



Outdoor Energy Storage Systems



ENERGY STORAGE FOR CHARGING STATIONS

Energy Storage Systems: Driving Electric Vehicle Charging Infrastructure Deployment

Energy storage systems (ESS) play a pivotal role in accelerating the deployment of electric vehicle (EV) charging infrastructure, particularly in regions with limited grid capacity. By optimizing the utilization of renewable energy sources like solar power, ESS ensure a reliable and sustainable electricity supply for charging stations. Integrating ESS with solar power plants fosters decentralized and flexible charging infrastructure development. Additionally, ESS significantly reduce initial investment costs by mitigating the need for costly grid upgrades, enabling charging station installation in previously inaccessible areas. Overall, ESS are essential for promoting sustainable and efficient EV charging ecosystems.



APPLICATIONS

- + Demand Control
- + UPS / Bridging Power
- + Peak Shaving
- + Backup Power
- + Load Shifting
- + Grid Flexibility Services

Battery Properties	POD-A100	POD-A230	POD-Q400
Battery Type	LiFePO4		
Nominal Voltage	512V	768V	1331,2V
Operating Voltage Range	440V - 568V	660V - 852V	1144V - 1476,8V
Nominal Energy Capacity	102.4kWh	230.4kWh	402.02kWh
Cycle Life (*)	≥6000 Cycles		
Charging Temperature	0~50°C		
Discharging Temperature (**)	-10~50°C		
Warranty	10 Years		
Inverter Properties			
Max. Efficiency	97,6%(PV-AC)	97%(PV-AC)	N/A
[PV] Max. Power	65000W	2x65000W	
[PV] Max. Voltage	1000V	2x1000V	
[PV] MPPT Voltage Range	150V-850V	2x150V-850V	
[PV] Max. Input Current	36+36+36+36A	2x(36+36+36+36A)	
[PV] # of MPPT Trackers	4(2+2+2+2) Strings	2x(4(2+2+2+2)) Strings	
[BATT] Voltage Range	160V-800V	2x(160V-800V)	
[BATT] Number of Battery Input	2	2x2	
[BATT] Max. Charge/Discharge Current	50+50A / 50+50A	2x(50+50A / 50+50A)	
Communication Interphase	Screen, CAN		
[AC] Nominal Output Power	59kWh	2x50kWh	
[AC] Peak Output Power	75kWh(10sec)	2x75kWh(10 sec)	
[AC] Nominal Voltage	380V/400V, 3L+N+PE	380V/400V, 3L+N+PE	
[AC] Max. Output Current	2x79.8A		
[AC] Frequency Range	50/60Hz		
[AC] THDI	<3%Rated Power		
Physical Properties			
Protection Level	IP54		
Dimension (WxDxH)	1100x1200x2400 mm	1200x2400x2500 mm	1400x1350x2500 mm
Weight	1800kg	3200kg	6500kg
Cooling Method	Air Cooling		Liquid Cooling

(*) Test Conditions: 25°C, 90% DOD, 0.5C Charge/Discharge
 (**) Performance may vary in different conditions