# LEADING MANUFACTURER
# OF ENERGY STORAGE BATTERIES


BSLBATT®
Best Solution Lithium Battery
www.bsl-battery.com

Win-win | Change | Cooperation | Integrity | Responsibility

BSL NEW ENERGY TECHNOLOGY CO., LTD

# Global 54 Distributors, 4 Offices




CATALOG

# History

## 2011

- WISDOM INDUSTRIAL POWER CO., LIMITED was established, mainly involved in lead-acid battery foreign trade sales. The original lead-acid factory was established in 1992.
- Now renamed as BSL NEW ENERGY (HONGKONG) CO., LIMITED.

## 2012

- Established HUIZHOU WISDOM POWER TECHNOLOGY CO., LTD. to further expand the business of lead-acid batteries, and the foreign trade sales exceeded 100 million RMB.

## 2014

- First Li-ion battery factory in Anhui, China.
- Lithium batteries shipped in bulk, 12V / 24V for lead-acid replacement.

## 2017

- The Energy Storage Battery Division is growing rapidly, with product voltages extending to 48V/51.2V and more applications, and volume shipments of lithium batteries for the telecom sector and UPS.

## 2018

- Established Li-ion battery factory in Dongguan, China, with a production area of 6,000 square meters.
- Launched the first rack-mounted and wall-mounted battery models for home energy storage, with over 7,000 units sold overseas.

## 2020

- Large shipments of batteries for residential storage.
- Became the leading energy storage battery brand in South Africa.
- Became the #3 Chinese lithium battery brand to be listed by Victron.

## 2021

- Established HUIZHOU BSL COMPANY CO., LTD.
- Established Huizhou lithium battery manufacturing and production line.
- Our products are exported to more than 50 countries, and our quality and service are recognized.

## 2022

- 2000 square feet warehouse and office established in Dallas, Texas, USA.
- Products passed UL1973 / IEC / Australia CEC and other international certifications.
- Realization of a complete range of home storage products.

## 2023

- Over 90,000 batteries installed in residential worldwide.
- Energy storage product breakthroughs in commercial and industrial sectors.
- European office and warehouse opened.
- Established R&D facility in Anhui, China for commercial and industrial energy storage products.

## 2024

- Establish a new automated and modern factory in Huizhou, with an estimated annual production capacity of 3GWh.
- Establish a factory in Maanshan, Anhui, with an estimated annual production capacity of 1GWh.
- Launch a full range of industrial and commercial energy storage products.
- Establish a warehouse and office in Mexico.
- Establish a Mini factory in Turkey.

# Certification

**UL1973 / UL9540A / IEC62619 / IEC62040 / IEC62477**




# Enterprise Qualification

**The company has established a perfect system for the construction and protection of intellectual property rights.**

| Invention Patent | Utility Model Patent | Software Copyright |
|---|---|---|
| 60+ | 01+ | 05+ |

**Several patents have been applied for and are pending authorization.**

# Energy Storage Battery Products

## Portable Batteries

Portable Batteries

Capacity: 3840 Wh
AC Output: 3300W / 3600W

## Residential ESS

Rack Mounted Battery

Capacity: 5/10/15 kWh
Max. of parallel connections: 63

Wall Mounted Battery

Capacity: 5/10/15 kWh
Max. of parallel connections: 15/30

High Voltage Stacked Batteries

Capacity: 10.61 - 37.27 kWh
Nominal Voltage: 204.8 V- 716.8 V

Integrated ESS -LV

Capacity: 15-35 kWh
Inverter: 5-15 kW

## C&I ESS

ESS-GRID HV PACK

Capacity: 38 kWh - 1,866 kWh
Nominal Voltage: 288V - 864V

ESS-GRID DyniO Series

Inverter: 15 kW ~ 30 kW
Battery : 30 kWh ~ 90 kWh

ESS-GRID Station Series

Capacity: 105 kWh - 2.49 MWh
Nominal Voltage: 568V - 908.8V

ESS-BATT Cubicon Series

Capacity: 96.76 kWh - 2.45 MWh
Nominal Voltage: 560V ~ 876V

ESS-GRID Cabinet Series

Capacity: 200.7 kWh - 2.45 MWh
Nominal Voltage: 716.8V - 768V

ESS-GRID FlexiO Series

Capacity: 1 MWh / 3.8 MWh
Nominal Voltage: 672V~852V

BSL Cloud

# Li-Pro SERIES

51.2V LiFePO4 Solar Wall Batteries


BSLBATT Li-PRO Battery offers an option if you are looking for batteries to match your system. Comprehensive battery design and considering protection function makes sure our battery can have a perfectly performance while a long life time.

