

High-Voltage Residential Battery

BHF-E Series Battery System: BHF-E10/E15/E20/E25/E30/E35/E40/E45/E50/E55/E60

The BHF-E10-60 battery is an advanced lithium iron phosphate (LFP) battery designed specifically for home energy storage. With a single pack capacity of 5.12kWh and 100Ah cells, it features high energy density and a stacked installation design, it is easy to install and compatible with residential and commercial renewable energy systems, providing customers with efficient and stable energy storage solutions.

Preliminary

Flexible Scalability

- Supports up to 12 battery packs in series with capacity configurable from 10kWh to 60kWh.

Smart Maintenance

- Enables remote O&M, OTA firmware upgrade, and proactive diagnostics to reduce on-site costs and response time.

Cold-Weather Ready

- Built-in intelligent battery heating ensures stable charge/discharge performance in low-temperature environments.

Outdoor Durability

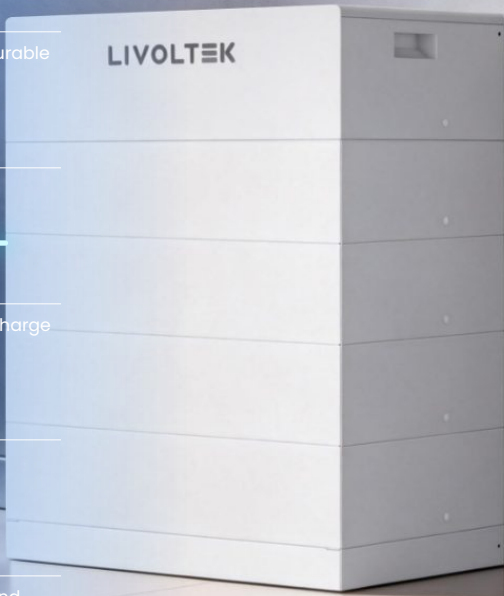
- IP65-rated enclosure allows direct outdoor installation with resistance to rain, dust, and harsh conditions.

Quick Installation

- Stackable plug-and-play design eliminates complex wiring and shortens installation time.

Easy Capacity Expansion

- Supports direct battery capacity expansion without additional device.

