

# HV-BOX5 (Stackable)

Energy Storage System

## GENIX ENERGY GREEN LIVING



### Product Introduction

The HV-BOX5 (Stackable) is a scalable energy storage system equipped with 51.2V/314Ah LiFePO<sub>4</sub> cells and a BMS with automotive-grade chips. Featuring a quick-connect design, it supports parallel expansion of up to 6 clusters and is designed for reliable residential and commercial backup applications.

### Product Features



**Sleek Design, Quick Setup**  
Minimalist look with acrylic accent, plug-and-play installation in minutes.



**Smart Parallel, Scalable Power**  
Daisy-chain communication supports 1 to 6 clusters, auto-recognition and addressing.



**Efficient Cooling, Compact & Powerful**  
Three-side air intake, supports 1C peak discharge, excellent cooling in small footprint.



**Dual Balancing, Life Extended**  
Standard real-time balancing + optional 2A active balancer for significantly longer cycle life.



**Easy Maintenance, Upgrade Ready**  
Dedicated service access and balancer upgrade ports for future enhancements.



**High-Capacity Core**  
51.2V 314Ah LiFePO<sub>4</sub> cells, safe and stable with high energy density.

# HV-BOX5-768 (Stackable)

## Energy Storage System



Product Model		HV-BOX5 Series									
<b>Main Parameter</b>											
Battery Type	LiFePO4										
Module Rated Energy(kWh)	16.08										
Module Rated Voltage(V)	51.2										
Rated Capacity(Ah)	314										
No. Of System Module In Series	6	7	8	9	10	11	12	13	14	15	
System Rated Voltage(V)	307.2	358.4	409.6	460.8	512	563.2	614.4	665.6	716.8	768	
System Operating Voltage(V)	Charge Voltage	345.6	403.2	460.8	518.4	576	633.6	691.2	748.8	806.4	864
	Discharge Voltage	268.8	313.6	358.4	403.2	448	492.8	537.6	582.4	627	672
System Nominal Energy (kWh)	96.46	112.54	128.62	144.69	160.77	176.84	192.92	209	225.08	241.15	
System Dischargeable Energy (kWh)	92.6	108.04	123.48	138.9	154.34	169.77	185.20	200.64	216.08	231.5	
Charge/Discharge Current(A)	Rated Current	157									
	Max. Current	165									
	Overload Current	170(10sec,25°C)									
Status Indicator Light	Blue: energy storage system start status, green: energy storage system operation status, red: energy storage system fault status										
With Active Balancing Or Not	Optional										
Communication Protocol	CAN2.0										
Working Temperature Range (°C)	Charge: 0~ 55/Discharge: -10~ 55										
Working Humidity Range	≤95% (No condensation)										
Working Altitude	≤2000m										
System Cooling Method	Fan cooling										
Waterproof Rating	IP20										
Installation Place	Indoors										
Weight(kg)	835	965	1095	1225	1355	1485	1615	1745	1875	2005	
Max. Dimension(mm)	940*835*2115										
Storage Temperature(°C)	0~35										
Recommended Discharge Depth	90%										
Cycle Life	≥10000 Cycles (25°C±2°C, 0.35C, 80%DOD@65%EOL)										
Certification	Cell:UL1973/IEC62619/UL9540A/TUV/CE/UN38.3										
Warranty	5 Years(Under Warranty Terms)										
Energy Throughput <sup>[1]</sup>	211MWh	246MWh	281MWh	317MWh	352MWh	387MWh	422MWh	458MWh	493MWh	528MWh	

[1] Conditions apply, refer to GENIXGREEN Warranty Letter.

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### Application scenarios



### PDU HV-BOX5-PDU 1000VDC250A(WIFI)

Operating Voltage	250~1000Vdc
Rated Charge/Discharge Current	157A
Max. Charge/Discharge Current	165A
Operating Temperature Range	Charge:0°C~55°C/Discharge:-10°C~ 55°C
Waterproof Rating	IP20
Dimension(Wide*Depth*High)	440*821*290mm
Weight	≈33kg
Parallel Connection	Support



### Module HV-BOX5-16S314A

Battery Type	LiFePO4(LFP)
Rated Voltage	51.2Vdc
Rated Capacity	314Ah
Rated power	16.08kW
Rated Charge/Discharge Current	157A
Max. Charge/Discharge Current	165A
Operating Temperature Range	Charge:0°C~55°C/Discharge:-10°C~ 55°C
Waterproof Rating	IP20
Dimensions (W × D × H)	440*821*290mm
Weight	≈130kg



**PS:** This energy storage product is designed for indoor energy storage, therefore it supports parallel operation (up to 4 clusters of parallel operation, with the option of adding active balancing to further improve battery consistency). However, the parallel operation must use an industrial air conditioner that matches the PCS power and battery power for heat dissipation. Air conditioners without matching power are prohibited from parallel operation (parallel operation requires the use of matching BMS control software and industrial air conditioners that match the required heat dissipation capacity of the product output power). Please contact our technical personnel for specific information, and after confirmation, upgrade and guide the operation of parallel operation. It is strictly prohibited to merge without authorization, as this operation will cause serious safety accidents. The default shipping software is the non parallel version. When the system is running in parallel with 2 to 4 clusters, if it needs to maintain a 0.5C current for charging and discharging, it must be based on the premise that the heat dissipation conditions meet the design requirements. Any parallel operation exceeding 4 clusters is a special working condition and must be handled by our technical personnel. Unauthorized operation is strictly prohibited.