Li-PRO Battery is a 51.2V household battery based on LiFePO4, available in 5kWh / 10kWh / 15kWh capacities, with a maximum of 32 identical units in parallel, and superior IP65 protection.

- Compact design, space saving
- Max. 1C discharge
- > 6000 cycle life @90% DOD
- 10-year warranty & technical support
- 30 days delivery period
- Module design, flexible expansion
- UL standard battery pack
- Matching with leading inverters
- Protection level: IP65



## Specification

51.2V 5.12kWh/10.24kWh/15.36 Battery

| Item | | General Parameter | | |
|---|---|---|---|---|
| Model | | Li-Pro 5120 | Li-Pro 10240 | Li-Pro 15360 |
| Battery Type | | LiFePO4 | LiFePO4 | LiFePO4 |
| Nominal Voltage (V) | | 51.2 | 51.2 | 51.2 |
| Nominal Capacity (wh) | | 5120 | 10240 | 15360 |
| Usable Capacity (wh) | | 4608 | 9216 | 13824 |
| Cell & Method | | 16S1P | 16S1P | 16S1P |
| Dimension(mm)(W*H*D) | | 660*450*145 | 760*530*190 | 900*660*220<br>(With base: 986.5*660*250) |
| Weight(Kg) | | 50 | 90 | 132 (With Base : 138) |
| Discharge Voltage (V) | | 47 | | |
| Charge Voltage (V) | | 55 | | |
| Charge | Rate. Current / Power | 50A / 2.56kW | 100A / 5.12kW | 100A / 5.12kW |
| | Max. Current / Power | 80A / 4.096kW | 160A / 8.192kW | 160A / 8.192kW |
| | Peak Current / Power | 110A / 5.632kW | 210A / 10.752kW | 210A / 10.752kW |
| Discharging | Rate. Current / Power | 100A / 5.12kW | 200A / 10.24kW | 200A / 10.24kW |
| | Max. Current / Power | 120A / 6.144kW, 1s | 220A / 11.264kW, 1s | 220A / 11.264kW, 1s |
| | Peak Current / Power | 150A / 7.68kW, 1s | 250A / 12.80kW, 1s | 250A / 12.80kW, 1s |
| Communication | | RS232, RS485, CAN, WIFI(Optional), Bluetooth(Optional) | | |
| Depth Of Discharge(%) | | 90% | | |
| Expansion | | Up to 32 units in parallel | | |
| Working Temperature | Charge | 0~55℃ | | |
| | Discharge | -20~55℃ | | |
| Storage Temperature | | 0~35℃ | | |
| Short Circuit Current /Duration Time | | 350A, Delay time 500μs | | |
| Cooling Type | | Nature | | |
| Protection Level | | IP65 | | |
| Monthly Self-discharge | | ≤ 3%/month | | |
| Humidity | | ≤ 60% ROH | | |
| Altitude(m) | | < 4000 | | |
| Warranty | | 10 Years | | |
| Design Life | | > 15 Years（25℃ / 77℉） | | |
| Cycle Life | | > 6000 cycles, 25℃ | | |

Note: Customized models and adjusted parameters are available upon request.

# PowerLine Series

Ultra Thin 51.2V LiFePO4 Solar Wall Battery


PowerLine- 5 is an ultra-thin wall-mounted battery that can be installed directly on the wall through a simple installation method quick installation. Exquisite designed, compact size can fit into any small space in the home. We use industry-leading LiFePO4 technology to cycle more than 6000 times @ 90% DOD.

- Modular and scalable
- Max. 1C discharge
- > 6000 cycle life @90% DOD
- 10-year warranty & technical support
- 30 days delivery period
- For on-grid and off-grid
- UL standard battery pack
- Compatible with multiple inverters
- Safe and reliable LiFePO4

