SkyEnergy

# FLEXIBLE C&I ENERGY STORAGE CONFIGURATIONS


# SkyVolt HV

Optimize your infrastructure with SkyVolt HV, a flexible, rack-mounted battery system purpose-built for high-voltage applications. Engineered for three-phase residential, microgrid, UPS, and heavy commercial setups, each 57.6V 135Ah module scales seamlessly in series or parallel to match your exact project load.

- Usable Battery Capacity from 35kWh - 1,343kWh
- Charge / Discharge Rate of 0.5 C
- Scalable up to 5~12 packs
- Rated Voltage Range 288V - 691V

## SKYVOLT HV SPECIFICATIONS

SkyVolt HV


| Model | HV-39-R | HV-46-R | HV-54-R | HV-62-R |
|---|---|---|---|---|
| Battery Module | 57.6V 135Ah 7.776kWh | | | |
| Rated Voltage(V) | 288.0 | 345.6 | 403.2 | 460.8 |
| Rated Capacity(Ah) | 135 | 135 | 135 | 135 |
| Cell Model(LFP-3.2V)(Ah) | 135 | 135 | 135 | 135 |
| System Configuration | 90S1P | 108S1P | 126S1P | 144S1P |
| Battery Single Box Number | 5 pack + 1 control box | 6 pack + 1 control box | 7 pack + 1 control box | 8 pack + 1 control box |
| Nominal Battery Capacity | 38.88kWh | 46.66kWh | 54.43kWh | 62.21kWh |
| Usable Battery Capacity | 34.99kWh | 41.99kWh | 48.99kWh | 55.99kWh |
| Charge cut-off Voltage(V) | 319.5 | 383.4 | 447.3 | 511.2 |
| Discharge Cut-off Voltage(V) | 256.5 | 307.8 | 359.1 | 410.4 |
| Recommended Current(A) | 68 | 68 | 68 | 68 |
| Rated DC Power(kW) | 19.58 | 23.50 | 27.41 | 31.33 |
| Maximum Charging Current(A) | 120 | 120 | 120 | 120 |
| Maximum Discharging Current(A) | 120 | 120 | 120 | 120 |
| Dimension (L x W x H) (mm) | 568*713*1071 | 568*713*1226 | 568*713*1381 | 568*713*1536 |
| Host Software Protocol | CAN BUS (Baud rate @250Kb/s) | | | |
| Operation Temperature Range | Charge: 0~55°C<br>Disharge: -20~55°C | | | |
| Storage Temperature | -10~40°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 | | | |
| Country of manufacture | China | | | |

## SKYVOLT HV SPECIFICATIONS

SkyVolt HV


| Model | HV-70-R | HV-78-R | HV-86-R | HV-93-R |
|---|---|---|---|---|
| Battery Module | 57.6V 135Ah 7.776kWh | | | |
| Rated Voltage(V) | 518.4 | 576.0 | 633.6 | 691.2 |
| Rated Capacity(Ah) | 135 | 135 | 135 | 135 |
| Cell Model(LFP-3.2V)(Ah) | 135 | 135 | 135 | 135 |
| System Configuration | 162S1P | 180S1P | 198S1P | 216S1P |
| Battery Single Box Number | 9 pack + 1 control box | 10 pack + 1 control box | 11 pack + 1 control box | 12 pack + 1 control box |
| Nominal Battery Capacity | 69.98kWh | 77.76kWh | 85.5kWh | 93.3kWh |
| Usable Battery Capacity | 62.98kWh | 69.98kWh | 76.95kWh | 83.97kWh |
| Charge cut-off Voltage(V) | 575.1 | 639.0 | 702.9 | 766.8 |
| Discharge Cut-off Voltage(V) | 461.7 | 513.0 | 564.3 | 615.6 |
| Recommended Current(A) | 68 | 68 | 68 | 68 |
| Rated DC Power(kW) | 35.25 | 39.16 | 43.08 | 47.00 |
| Maximum Charging Current(A) | 120 | 120 | 120 | 120 |
| Maximum Discharging Current(A) | 120 | 120 | 120 | 120 |
| Dimension (L x W x H) (mm) | 568*713*1691 | 568*713*1846 | 568*713*2018 | 568*713*2168 |
| Host Software Protocol | CAN BUS (Baud rate @250Kb/s) | | | |
| Operation Temperature Range | Charge: 0~55°C<br>Disharge: -20~55°C | | | |
| Storage Temperature | -10~40°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 | | | |
| Country of manufacture | China | | | |

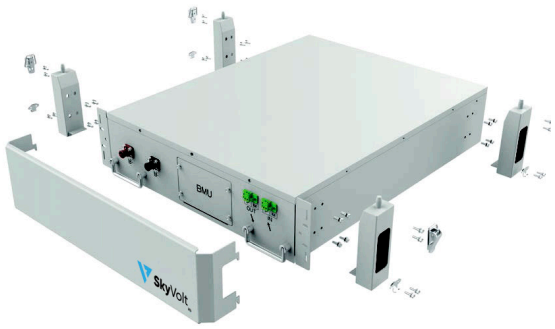
**SKYVOLT HV** SPECIFICATIONS

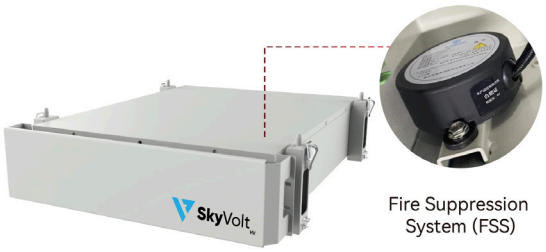
# Low footprint, maximized value.

