ESS High Voltage Batteries

HV100S Series

29~60KW | 614V | 230/400V | 491kWh(max)

The HV100S series Energy Storage System (ESS) presents a cutting-edge solution meticulously designed for high-rate cyclic charging and discharging scenarios.Recognized for its robustness, this innovative system harnesses the power of Lithium Iron Phosphate (LiFePO4) technology, which offers not only superior performance but also peace of mind through its comprehensive suite of advanced safety features.

CE IEC UN38.3 ISO



▼ Main Features

- High Capacity, Delivers up to 61.44 kWh with optional expansions up to 491kWh.
- Utilizes durable Lithium Iron Phosphate(LiFePO4) technology.
- Wide Operating Range:-20°C to 55°C.
- Integrated fire suppression, smoke, and gas detection systems.
- >6000 cycles (90%DOD 70%EOL)
- Easy Installation, Floor-mounted design for simple setup in environments.





Office



Factory



Shop

Model	HV100S-6029	HV100S-6030	HV100S-6040	HV100S-6050	HV100S-6060
AC SPECIFICATION					
AC rated power	29KW	30KW	40KW	50KW	60KW
Max.AC Output Current	48.4A	50A	66A	84A	99A
Max.ouput apparent power	29KVA	33KVA	44KVA	55KVA	66KVA
Nominal Output Voltage	230V/400V				
Rated frequency	50Hz/60Hz				
Output THDi	<3%				
Switching Time	<10ms				
Grid structure	3-phase 4-wire+PE				
Power Factor	1-(0.8-0.8)				
Max. Efficiency	97.5%				
BATTERY SYSTEM					
DC rated voltage	614V				
DC voltage range	556.8V~691.2V				
Rated capacity	100Ah				
Rated energy	61.4kWH				
Max discharge current	100A				
Cell	3.2Vdc 100Ah LiFePO4				
Battery module	51.2Vdc 100Ah 5.12kWh				
PV INPUT					
Max. DC Input Power	48KW	48KW	64KW	80KW	96KW
PV DC.Max Voltage	1000V				
MPPT Voltage range	180~850V				
Rated DC Input Voltage	600V				
DC Input Voltage Range	180~850V				
Start-up Voltage	200V				
Max. input current	3x45A		4x45A		
No.of MPPT Tracker /Strings	3/3		4/3		
AC LOAD OUTPUT(BACK-UP)					
Nominal Output Power	29KVA	33KVA	44KVA	55KVA	66KVA
Nominal Output Voltage	230V/400V				
Nominal Output Frequency	50Hz/60Hz				
Nominal Output Current	48.4A	50A	66A	84A	99A
THDV (with linear load)	<3%				
Switching Time	<10ms				
GENERAL DATA					
Cooling	Smart cooling				
Noise Level	≤75dB				
Temperature Range	-20℃~55℃ (> 45℃ capacity reduction)				
Protection Level	IP21				
Highest altitude	4000m (>3000m capacity reduction)				
Humidity Range	0~95%(No condensing)				
Installation mode	Vertical mounting				
Maximum efficiency	95.5%				
Topology	Transformerless				
Protection function	Ac over/under voltage, over temperature,abnormal frequency,AC phase error, over current, communication failure, fan failure, insulation impedance detection, anti-island				
Display	Touch screen and APP				
Communication interface	RS485 / CAN / WiFi / GPRS / 4G				
AC LOAD OUTPUT(BACK-UP)					
Machine Dimension (W*H*D)(mm)	905x2211x1024				
N.W(kg) (Includes MPPT module)	895	903	918	935	946
Design Life	10+ Years				

* The technical specifications of this document are subject to change without any notice.