



ESS-GRID HV PACK

High Voltage ESS Solutions From kWh To MWh



More Flexible HV battery Solutions for C&I ESS

Enhance your energy storage efficiency with the flexible, expandable ESS-GRID HV PACK. This rack-mounted battery system is purpose-built for high-voltage applications, including three-phase residential systems, commercial and industrial storage, microgrids, and UPS. Each battery module operates at 57.6V 135Ah, with scalable capacity through series and parallel configurations to meet your project's energy needs.



38 kWh - 1,866 kWh



Support 5~15 packs



0.5 C



288 V - 864 V



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| Model | HV PACK 5 | HV PACK 6 | HV PACK 7 | HV PACK 8 | HV PACK 9 | HV PACK 10 |
|--------------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
| Battery Module | 57.6V 135Ah 7.776kWh | | | | | |
| Rated Voltage(V) | 288.0 | 345.6 | 403.2 | 460.8 | 518.4 | 576.0 |
| Rated Capacity(Ah) | 135 | 135 | 135 | 135 | 135 | 135 |
| Cell Model(LFP-3.2V)(Ah) | 135 | 135 | 135 | 135 | 135 | 135 |
| System Configuration | 90S1P | 108S1P | 126S1P | 144S1P | 162S1P | 180S1P |
| Battery Single Box Number | 5 pack+ 1 control box | 6 pack+ 1 control box | 7 pack+ 1 control box | 8 pack+ 1 control box | 9 pack+ 1 control box | 10 pack+ 1 control box |
| Rate Power(kWh) | 38.88 | 46.66 | 54.43 | 62.21 | 69.98 | 77.76 |
| Charge cut-off Voltage(V) | 319.5 | 383.4 | 447.3 | 511.2 | 575.1 | 639.0 |
| Discharge Cut-off Voltage(V) | 256.5 | 307.8 | 359.1 | 410.4 | 461.7 | 513.0 |
| Recommended Current(A) | 68 | 68 | 68 | 68 | 68 | 68 |
| Maximum Charging Current(A) | 80 | 80 | 80 | 80 | 80 | 80 |
| Maximum Discharging Current(A) | 80 | 80 | 80 | 80 | 80 | 80 |
| Dimension(L*W*H)(MM) | 586*713*1071 | 586*713*1226 | 586*713*1381 | 586*713*1536 | 586*713*1691 | 586*713*1846 |
| Host Software Protocol | CAN BUS (Baud rate @250Kb/s) | | | | | |
| Operation Temperature Range | Charge: 0~55°C | | | | | |
| | Discharge: -20~55°C | | | | | |
| Storage Temperature | 0~35°C | | | | | |
| Cycle Life(25°C) | 6000 cycles @90% DOD | | | | | |
| Protection Level | IP20 | | | | | |
| Storage Humidity | 10%RH ~90%RH | | | | | |
| Internal Impedance | ≤1Ω | | | | | |
| Warranty | 10 years | | | | | |
| Transportation | UN38.3 | | | | | |
| Battery Life | ≥15 years | | | | | |
| Weight | Base: 18kg Single Pack: 68kg High voltage Box: 20kg | | | | | |

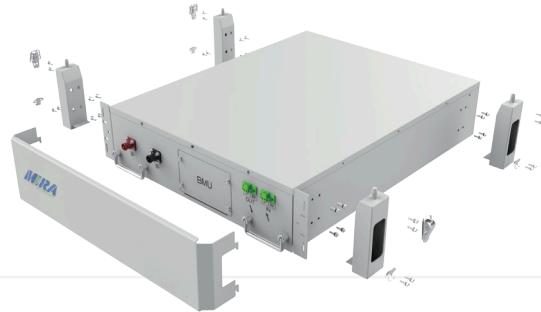


| Model | HV PACK 11 | HV PACK 12 | HV PACK 13 | HV PACK 14 | HV PACK 15 |
|--------------------------------|---|---------------------------|---------------------------|---------------------------|---------------------------|
| Battery Module | 57.6V 135Ah 7.776kWh | | | | |
| Rated Voltage(V) | 633.6 | 691.2 | 746.8 | 806.4 | 864 |
| Rated Capacity(Ah) | 135 | 135 | 135 | 135 | 135 |
| Cell Model(LFP-3.2V)(Ah) | 135 | 135 | 135 | 135 | 135 |
| System Configuration | 198S1P | 216S1P | 234S1P | 252S1P | 270S1P |
| Battery Single Box Number | 11 pack+ 1 control box | 12 pack+ 1 control box | 13 pack+ 1 control box | 14 pack+ 1 control box | 15 pack+ 1 control box |
| Rate Power(kWh) | 85.5 | 93.3 | 101.08 | 108.86 | 116.64 |
| Charge cut-off Voltage(V) | 702.9 | 766.8 | 830.7 | 887.5 | 944.3 |
| Discharge Cut-off Voltage(V) | 564.3 | 615.6 | 666.9 | 712.5 | 758.1 |
| Recommended Current(A) | 68 | 68 | 68 | 68 | 68 |
| Maximum Charging Current(A) | 80 | 80 | 80 | 80 | 80 |
| Maximum Discharging Current(A) | 80 | 80 | 80 | 80 | 80 |
| Dimension(L*W*H)(MM) | 586*713*2001 | 586*713*2156 | 1172*713*1226 | 1172*713*1381 | 1172*713*1536 |
| Host Software Protocol | CAN BUS (Baud rate @250Kb/s) | | | | |
| Operation Temperature Range | Charge: 0~55°C | | | | |
| | Discharge: -20~55°C | | | | |
| Storage Temperature | 0~35°C | | | | |
| Cycle Life(25°C) | 6000 cycles @90% DOD | | | | |
| Protection Level | IP20 | | | | |
| Storage Humidity | 10%RH ~90%RH | | | | |
| Internal Impedance | ≤1Ω | | | | |
| Warranty | 10 years | | | | |
| Transportation | UN38.3 | | | | |
| Battery Life | ≥15 years | | | | |
| Weight | Base: 18kg Single Pack: 68kg High voltage Box: 20kg | | | | |



