

HVC32-ESS

143~192Kwh High Voltage C&I Energy Storage System

 ELONGTOP



114~192kWh



30~50kW



0.3C



384~672Vdc



Extraordinary Performance



Superior Safety



Flexible Configuration



Easy Set-up & Maintenance

BATTERY DATA

143~192Kwh High Voltage C&I Energy Storage Battery

Models	1P32S280Ah / 314Ah		
Single Battery Module			
Energy Capacity	28.6Kwh / 32.15Kwh		
Max. Output Current	84A		
Nominal Voltage	102.4V		
Operating Voltage	96~112V		
Dimensions (L/D/H)	882mm x 745mm x 242mm		
Battery System Data			
Number of Modules	4	5	6
Energy Capacity	114.6Kwh/128.6Kwh	143.3Kwh/160.7Kwh	172Kwh/192.9Kwh
Standard Charge / Discharge Current	84A / 0.3C	84A / 0.3C	84A / 0.3C
Nominal Voltage	409.6V	512V	614.4V
Operating Voltage	384~448V	480~560V	576~672V
Dimensions (L/D/H)	1015 x 1300 x 2000mm	1015 x 1300 x 2000mm	1015 x 1300 x 2000mm
Weight	≈1.76T	≈2T	≈2.23T
Battery Cell Type	LiFePO4 Battery(Lithium iron phosphate battery)		
Enclosure Protection Rating	IP54		
Round-trip Efficiency	≥90%		
Operation Tem.	-10°C to +50°C		
Applications	ON Grid / ON Grid + Backup / OFF Grid		
Communication Port	CAN		
Cycle Life	≥6000(@25°C±2°C,0.3C/0.3C,70%EOL)		
Short Circuit Protection	YES		
Over Current Protection	YES		
Over Charge Protection	YES		
Over Temperature Protection	YES		
Cell Over Voltage Protection	YES		
Cell Over Under Protection	YES		
Cell Discharge Protection	YES		

※The above are only the parameters of the battery system. You can select the inverter according to your needs.
The inverter can be mounted outside the battery rack and supports customization.

Inverter Technical Data

Model	SUN-29.9K-SG01HP3 -EU-BM3	SUN-30K-SG01HP3 -EU-BM3	SUN-35K-SG01HP3 -EU-BM3	SUN-40K-SG01HP3 -EU-BM4	SUN-50K-SG01HP3 -EU-BM4
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-800				
Max. Charging Current (A)	50+50				
Max. Discharging Current (A)	50+50				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	2				
PV String Input Data					
Max. PV Access Power (W)	59800	60000	70000	80000	100000
Max. PV Input Power (W)	38870	39000	45500	52000	65000
Max. PV Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Voltage Range (V)	150-850				
Rated PV Input Voltage (V)	600				
Max. Operating PV Input Current (A)	36+36+36			36+36+36+36	
Max. Input Short-Circuit Current (A)	55+55+55			55+55+55+55	
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2			4/2+2+2+2	
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	29900	30000	35000	40000	50000
Max. AC Input/Output Apparent Power(VA)	29900	33000	38500	44000	55000
Rated AC Input/Output Current(A)	45.4/43.4	45.5/43.5	53.1/50.8	60.7/58	75.8/72.5
Max. AC Input/Output Current(A)	45.4/43.4	50/47.9	58.4/55.8	66.7/63.8	83.4/79.8
Max. Continuous AC Passthrough (grid to load) (A)	200				
Peak Power (off-grid) (W)	1.5 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65				
Grid Connection Form	3L+N+PE				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise(dB)	≤65				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)				
Weight (kg)	80				
Type of Cooling	Intelligent Air Cooling				
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25 G98 G99, VDE-AR-N 4105				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				