

# HIGH-VOLTAGE BATTERY SYSTEM

## BHF-G SERIES BATTERY SYSTEM: BHF-G15/25/30/35/40/45/50/55/60

Livoltex 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 monitor and management via CAN/RS485
- Long cycle life with LFP cells
- Intelligent BMS multiple protection
- Reliable performance: high efficiency and 90% DOD



# HIGH-VOLTAGE BATTERY SYSTEM

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

BATTERY

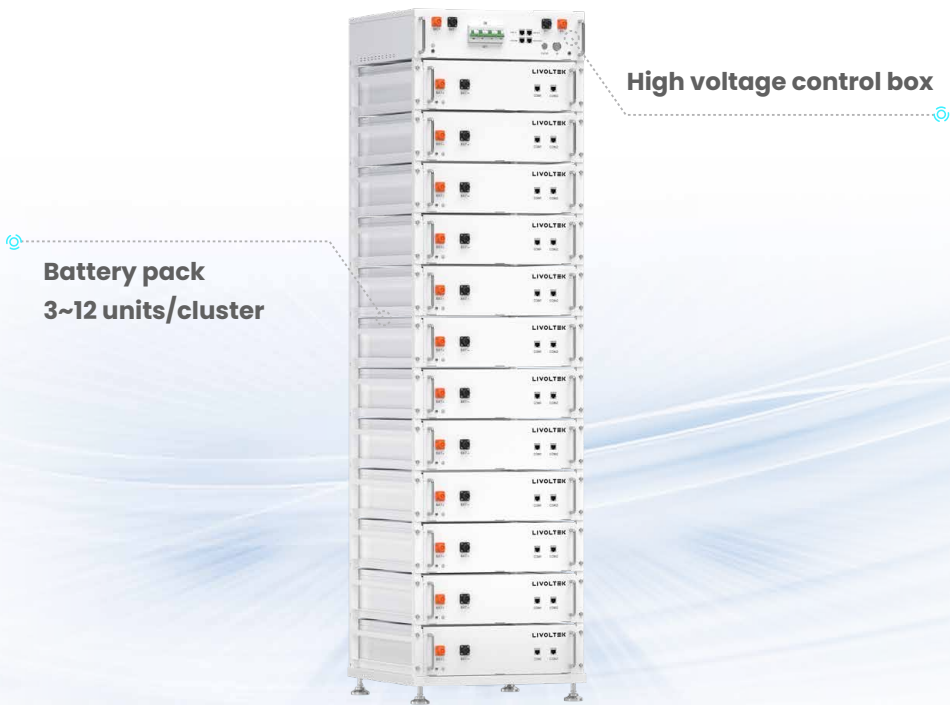
| Model                             | BHF-G15                                       | BHF-G20           | BHF-G25           | BHF-G30            | BHF-G35            | BHF-G40            | BHF-G45            | BHF-G50            | BHF-G55            | BHF-G60            |
|-----------------------------------|-----------------------------------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 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        |
| Rate 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°C to 55°C; Discharge: -20°C to 55°C |                   |                   |                    |                    |                    |                    |                    |                    |                    |
| Operating Humidity                | 5% ~ 95%                                      |                   |                   |                    |                    |                    |                    |                    |                    |                    |
| Operating Altitude                | < 4000m                                       |                   |                   |                    |                    |                    |                    |                    |                    |                    |
| Communication                     | CAN/RS485                                     |                   |                   |                    |                    |                    |                    |                    |                    |                    |
| Cooling Type                      | Natural                                       |                   |                   |                    |                    |                    |                    |                    |                    |                    |
| Protection Rating                 | IP20                                          |                   |                   |                    |                    |                    |                    |                    |                    |                    |
| Cycle Life                        | 6000 Cycles[1]                                |                   |                   |                    |                    |                    |                    |                    |                    |                    |
| Dimensions (mm)<br>(W*D*H)[2]     | 493*545<br>*545                               | 493*545<br>*752.1 | 493*545<br>*888.6 | 493*545<br>*1025.1 | 493*545<br>*1161.6 | 493*545<br>*1298.1 | 493*545<br>*1434.6 | 493*545<br>*1571.1 | 493*545<br>*1707.6 | 493*545<br>*1844.1 |
| Weight (kg)                       | 152                                           | 197.3             | 243               | 288.5              | 334                | 379.5              | 425                | 470.5              | 516                | 561.5              |

[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.

