows hybrid control across multiple brands or power ratings of PCS, supporting flexible cabinet additions and MWh-scale capacity expansion. It provides superior scalability for distributed systems, staged investments, and grid-connected commercial energy storage projects.



The capacity expansion of SP-PowerCube commercial energy storage system is typically achieved in three ways:

- ① **Adding battery cabinets** to increase energy storage capacity;
- ② **Parallel connection of multiple complete systems** to expand both capacity and power;
- ③ **Integrating a PowerHub** for AC convergence and centralized system management is ideal for MW-level system expansion.

Supports up to **32** units in parallel. This modular and flexible approach allows progressive expansion without affecting the operation of the existing system, meeting evolving energy demand and storage requirements.



Basic Information	SP-PowerCube-64kWh	SP-PowerCube-80kWh	SP-PowerCube-96kWh	SP-PowerCube-112kWh
Rated Energy (kWh)	64.30	80.38	96.46	112.54
Normal Voltage (V)	204.8	256.0	207.2	358.4
Voltage Range (V)	184~392			
Rated Energy of Battery Pack (kWh)	16.07			
Battery Pack Qty	4	5	6	7
Norminal Voltage of Battery Pack (V)	51.2			
Nominal Capacity (Ah)	314			
Battery Cell Qty of Battery Pack	16			
Communication Protocol	CAN/RS485/RS232			
Max. Qty of Parallel Connections	5 Sets(Standard), 32 Sets(Extra BAU module)			
Cycle Life	≥8000(@25℃±2℃, 0.5C/0.5C, 70%EOL			
Protection Mechanism	Short Circuit Protection/Over Current Protection/Over Charge Protection/Over Discharge Protection/Over Temperature Protection/Cell Over Voltage Protection/Cell Under Voltage Protection			

Charging Parameters

Recommended Charging Current (A)	157			
Max.Charging Current (A)	157			
Recommended Charging Voltage (V)	230.4	288.0	345.6	403.2
Max.Charging Voltage (V)	233.6	292.0	350.4	408.8

Discharging Parameters

Recommended Discharging Current (A)	157			
Max.Discharging Current (A)	157			
Recommended Discharging Cut-off Voltage (V)	176.0	220.0	264.0	308.0
Battery Cut-off Voltage (V)	172.8	216.0	259.2	302.4

General Parameters

Dimension (WxDxH,mm)	1100x750x2200			
Net Weight (kg)	654.0	696.0	737.6	779.2
IP Rating of Enclosure	IP55			
Installation Method	Outdoor Floor Type			
Cell Type	LiFePO4			
Warranty	5/10 years			

Certification & Safety Standard

Safety Certification	CE, CB
Transport & Other Certification	UN38.3, Class 9, MSDS

Temperture Parameters

Discharging Temperature	-20℃ ~ 55℃
Charging Temperature	0 ~ 55℃
Storage Temperature	-10℃ ~ 40℃