LIVOLTEK

High Voltage Battery System

BHF-G Series Battery System:
BHF-G15/25/30/35/40/45/50/55/60



Livoltek BHF-G series are a high-performance, scalable high-voltage battery storage module, can be directly used as backup power or combined with photovoltaics to form an optical storage system, suitable for shops, hotels, small factories and other scenarios. As an energy storage system, the BHF-G series adopt the modular and rack-mounted design which are easy to install and maintain. A single battery pack has a capacity of 5.12kWh, while a cluster supports up to 12 packs as a combination system with a capacity of 61.4kWh. Also, multiple battery clusters can be in parallel for expanding capacity and power(up to 5 in parallel for a capacity of 300 kWh). Additionally, because of its Intelligent BMS system with high-performance equalization technology and multiple protections, the system can automatically balance the current and voltage of each cell and maintain it for long cycle life.

Product Benefits

- Easy installation and expansion with modular design
- Wide operating temperature range from -20°C to 55°C
- Real-time moniter and management via CAN/RS485
- Long cycle life with LFP cells
- Intelligent BMS multiple protection
- Reliable performance: high efficiency and 90% DOD

20260BV1 Edition
Design and specifications are subject to change without notice

High Voltage Battery System

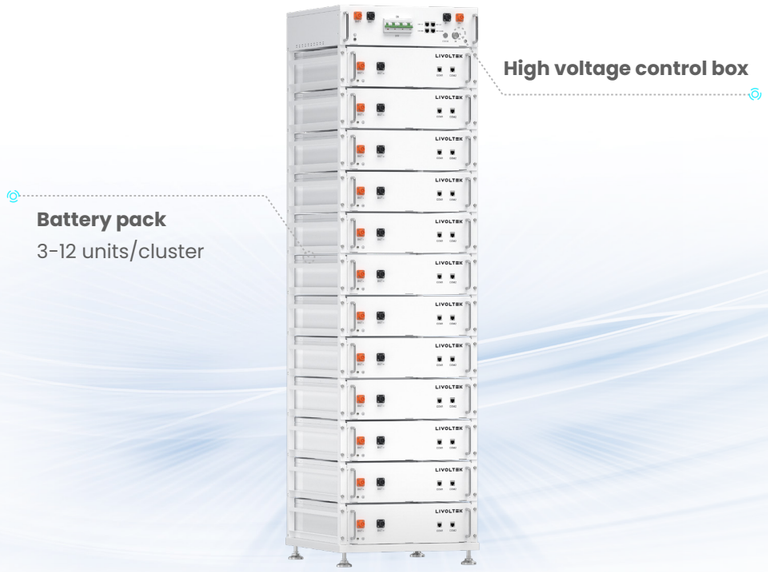
BATTERY

BHF-G15/20/25/30/35/40/45/50/55/60

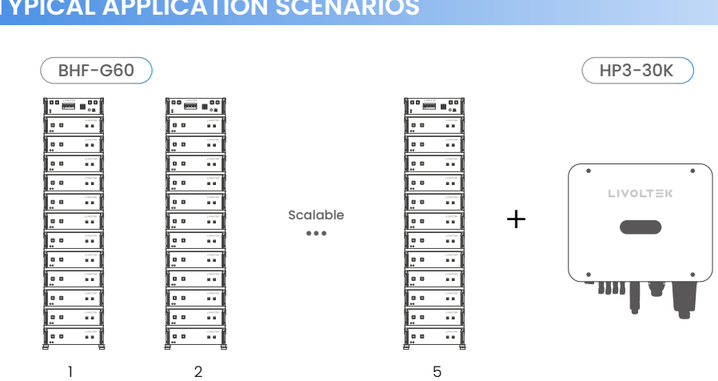
Model	BHF-G15	BHF-G20	BHF-G25	BHF-G30	BHF-G35	BHF-G40	BHF-G45	BHF-G50	BHF-G55	BHF-G60
Nominal Voltage (V)	153.6	204.8	256	307.2	358.4	409.6	460.8	512	563.2	614.4
Operating Voltage Range (V)	129.6-172.8	172.8-230.4	216-288	259.2-345.6	302.4-403.2	345.6-460.8	388.8-518.4	432-576	475.2-633.6	518.4-691.2
Rated Capacity (Ah)	100									
Number of Modules	3	4	5	6	7	8	9	10	11	12
Total Energy (kWh)	15.4	20.5	25.6	30.7	35.8	41	46.1	51.2	56.3	61.4
Usable Energy (kWh)	13.8	18.4	23	27.6	32.3	36.9	41.5	46.1	50.7	55.3
Rated Power (kW)	7.7	10.2	12.8	15.4	17.9	20.5	23	25.6	28.2	30.7
Max. Power (kW)	15.4	20.5	25.6	30.7	35.8	41	46.1	51.2	56.3	61.4
Rated Charge/Discharge Current (A)	50/50									
Max. Charge/Discharge Current (A)	80/100									
Depth of Discharge	90%									
Operating Temperature (°C)	Charge: 0 to 55; Discharge: -20 to 55									
Operating Humidity (%)	5-95									
Operating Altitude (m)	<4000									
Communication	CAN/RS485									
Cooling Type	Natural									
Protection Rating	IP20									
Cycle Life	6000 Cycles[1]									
Dimensions (W × D × H, mm)[2]	493 × 545 × 615.6	493 × 545 × 752.1	493 × 545 × 888.5	493 × 545 × 1025	493 × 545 × 1161.5	493 × 545 × 1298	493 × 545 × 1434.5	493 × 545 × 1571	493 × 545 × 1707.5	493 × 545 × 1844
Weight (kg)	154	197.5	241	284.5	328	371.5	415	458.5	502	545.5

[1]: Test conditions: 0.5C Charge/0.5C Discharge, @25°C, 90% DOD, 70% EOL.
[2]: The dimensions shown here are for the battery with the frame.

PRODUCT STRUCTURE



TYPICAL APPLICATION SCENARIOS



SYSTEM COMPONENTS

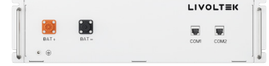
BATTERY

Battery high voltage control box



Model	BHF-C04ZY
Operating Voltage (V)	80-750
Nominal Charge/Discharge Current (A)	50/50
Max. Charge/Discharge Current (A)	80/100
Operating Temperature Range (°C)	Charge: 0 to 55; Discharge: -20 to 55
Ingress Protection	IP20
Dimensions (W × D × H, mm)	438 × 533 × 131
Weight (Approx.) (kg)	15

Battery pack



Model	BHF-B51100
Battery Type	$LiFePO_4$ (LFP)
Nominal Voltage (V)	51.2
Rated Capacity (Ah)	100
Rated Energy (kWh)	5.12
Nominal Charge/Discharge Current (A)	50/50
Charge Temperature (°C)	0 to 50
Discharge Temperature (°C)	-20 to 55
Storage Temperature (°C)	15 to 35 (Recommended)
Ingress Protection	IP20
Dimensions (W × D × H, mm)	485 × 570 × 154 (with handle)
Weight (Approx.) (kg)	43.5