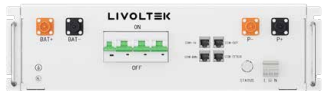
PRODUCT STRUCTURE

BATTERY

SYSTEM COMPONENTS

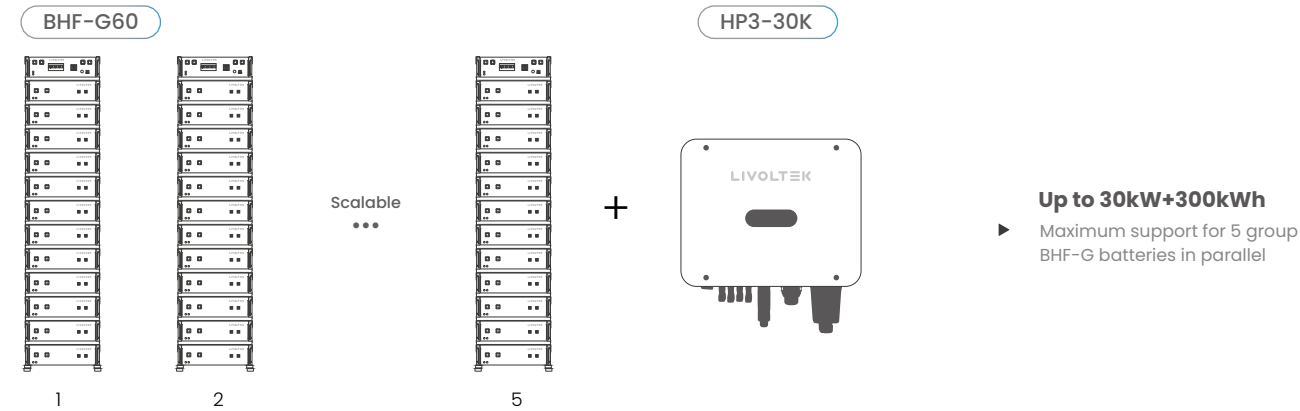


Battery high voltage control box

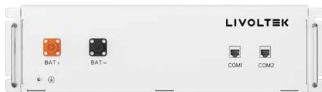


| Model                            | BHF-C01YD                                     |
|----------------------------------|-----------------------------------------------|
| Operating Voltage                | 80 ~ 750V                                     |
| Nominal Charge/Discharge Current | 50/50 A                                       |
| Max.Charge/Discharge Current     | 80/100 A                                      |
| Operating Temperature Range      | Charge: 0°C to 55°C; Discharge: -20°C to 55°C |
| Ingress Protection               | IP20                                          |
| Dimension ( W×D×H )              | 485.4*539.2*131 mm                            |

TYPICAL APPLICATION SCENARIOS



Battery pack



| Model                            | BHF-B51100                |
|----------------------------------|---------------------------|
| Battery Type                     | LiFePO (LFP)              |
| Nominal Voltage                  | 51.2 V                    |
| Rated Capacity                   | 100 Ah                    |
| Rated Energy                     | 5.12 kWh                  |
| Nominal Charge/Discharge Current | 100A / 100A               |
| Charge Temperature               | 0°C ~ 50°C                |
| Discharge Temperature            | -20°C ~ 55°C              |
| Storage Temperature              | 15°C ~ 35°C (Recommended) |
| Ingress Protection               | IP20                      |
| Dimension(WxDxH)                 | 483x535x133mm             |
| Weight Approximate               | ~43kg                     |