Usable Battery Capacity: 35kWh - 84kWh

Module Capacity: 7.8 kWh

Scalable up to 12 batteries

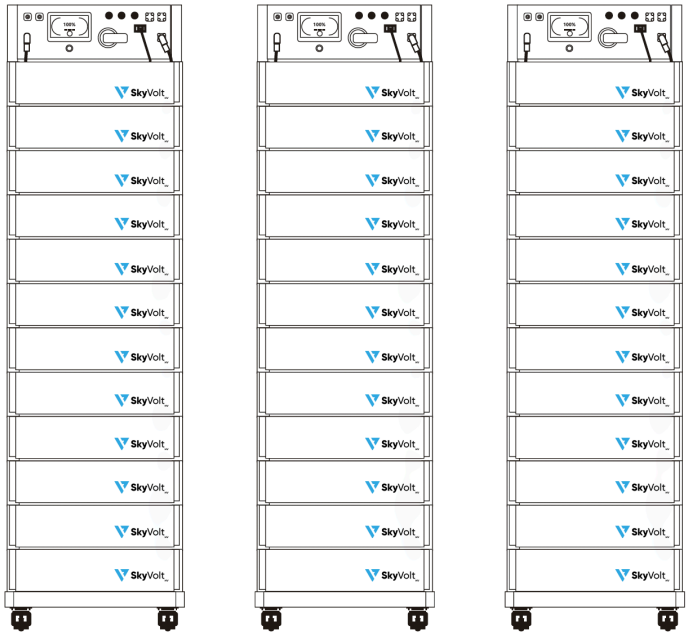

Fire Suppression System (FSS)

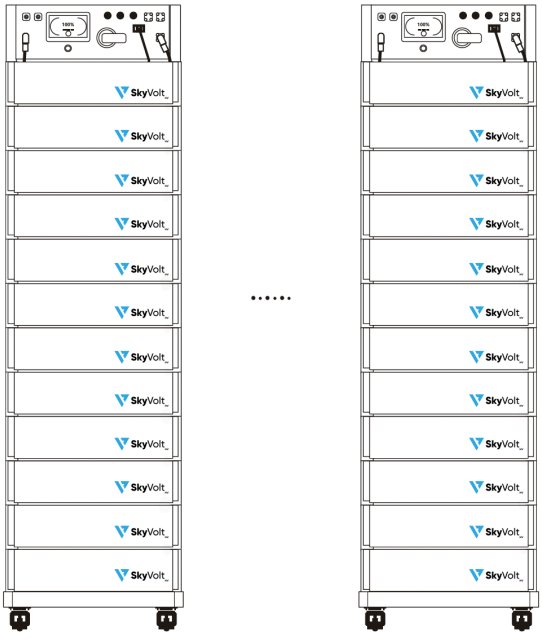
## Compatible Inverters

ATESS, Deye, Hi HYPONTECH, MEGAREVO, SAJ, GOODWE

Sol-Ark, solis inverters, SOLINTEG, Solplanet, SUN SYNK

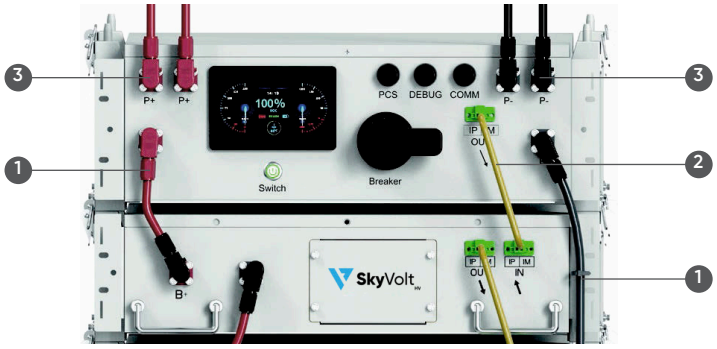
## Max 16 Groups in One Cluster

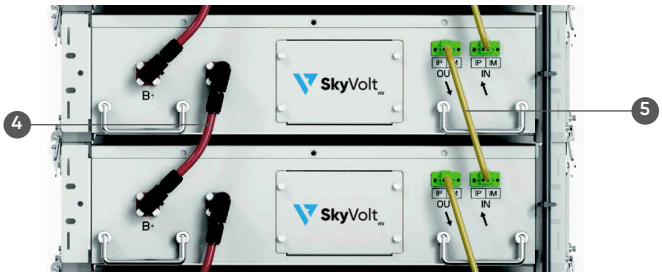


**SKYVOLT HV** BATTERY DETAILS

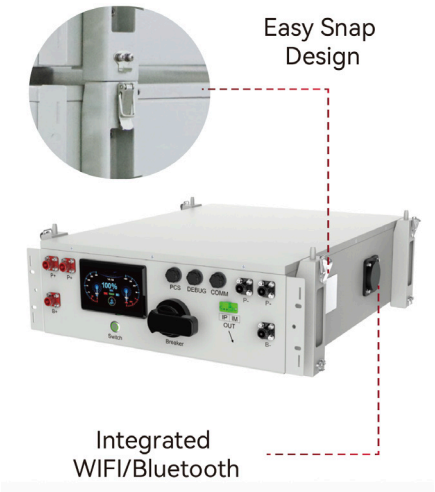
# Tailored scalability.
# Modular integration reduces setup costs.




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 (℃) | -20~55 |
| Ingress Protection | IP20 |

## SKYVOLT HV FEATURES


### Commercial & Industrial (C&I)

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

### Higher Conversion Efficiency

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

### High Security

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

### Fast Charging and Discharging

The HV Pack is capable of charging and discharging up to 0.5c, making it ideal for commercial and industrial loads.

### Compact Size Design

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

SkyVolt HV

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