Feel Free To Expand As Needed.

Simple, flexible, cost-saving battery rack.



Connection way -1

Capacity
38.88kWh - 93.3kWh

7.8 kWh
For each battery module

Voltage
256.5V - 766.8V

Max. 12
Batteries in a group



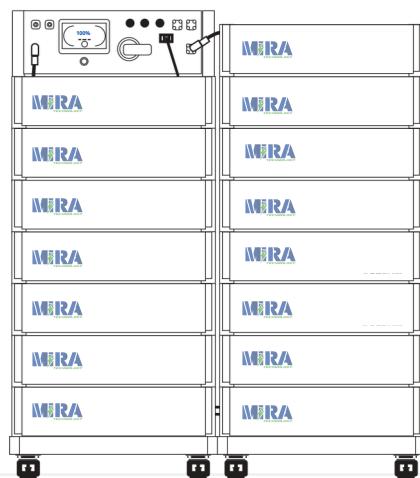
Connection way -2

Capacity
38.88kWh - 116.64kWh

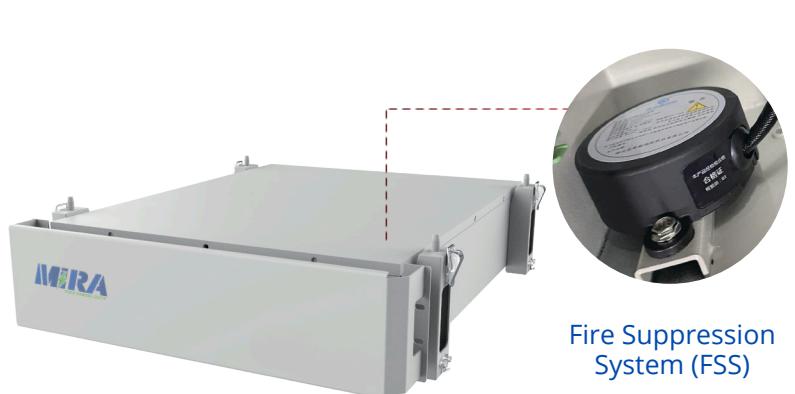
7.8 kWh
For each battery module

Voltage
256.5V - 944.3V

Max. 15
Batteries in a group



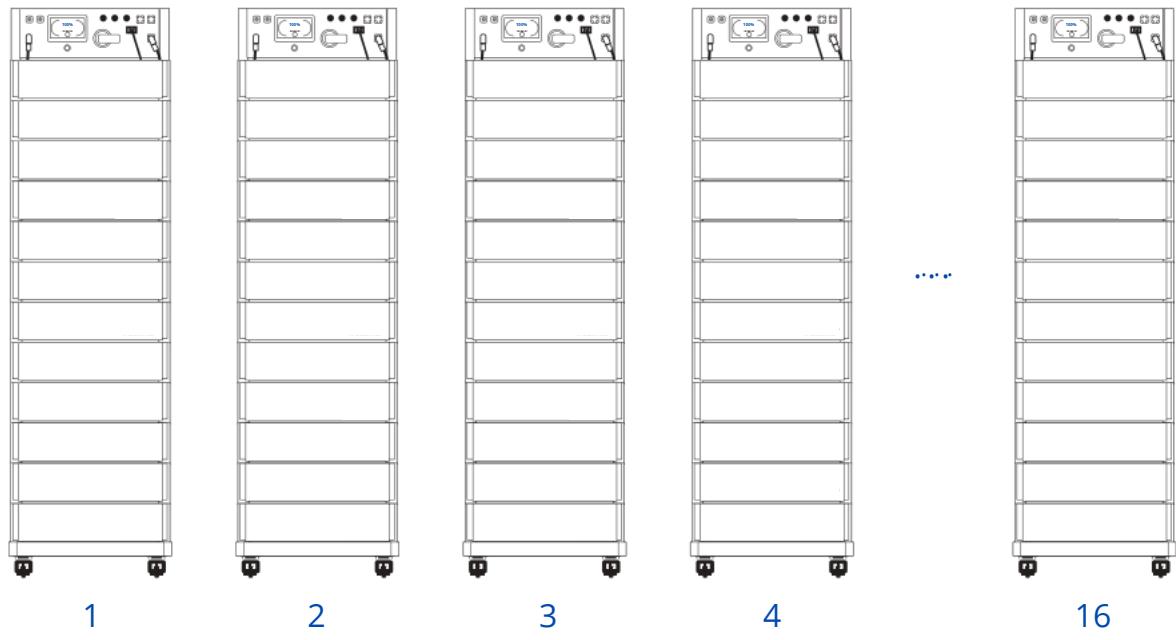
COMPATIBLE INVERTERS



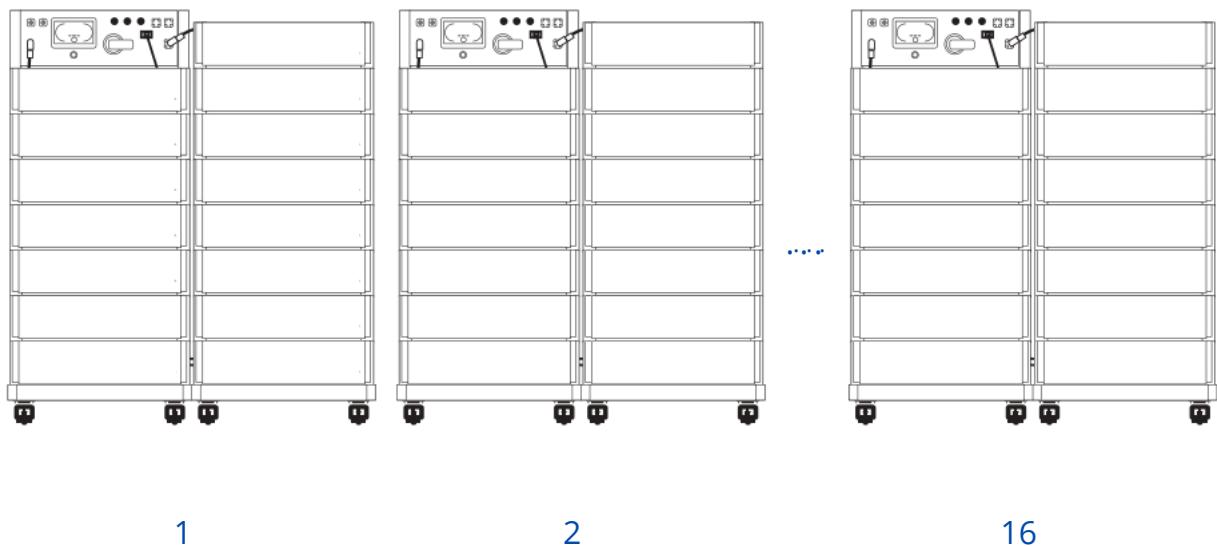
Fire Suppression System (FSS)



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Max 16 Groups in One Cluster



Max 16 Groups in One Cluster



BSLBATT HV PACK

Can be expanded according to your needs.
And the simple, flexible combination
saves you installation costs.



- ① Control box connect B+ to battery pack B+ using cable 35m².
- ② Control box BCOM connects to the BCOM IN battery pack using a 0.5m² 180mm communication cable.
- ③ 2*25m² connectors for the P+ and P- of the control box.
- ④ B+ and B- are connected between battery packs using cable 35m².
- ⑤ The BCOM IN and BCOM OUT connections between battery packs use the 0.5m² 180mm communication cable.



| High Voltage BMU | |
|-----------------------------------|---|
| Controller Working Voltage | 80-1000 VDC |
| System Operation Voltage | 102.6-639.0 VDC |
| Max. Continuous Charge Current | 135A |
| Max. Continuous Discharge Current | 135A |
| Self-consumption | <18W |
| Dimension (W*D*H, MM) | 580*713*170 |
| Weight | 20kg |
| Communication Protocol | CAN BUS (Baud rate @500Kb/s or @250Kb/s) /Modbus RTU(@9600b/s) |
| Operation Life (Year) | 15+ |
| Operation Temperature(°C) | -20~55 |
| Ingress Protection | IP20 |





Commercial & Industrial (C&I)

- Agribusiness/Farming
- Manufacturing Plants
- Oil & Gas
- Telecom/Data
- Emergency Services
- Infrastructure School
- Government Projects
- Power Backup
- Local/Rural Businesses
- Rail/Transport



Applications

- Peak Shaving
- Power Back-up
- Demand Response
- Expanded PV self-consumption
- Off-grid/On-grid systems

Higher Energy Density

- Each module utilizes a capacity of 7.7kWh, which is a higher energy density than a 5kWh battery of the same size.

Compact Size Design

- Each module is designed with a 3U rack battery to meet demanding space requirements.

Higher Conversion Efficiency

- Compared to LV systems, HV systems can reduce energy loss by lowering the current value with less energy loss.

Fast Charging And Discharging

- The HV Pack is capable of charging and discharging up to 1C, making it ideal for commercial and industrial loads.

High Security

- Using LiFePO4 as the storage core and multi-level control for expansion ensures the safety of each battery function.

