

Outdoor Cabinet Type Energy Storage System



C&I energy storage



Rural power shortage



Off-grid island



Nomadic farm



Mine off-grid

Product Features

Simple and flexible

- Integrate PV, PCS and LiFePO4 Battery in one cabinet, support multiple battery access, and integrate EMS smart energy management system
- Wide PV input voltage range, wide battery voltage range
- With grid-connected charging and discharging, off-grid independent inverter function
- Simple structure, small footprint, flexible layout, easy installation operation and maintenance
- Modular design, power and capacity can be expanded
- Communication is flexible, can accept BMS instructions in real time, communication methods are RS485, CAN

Safe & Reliable

- Use of high performance DSP, optimized control circuit design, better performance, more stable and safe system
- BYD blade battery cell (LFP) : more safety, longer life cycle ,more usable energy
- Built-in fire control, temperature control and warning system function for multiple security
- IP54 protection grade, stronger environmental adaptability
- Off-grid cold start function

Economical & Intelligent

- The highest efficient power density, max. efficiency is 98.4%
- Low power consumption fan, with intelligent temperature control system

Outdoor Cabinet Type Energy Storage System



Model	SNE-ESS20K	SNE-ESS30K	SNE-ESS40K	SNE-ESS50K	SNE-ESS60K
DC Input					
Max. power(KW)	26KW	36KW	48KW	60KW	72KW
Max. DC voltage(V)	1000V				
MPPT voltage range(V)	180V-900V/630V				
MPPT operating voltage range at rated power	300V-900V	300V-900V	400V-900V	400V-900V	450V-900V
MPPT tracker/strings	2/2	2/2/2	2/2/2	2/2/2/2	2/2/2/2
Max.input current of single MPPT(A)	23A*2	36A*3	36A*3	36A*4	36A*4
Short-circuit current of PV input(A)	32A/32A	42A/42A/42A	42A/42A/42A	42A/42A/42A/42A	42A/42A/42A/42A
AC Output					
Rated output power(KW)	20KW	30KW	40KW	50KW	60KW
Max. apparent AC power(KVA)	20KVA	30KVA	40KVA	50KVA	60KVA
Max. output current(A)	31A	45A	60A	75A	87A
Grid voltage/range(V)	380V, 3L+N+PE	400V, 3L+N+PE			
Frequency (Hz)	50 /60Hz				
PF	1(0.8lagging-0.8leading)				
THDI	<3%				
Battery					
Battery capacity(KWH)	53KWH-173KWH				
Battery type	LiFePO4 battery				
Battery Module	51.2V 130AH BYD blade battery module				
Number of battery racks	1~2				
Battery voltage range(V)	180V~700V	220V~800V			
Max. input/output voltage(V)	700V	800V			
Rated charge/discharge current(A)	50A	100A	100A	100A	100A
Max. input/output power(KW)	20KW	30KW	40KW	50KW	60KW
EPS Output					
Rated output power(KW)	20KW	30KW	40KW	50KW	60KW
Max. Apparent AC power(KVA)	20KVA	30KVA	40KVA	50KVA	60KVA
Max. single-phase apparent output power	6.6KVA	10KVA	13KVA	17KVA	20KVA
Rated output voltage(V)	380V, 3L+N+PE	400V, 3L+N+PE			
Rated output current(A)	31A	45A	60A	75A	87A
Rated frequency (Hz)	50Hz /60Hz				
Automatic switching time (ms)	<10ms				
THDU	<3%				
Overload capacity	110%, 30S/120%, 10S/150%, 0.02S				
Protection Parameters					
AC over-current protection	Yes				
Ground fault detection protection	Yes				
Power grid monitoring protection	Yes				
Residual current detection protection	Yes				
General Data					
Euro Efficiency	> 98.2%				
Noise Emission (Typical)	<45dB				
Operation Temperature	-25 ~ +60°C				
Relative Humidity	5 ~90% (non-condensing)				
Altitude	4000m(>2,000 Derating)				
Dimensions (W/D/H) mm	1000*1650*2050				
Weight(kg)	Customization				
Inverter Topology	transformerless				
Self-Consumption	<3W				
Ingress protection	IP54				
Fire extinguishing system	Optional				
Operating temperature	-30°C~55°C				
PCS cooling way	Intelligent Fan				
Battery cooling way	Air conditioning cooling				
Display and Communication					
Display	LCD				
Interface: RS485/WIFI/GPRS	yes /opt/opt				