

Air Cooling

30kW/80kWh~50kW/112kWh

PV+Battery ESS All-in-one Cabinet

C&I BESS Cabinet Solution



PV+Storage Integrated Design

30kW~50kW hybrid inverter + battery, plug and play design, maximizing PV self-consumption



Global Grid Compliance

Certified for G99, VDE-AR-N 4105, CEI 0-21, NRS 097-2-1, EN 50549-1/10 and 20+ international grid codes



Seamless Backup Power

10ms UPS-level switching to backup mode, supports critical load protection with 1.6x surge power capacity



Multi-Scenario Versatility

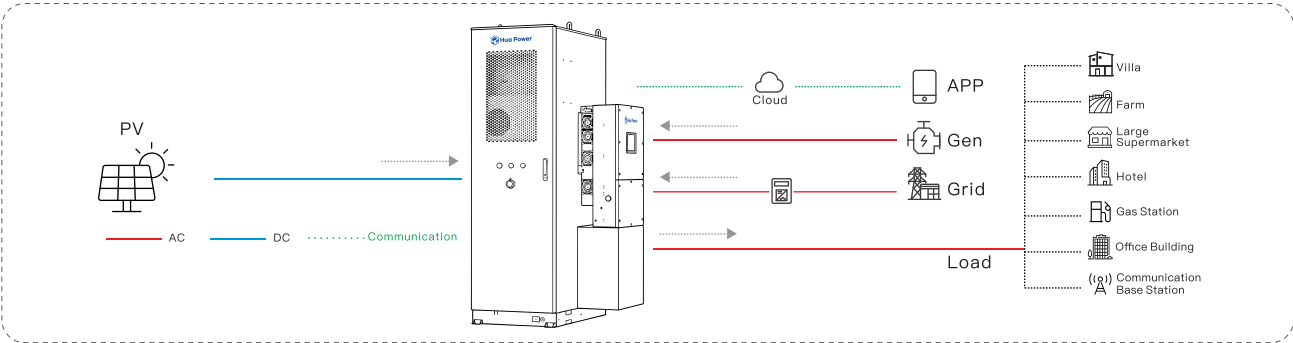
One machine for multiple applications: grid-tied, grid/off-grid switching, backup power, and microgrid operation



Intelligent Energy Management

Self-developed EMS delivers smart energy dispatch and optimized allocation, enabling peak shaving, time-of-use arbitrage and demand response

System Diagram



Model	HC-UPSAP80 30kW/80,384kWh	HC-UPSAP112 50kW/112,538kWh
Grid Side (Output)		
Rated Output Power	30kW	50kW
Max. Output Power	30kVA	50kVA
Rated Output Current	45.6A/43.3A	76A/72.2A
Max. Output Current	45.6A/43.3A	76A/72.2A
Rated Voltage	400V	
Voltage Range	-15%~20%	
Connection Type	3P4L+PE	
Rated Frequency	50/60Hz	
Power Factor	0.8 (Leading)~0.8 (Lagging)	
THDi	<3% (Rated Power)	
Grid Side (Input)		
Max. AC Passthrough Current	91.2A/86.6A	152A/144.4A
Rated Input Voltage	3P4L+PE,220/230V,380/400V	
Rated Input Frequency	50Hz/60Hz	
GEN Side		
Max. Input Power	30kW	50kW
Rated Input Current	45.6A/43.3A	76A/72.2A
Rated Input Voltage	3P4L+PE,220/230V,380/400V	
Rated Input Frequency	50Hz/60Hz	
Back-up Side		
Rated Output Power	30kW	50kW
Max. Apparent Output Power	1.6 times of rated Power (2S)	
Back-up Switch Time	<10ms	
Rated Output Voltage	3P4L+PE,220/230V,380/400V	
Rated Frequency	50Hz/60Hz	
Rated Output Current	45.6A/43.3A	76A/72.2A
Max. Imbalance Power Per Phase	33% rated Power	
THDv (@linear load)	<2%	
PV		
Max. Usable PV Input Power	60kW	96kW
Recommended Max. PV Array Size	60kW	100kW
Max. Input Voltage	1000V	
Rated Voltage	600V	
Start-up Voltage	180V	
MPPT Voltage Range	150V~850V	
Full Load MPPT Voltage Range	360V~850V	
Max. Input Current	40A/40A/40A	40A/40A/40A/40A
Max. Short Circuit Current	60A/60A/60A	60A/60A/60A/60A
MPPT Number/Max. Input Strings Number	3/6	4/8
Max. Input Power Per MPPT	18kW	
Battery		
Cell Type	LiFePO4	
Battery Cell	3.2V/314Ah	
Pack Configuration	16S1P (16.0768kWh)	
System Configuration	16S1P*5	16S1P*7
Rated Voltage	256V	358.4V
Voltage Range	224V~280V	313.6V~392V
Voltage Range Compatible With Hybrid	150V~800V	
Rated Charge/Discharge C-rate	0.5CP	
Max. Charge/Discharge Power	33kW	55kW
Max. Charge/Discharge Current	70A*2	
Cell Cycle Life	≥8000 Cycles (80%SOH@Standard Cycle)	
System		
RTE	≥85%	
Cooling Method	Air Cooling	
IP Rating	IP54	
Operating Temperature	-20~50℃ (>45℃ Derating)	
Anti-corrosion Rating	C3-M	
Altitude	2000m	
Operating Humidity	5~95%RH (Non-condensing)	
Fire Suppression Agent	Aerosol / FK-5-1-12	
Communication	CAN / RS485 / WiFi / Ethernet	
Dimensions (W*D*H)	650*1040*1630mm+969*1040*1630mm	650*1100*2150mm+974*1100*2150mm
Weight	760kg	1.3t
Certification & Compliance		
Grid Connection Standard	G99, VDE-AR-N 4105 / VDE V 0124, CEI 0-21, C10/11,EN 50549-1/EN 50549-10, NRS 097-2-1, TOR, MEA,PEA, VDE 0126 / UTE C 15/VFR: 2019, EIFS 2018.2,NTS 631/RD 1699/RD 244	
Safety/EMC Standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4,EN 55011	
Features		
PV Connection	MC4 Quick Connection plug	
Battery Connection	Terminal Connector	
AC Connection	Terminal Block	
Display	LED + Bluetooth + APP	
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN	