

100/120kWh Air-cooled Hybrid DC Cabinet

HD-100/120-E
(Hybrid Inverter Optional)



HD-100/120-E

Developed with integrated energy storage and digital monitoring technologies, the HEX-HY-100/120kWh series serves as a complete PV-ESS integrated solution. Housed in a single compact cabinet are core modules including lithium battery packs, HVAC thermal control units, fire suppression systems (FSS) and EMS. The streamlined structure shortens on-site installation time and supports flexible capacity expansion to meet varied demand. When coupled with a hybrid inverter, the system features diverse operating modes and fully configurable energy management strategies.

Comprehensive Safety & Heat Resistance

- **High Outdoor Grade** IP55 dustproof & waterproof
- **Balanced Cooling** Optimized ventilation, temp gap $\leq 6^{\circ}\text{C}$
- **Stable Operation** Reliable performance under high temperature

High Efficiency & Cost Saving

- **High Energy Utilization** Up to 90% RTE, 100% DOD
- **Self-developed Integration** LFP 314Ah 3S all-in-one system
- **Wide Compatibility** Supports PV & most hybrid inverters

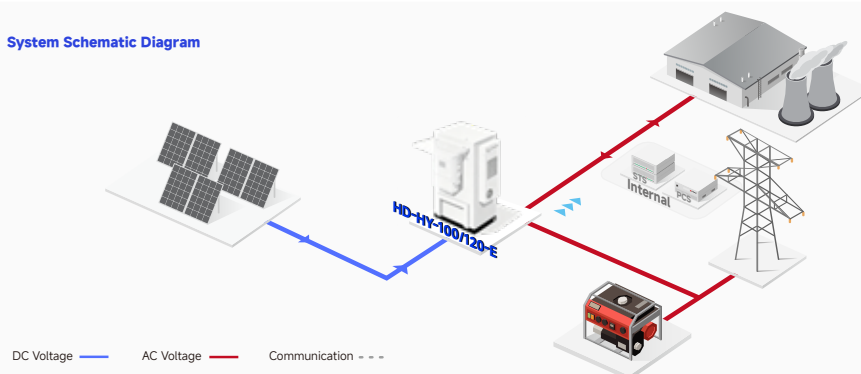
Simple Dual-mode O&M

- **Cloud Diagnosis** Fast fault detection in real time
- **Dual Control** Local onsite & cloud remote monitoring
- **Low Labor Cost** Reduce frequent field inspection

Compact & Flexible Deployment

- **Small Footprint** Only 0.96m^2 , easy transport & install
- **Wide Compatibility** Fits mainstream 30–50kW hybrid inverters
- **Modular Scalability** Parallel design for on-demand expansion

System Schematic Diagram



Model	HD-100-E		HD-120-E
Battery Cabinet			
Cell Type	LFP / 314Ah		LFP / 314Ah
Pack Configuration	20.096 kWh / 1P20S		20.096 kWh / 1P20S
System Configuration	100.48 kWh / 1P100S		120.576 kWh / 1P120S
Rated DC Voltage	320 V		384 V
DC Voltage Range	280 ~ 360 V		336 ~ 432 V
Max. Charge/Discharge Rate	0.5 P		
Max. Depth of Discharge	100% (25 ± 2°C)		
Cycle Life	≥ 8,000 cycles		
PV Input(Hybrid Inverter)			
Max. Input Power	60kW	80kW	100kW
PV Voltage Range	150 ~ 850V	150 ~ 850V	150 ~ 850V
MPPT	3	4	4
Max Input Current	40A*3	40A*4	40A*4
AC Side(Hybrid Inverter)			
Rated Output Power	30kW	40kW	50kW
Rated AC Voltage	400V		
AC Voltage Range	±15%		
Grid Type	3W+N+PE		
Rated Frequency	50Hz/60Hz		
Power Factor	0.99/-0.8~+0.8		
THDi	≤3%		
DC Ratio	<0.5% Ipn		
System Parameters			
Max. Round Trip Efficiency	90%		
Communication	Modbus TCP/IP		
Fire Suppression System	Aerosol		
IP Rating	IP55		
Cooling Method	Air cooling		
Operating Temperature	-25°C~55°C (Derating after 45°C)		
Anticorrosion Rating	C4 (C5 optional)		
Humidity	0~95% RH (non-condensing)		
Altitude	3000m (Derating above 2000m)		
Dimensions (W×D×H)	800×1200×2100 mm		
Weight	1200 kg		
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4		
Grid codeE	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11		