

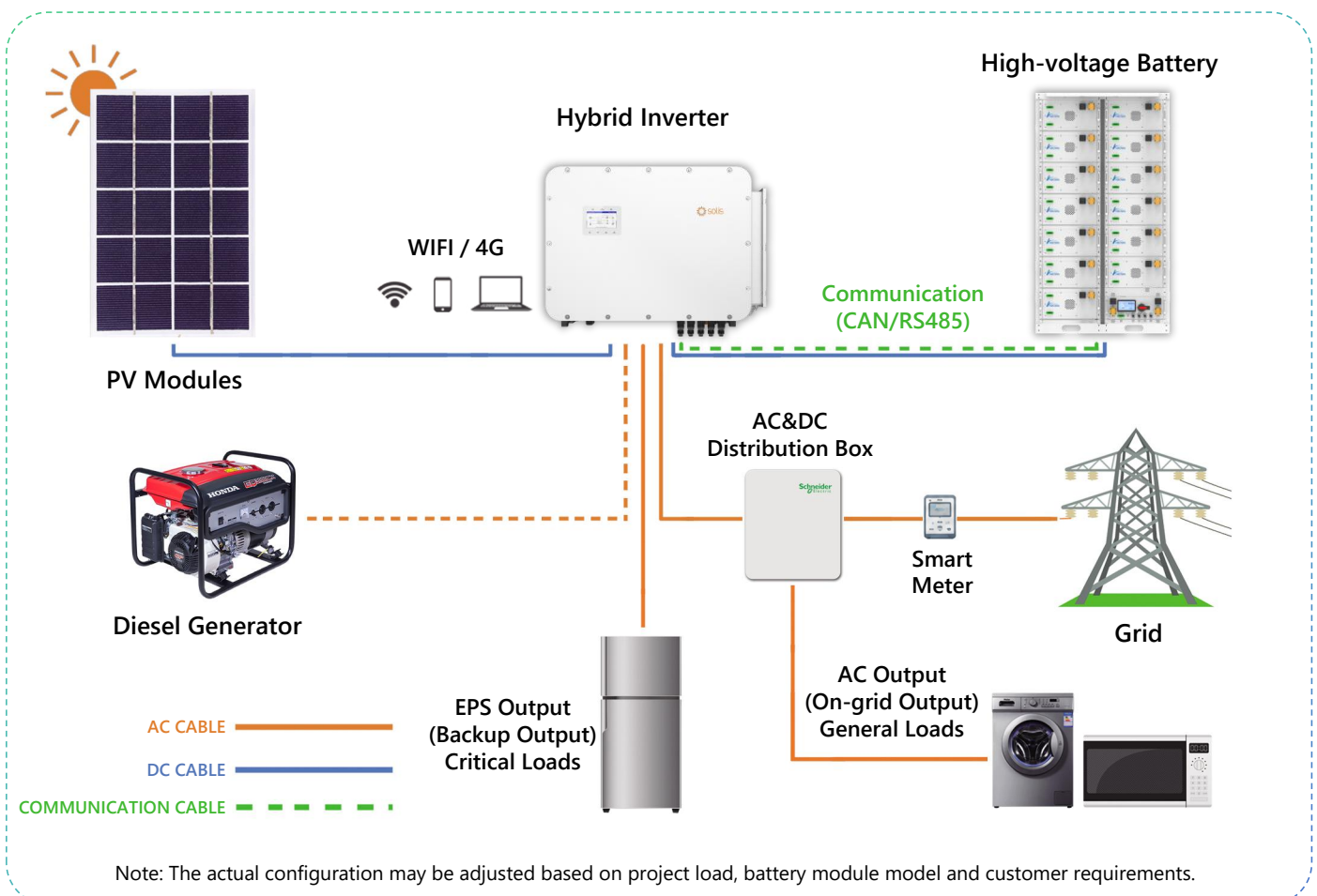
100kW/209kWh High Voltage Hybrid Energy Storage System

System Operating Modes

1. PV Priority Mode (Self-Consumption)
2. Peak Shaving & Energy Arbitrage Mode
3. Off-grid Backup Mode
4. Diesel Generator Integration Mode (Optional)



System Topology Diagram



100kW HYBRID ENERGY STORAGE INVERTER

Grid-Tied | Off-Grid | Peak Shaving | Backup Power



Model	S6-EH3P(100)K10-NV-YD-H
Battery Input Data	
Battery Type	Lithium-ion
Battery Voltage Range (V)	300 - 950 V
Max. Charging Current (A)	100+100
Max. Discharging Current (A)	100+100
Number of Battery Input	2
Communication	CAN / RS485
Input DC (PV side)	
Recommended max. PV array size	200 kW
Max. usable PV input power	200 kW
Max. input voltage	1000 V
Rated voltage	600 V
Start-up voltage	180 V
MPPT voltage range	150 - 950 V
Max. input current	10 × 42 A
Max. current per DC input	42 A
Max. short circuit current	10 × 60 A
MPPT number / Max. input strings number	10 / 20
Output AC (Grid side)	
Rated output power	100 kW
Max. apparent output power	100 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V
Rated grid frequency	50 Hz / 60 Hz
Rated grid output current	151.9 A / 144.3 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
Input AC (Grid side)	
Max. input power	164.5 kW / 173.2 kW
Input voltage range	304 - 460 V
Max. input current	250 A
Output AC (Back-up)	
Rated output power	100 kW
Max. apparent output power	1.6 times of rated power, 10 s; 2 times of rated power, 200 ms
Back-up switch time	< 10 ms
Rated output voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V
Rated frequency	50 Hz / 60 Hz
Rated output current	151.9 A / 144.3 A
Max. AC passthrough current	151.9 A / 144.3 A
THDv (@linear load)	< 3%
Input AC (Generator side)	
Max. input power	100 kW
Rated input current	151.9 A / 144.3 A
Rated input voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V
Rated input frequency	50 Hz / 60 Hz
General Data	
Max. efficiency	97.5%
Max. power per phase (grid & back-up)	33% rated power
Dimensions (W × H × D)	1174 × 814 × 400 mm
Weight	170 kg
Inverter topology	Transformerless
Operating temperature range	-25 ~ +60°C
Ingress protection	IP66
Cooling concept	Intelligent redundant fan-cooling
Max. operation altitude	3000 m

HIGH VOLTAGE ENERGY STORAGE BATTERY SYSTEM

209 kWh | HBOWA-209K314

- Ultra Safe LFP Cells | Excellent Thermal Stability
- 6000+ Cycles | 15+ Years Design Life
- Expandable Design | Max 16 Units Connected in Series
- Compact Integrated Rack | Quick PCS Integration
- Wide Temperature Adaptability
- Multi Communication Ports | Compatible with Mainstream Inverters



Model	HBOWA-209K314
Battery Parameter	
Battery Type	LiFePO ₄ (Lithium Iron Phosphate)
Energy Capacity	209kWh (665.6V 314Ah)
Nominal Voltage	665.6V
Nominal Capacity	314Ah
Module Dimension (mm)	483*245*792mm*13
Dimension RACK(mm)	1090*780*1940
Total Weight(kg)	1668
General Parameter	
Nominal Capacity (KWH)	209
Discharge Cut-Off Voltage (V)	572
Charge Cut-Off Voltage (V)	738.4
Recommend Charge/Discharge Current (A)	100
Max. Charge/Discharge working Current(A)	160
Communication	RS485/RS232/CAN
Working Temperature	0°C~50°C Charge -10°C ~50°C Discharge
Transport or Storage Temperature Range	-20°C~60°C
Design Life	15years+
Cycle Life	(0.5C/0.5C-80% DOD) ≥6000 Cycles
Series Function	Support 16 units in Series
Certification	CE/IEC/UN38.3/MSDS/ROHS
Application Scenario	C&I ESS / Solar + Storage / Peak Shaving / Backup Power