Air Cooling / Liquid Cooling

30kW / 80kWh ~ 125kW / 261kWh

Hybrid Microgrid ESS All-in-one Cabinet

C&I BESS Cabinet Solution



PV+Storage Integrated Design

30kW~125kW 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

Multi-Scenario Versatility

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

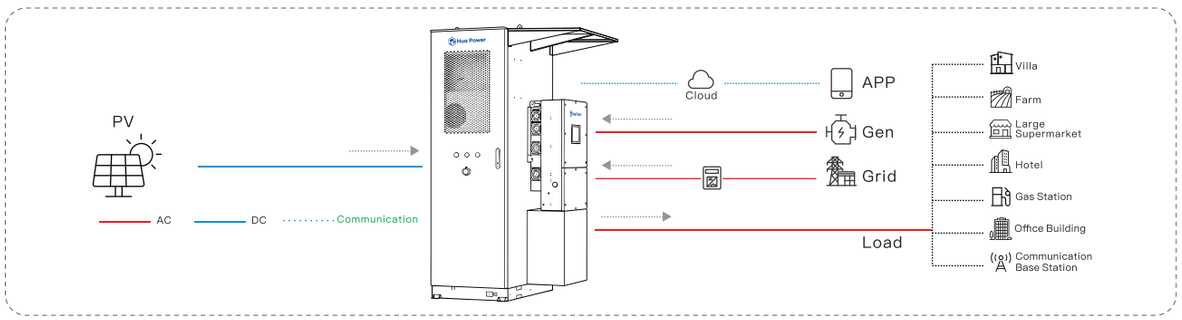
Seamless Backup Power

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

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-UPSAP80I / HC-UPSAP80 30kW / 80.384kWh	HC-UPSAP112I / HC-UPSAP112 50kW / 112.538kWh	HC-UPSAP241-B 125kW / 241.152kWh	HC-UPSAP261L-B 125kW / 261.245kWh
Grid Side (Output)				
Rated Output Power	30kW	50kW	125kW	
Max. Output Power	30kVA	50kVA	125kVA	
Rated Output Current	45.6A / 43.3A	76A / 72.2A	189.9A / 180.4A	
Max. Output Current	45.6A / 43.3A	76A / 72.2A	189.9A / 180.4A	
Rated Voltage	400V			
Voltage Range	-15%~20%			
Connection Type	3P4L+PE			
Rated Frequency	50 / 60 Hz (±5 Hz)			
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	204.6A / 195.7A	
Rated Input Voltage	3P4L+PE,220 / 230V,380 / 400V			
Rated Input Frequency	50Hz / 60Hz			
GEN Side				
Max. Input Power	30kW	50kW	125kW	
Rated Input Current	45.6A / 43.3A	76A / 72.2A	189.9A / 180.4A	
Rated Input Voltage	3P4L+PE,220 / 230V,380 / 400V			
Rated Input Frequency	50Hz / 60Hz			
Back-up Side				
Rated Output Power	30kW	50kW	125kW	
Max. Apparent Output Power	1.6 times of rated Power (2S)		1.6 times of rated Power (10S)	
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	189.9A / 180.4A	
Max. Imbalance Power Per Phase	33% rated Power			
THDv (@linear load)	<2%		<3%	
PV				
Max Usable PV Input Power	60kW	96kW	250kW	
Recommended Max PV Array Size	60kW	100kW	250kW	
Max. Input Voltage	1000V			
Rated Voltage	600V			
Start-up Voltage	180V			
MPPT Voltage Range	150V~850V		150V~950V	
Full Load MPPT Voltage Range	360V~850V		450-950V	
Max. Input Current	3 * 40A	4 * 40A	10 * 42A	
Max. Short Circuit Current	3 * 60A	4 * 60A	10 * 60A	
MPPT Number / Max Input Strings Number	3 / 6	4 / 8	10 / 20	
Max Input Power Per MPPT	18kW		25KW	
Battery				
Cell Type	LiFePO4			
Battery Cell	3.2V / 314Ah			
Pack Configuration	16S1P (16.0768kWh)			52S1P (52.249 kWh)
System Configuration	16S1P*5	16S1P*7	16S1P*15	52S1P*5
Rated Voltage	256V	358.4V	768V	832V
Voltage Range	224V~280V	313.6V~392V	672V~840V	728V~910V
Voltage Range Compatible With Hybrid	150V~800V		300V~950V	
Rated Charge / Discharge C-rate	0.5CP			
Max. Charge / Discharge Power	33kW	55kW	137.5kW	
Max. Charge / Discharge Current	70A*2		100A*2	
Cell Cycle Life	≥8000 Cycles (80%SOH @Standard Cycle)			
System				
RTE	≥85%			
Cooling Method	Air Cooling			Liquid Cooling
IP Rating	IP20 / IP54		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			
Conmmunication	CAN / RS485 / WiFi / Ethernet			
Dimensions (W*D*H)	650*1040*1630mm+ 969*1040*1630mm	650*1100*2150mm+ 974*1100*2150mm	1200*1000*2125mm+ 734*1091*344mm	980x1350x2150mm+ 734*1091*344mm
Weight	760kg	1.3t	2.4t	2.3t
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 / UNE 206006 / UNE 206007-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, PORTARIA Nº 140, DE 21 DE MARÇO DE 2022		G99, VDE-AR-N 4105 / VDE V 0124,EN 50549-1&2 / EN 50549-10, VDE 0126 / UTE C 15 / VFR:2019,NTS 631 / RD 1699 / RD 244 / UNE 206006 / UNE 206007-1,CEI 0-21, C10 / 11, NRS 097-2-1, TOR, EIFS 2018.2,IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530,MEA, PEA, PORTARIA Nº 140, DE 21 DE MARÇO DE 2022	
Safty / 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		OT / SC Terminal	
Display	LED + Bluetooth + APP		LCD + APP + Cloud	
Communication	CAN, RS485, Ethernet, Optional:Wi-Fi, Cellular, LAN		CAN, RS485, Ethernet	