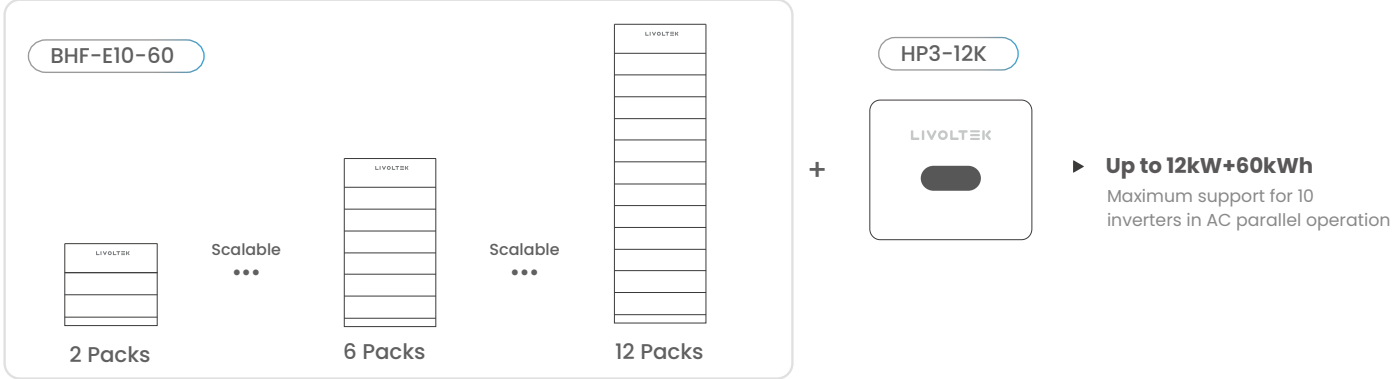


PRODUCT STRUCTURE

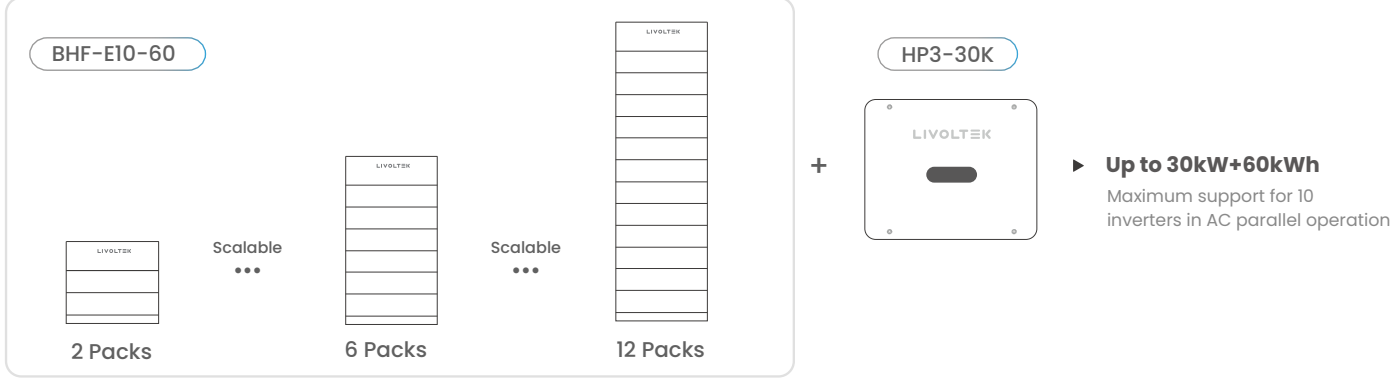


TYPICAL APPLICATION SCENARIOS

Supports **5-hour** backup power (60kWh)



Supports **2-hour** backup power (60kWh)



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BHF-E10/E15/E20/E25/E30/E35/E40/E45/E50/E55/E60

BATTERY

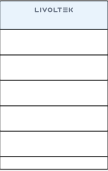
Model	BHF-E10	BHF-E15	BHF-E20	BHF-E25	BHF-E30	BHF-E35	BHF-E40	BHF-E45	BHF-E50	BHF-E55	BHF-E60
Technical Properties											
Nominal Voltage (V)	102.4	153.6	204.8	256	307.2	358.4	409.6	460.8	512	563.2	614.4
Operating Voltage Range (V)	86.4-115.2	129.6-172.8	172.8-230.4	216-288	259.2-345.6	302.4-403.2	345.6-460.8	388.8-518.4	432-576	475.2-633.6	518.4-691.2
Battery Module	BHF-E51100: 51.2 V, 100 Ah, 5.12 kWh										
Number of Modules	2	3	4	5	6	7	8	9	10	11	12
Total Energy (kWh)	10.2	15.4	20.5	25.6	30.7	35.8	41	46.1	51.2	56.3	61.4
Rated Power (kW)	5.1	7.7	10.2	12.8	15.4	17.9	20.5	23	25.6	28.2	30.7
Max. Power (kW)	10.2	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 A / 50 A										
Max. Charge/Discharge Current (A)	80 A / 100 A										
Depth of Discharge (%)	90										
Operating Temperature (°C)	Charge: 0 to 55; Discharge: -20 to 55										
Operating Humidity (%)	5-95										
Operating Altitude (m)	≤3000										
Communication	CAN / RS485										
Cooling Type	Natural										
Protection Rating	IP65										
Cycle Life	6000 Cycles										
Self-Heating Function	Support (Optional)										
Dimensions (W × D × H, mm)	Pack: 630 × 390 × 150 (excluding handles); Control Box: 630 × 390 × 200; Base: 630 × 390 × 58 (excluding handles)										
Weight (kg)	Pack: 48.6; Control Box: 21.8; Base: 6.45										

BHF-E51100/E51100H



Model	BHF-E51100	BHF-E51100H
Cell Type	LFP	
Nominal Voltage (V)	51.2	
Operating Voltage Range (V)	43.2-57.6	
Number of modules	1	
Total Energy (kWh)	5.12	
Rated Power (kW)	2.56	
Max power (kW)	5.12	
Rated Charge/Discharge Current(A)	50/50	
Max Charge/Discharge Current (A)	80/100	
Operating Temperature (°C)	Charge: 0 to 55; Discharge: -20 to 55	
Operating Humidity(%)	5-95	
Operating Altitude(m)	≤ 3000	
Communication	CAN/RS485	
Cooling Type	Natural	
Protection Rating	IP65	
Cycle Life	6000 Cycles	
Self-Heating Function	Support (Optional)	
Dimensions (mm) (W x D x H)	630 x 390 x 150	
Weight (kg)	48.6	

OTHER COMPONENTS

Model	HF-ControlBox	HF-BS
Technical Properties		
Dimensions (mm) (W x D x H)	630 x 390 x 200	630 x 390 x 58 (excluding handles)
Weight (kg)	21.8	6.45
Rated Charge/Discharge Current	50/50 A	50/50 A
Max. Charge/Discharge Current	80/100 A	80/100 A
Ingress Protection	IP65	IP65
Operating Temperature	Charge: 0°C to +55°C Discharge: -20°C to +55°C	Charge: 0°C to +55°C Discharge: -20°C to +55°C