

SP-HV5120-S Series / 10-40kWh

Residential&Commercial High Voltage Lithium Battery



Modular Design & Easy Installation

HV-BMS
Control Box



LiFePo4
Battery Pack



Bottom Base



Easy Installation

- A single module with small dimension and weights less than 48kg
- Wireless connection and fewer accessories
- Optimized design of handles and interfaces realizes easy installation

Modular Design

- With a wireless connection, it is no need to disassemble wires during maintenance
- The modular design of BMS makes maintenance convenient and reduces maintenance time
- With cloud monitoring fast troubleshooting

Flexible Expansion

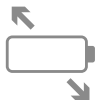
- Optimized design of module voltage makes Sunplus batteries compatible with popular inverters
- 2-8 modules connected in series to form a complete unit
- Units can be connected in parallel to enlarge electric capacity



Over Current Protection



Over Charge Protection



Over Discharge Protection



Soft Start Function



Voltage Protection



Cell Balance Function



Short Current Protection



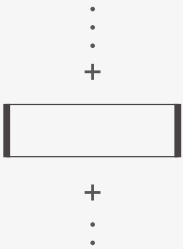
Temperature Protection

- Long Design Life
- Multiple Protection
- Modular Design
- Dekra Certification
- Scalable & Flexible
- Easy Maintenance



HV-BOX01

HV BMS Control Box
+
Bottom Base



SP-HV5120-S

5.12kWh LiFePO4 Battery pack,
102.4V, 50AH



High Voltage Energy
Storage Battery

S Series

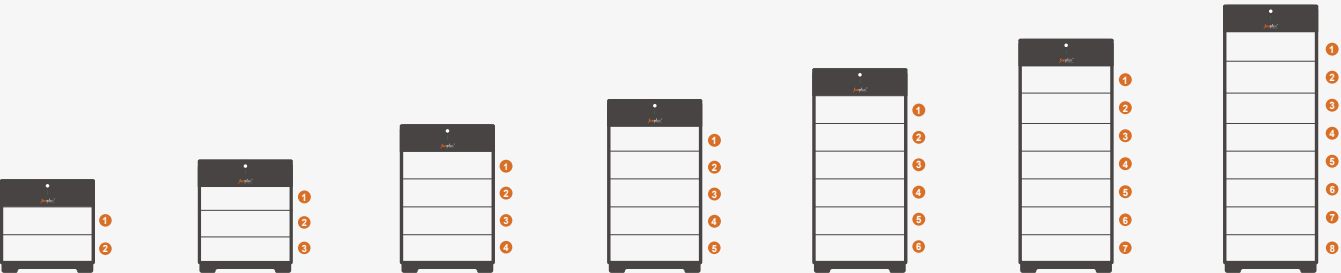
HV5120-S Specification



Product Name	HV Stacked LFP Battery
Module Model	SP-HV5120-S1
Battery Type	LFP 1P32S
Nominal Capacity	50Ah / 5.12kWh
Usable Capacity	4.86kWh （95% DOD）
Nominal Voltage	102.4V
Working Voltage	550~650V
Charging Voltage	112V
Max. Charge/Discharge Current(A)	25/40
Communication	RS485 , CAN, Wi-Fi
Storage Temperature	0℃～45℃ （Recommended）
Storage Humidity	≤85% （RH）
Working Temperature	Charging：-10℃～50℃ Discharging：-20℃～50℃
Working Humidity	≤95% （RH） No Condensation
Working Altitude	≤2000m
Ingress Protection	IP65
Protective Class	I
Weight	22kg (HV-Box01)+45kg (Pack)
Dimension(W x D x H, mm)	715 x 340 x 533
Design Life	15 Years （25℃）
Cycle Life	>8000 （25℃），60% EOL
Scalability	Module: Max. 8S, Max. 8 in parallel (Capacity 327.68kWh)
Certification	CE/UKCA: IEC/EN61000-6-2/3, CB: IEC62619, IEC63056, IEC60730 UN38.3, MSDS, DEKRA SEAL

S2-S8

Rechargeable Lithium Iron Phosphate Battery System



Product Model	SP-HV5120-S2	SP-HV5120-S3	SP-HV5120-S4	SP-HV5120-S5	SP-HV5120-S6	SP-HV5120-S7	SP-HV5120-S8
Nominal Capacity(kWh)	10.24	15.36	20.48	25.6	30.72	35.84	40.96
Usable Capacity(kWh)	9.72	14.58	19.44	24.3	29.16	34.02	38.88
Rated Power (kW)	8.192	12.288	16.384	20.480	24.576	28.672	32.768
Maximum Out Power (kW)	9.216	13.824	18.432	20.040	27.648	32.256	36.864
Nominal Voltage(V)	204.8	307.2	409.6	512	614.4	716.8	819.2
Working Voltage(V)	182.4~230.4	273.6~345.6	364.8~460.8	456~576	547.2~691.2	638.4~806.4	729.6~921.6
Charging Voltage(V)	224	336	448	560	672	784	896
Max. Charge/Discharge Current(A)	25/40	25/40	25/40	25/40	25/40	25/40	25/40
Weight(kg)	<110	<155	<200	<245	<290	<335	<380
Dimension(W x D x H, mm)	636*330*628	636*330*816	636*330*1004	636*330*1192	636*330*1380	636*330*1568	636*330*1756
Design Life	15 Years （25℃）						
Scalability	Max. 8 in parallel						
Types of Protection	Against excessive energy charging, Against excessive energy discharge, Against too high or too low charging current, Against short circuit/reverse polarity, Against overheating, Before charging at low temperatures, Sleep mode after charging.						
Work Profiles	Charging only from a photovoltaic installation, Charging from the cut power of the photovoltaic installation, Charging from a photovoltaic installation and the power grid						

Compatibility List



Accessories