| Item | | General Parameter |
|---|---|---|
| Model | | PowerLine-5 |
| Nominal energy | | LiFePO4 |
| Nominal Voltage (V) | | 51.2 |
| Nominal Capacity (wh) | | 5120 |
| Usable Capacity (wh) | | 4608 |
| Cell & Method | | 16S1P |
| Dimension(mm)(W*H*D) | | （700*540*90）±1mm |
| Weight(Kg) | | 48.3±2Kg |
| Discharge Voltage (V) | | 47 |
| Charge Voltage (V) | | 55 |
| Charge | Rate. Current / Power | 50A / 2.56kW |
| | Max. Current / Power | 80A / 4.096kW |
| | Peak Current / Power | 110A / 5.632kW |
| Discharging | Rate. Current / Power | 100A / 5.12kW |
| | Max. Current / Power | 120A / 6.144kW, 1s |
| | Peak Current / Power | 150A / 7.68kW, 1s |
| Communication | | RS232, RS485, CAN, WIFI(Optional), Bluetooth(Optional) |
| Depth Of Discharge(%) | | 90% |
| Expansion | | Up to 32 units in parallel |
| Working Temperature | Charge | 0~55℃ |
| | Discharge | -20~55℃ |
| Storage Temperature | | 0~35℃ |
| Short Circuit Current /Duration Time | | 350A, Delay time 500μs |
| Cooling Type | | Nature |
| Protection Level | | IP20 |
| Monthly Self-discharge | | ≤ 3%/month |
| Humidity | | ≤ 60% ROH |
| Altitude(m) | | < 4000 |
| Warranty | | 10 Years |
| Design Life | | > 15 Years（25℃ / 77℉） |
| Cycle Life | | > 6000 cycles, 25℃ |
| Certification & Safety Standard | | UN38.3 |

Note: Customized models and adjusted parameters are available upon request.

# B-LFP48 SERIES

51.2V LiFePO4 Solar Wall Batteries


The BSLBATT 51.2V 10.65kWh/14.34kWh home battery with IP65 enclosure is special designed for outdoor installations and utilizes LiFePO4 technology for increased safety and performance levels. The battery is particularly well suited for high power applications with limited installation space and long cycle life.

- Modular and scalable
- Maximum 16 in parallel
- 6000 Cycle Life @80% DOD
- 10-year warranty & technical support
- 30 days delivery period
- For on-grid and off-grid
- UL standard battery modulel
- Compatible with multiple inverters
- Safe and reliable LiFePO4



51.2V 10.65kWh/14.34kWh Battery

| Model | | ECO 10.0 Plus | ECO 15.0 Plus |
|---|---|---|---|
| Battery Type | | LiFePO4 | |
| Nominal Voltage (V) | | 51.2 | |
| Nominal Capacity (Wh) | | 10650 | 14336 |
| Usable Capacity (Wh) | | 9585 | 12902 |
| Cell & Method | | 16S2P | 16S1P |
| Dimension(mm) | | 519*762*148 | 470*908*262 |
| Weight(Kg) | | 85±3 | 125±3 |
| Discharge Voltage(V) | | 43.2 | 43.2 |
| Charge Voltage(V) | | 56.8 | 56.8 |
| Charge | Rate. Current / Power | 90A / 4.60kW | 140A / 7.16kW |
| | Max. Current / Power | 100A / 5.12kW | 200A / 10.24kW |
| Discharge | Rate. Current / Power | 90A / 4.60kW | 140A / 7.16kW |
| | Max. Current / Power | 100A / 5.12kW | 200A / 10.24kW |
| Communication | | RS232, RS485, CAN, WIFI(Optional), Bluetooth(Optional) | |
| Depth Of Discharge(%) | | 80% | |
| Expansion | | Up to 16 units in parallel | |
| Working Temperature | Charge | 0~55℃ | |
| | Discharge | -20~55℃ | |
| Storage Temperature | | 0~35℃ | |
| Short Circuit Current/Duration Time | | 350A, Delay time 500μs | |
| Cooling Type | | Nature | |
| Protection Level | | IP65 | |
| Monthly Self-discharge | | ≤ 3%/month | |
| Humidity | | ≤ 60% ROH | |
| Altitude(m) | | < 4000 | |
| Warranty | | 10 Years | |
| Design Life | | > 15 Years（25℃ / 77℉） | |
| Cycle Life | | > 6000 cycles, 25℃ | |
| Certification & Safety Standard | | UN38.3, IEC62619, UL1973 | UN38.3, UL1973, UL9540A |

# B-LFP48 SERIES

51.2V LiFePO4 Solar Wall Batteries


**5.12kWh/10.24kWh/15.36kWh**
100PW / 200PW / 300PW

The BSLBATT wall-mounted home battery is a 51.2V solar battery based on LiFePO4 electrochemical technology with various capacity options: 5kWh, 10kWh, 15kWh, which can be flexibly expanded to meet different energy needs of the family.

- Modular and scalable
- Maximum 16 in parallel
- 6000 cycle life @90% DOD
- 10-year warranty & technical support
- 30 days delivery period
- For on-grid and off-grid
- UL standard battery pack
- Compatible with multiple inverters
- Safe and reliable LiFePO4

51.2V 5.12kWh/10.24kWh/15.36kWh Battery

| Item | | General Parameter | | |
|---|---|---|---|---|
| Model | | B-LFP48-100PW | B-LFP48-200PW | B-LFP48-300PW |
| Battery Type | | LiFePO4 | LiFePO4 | LiFePO4 |
| Nominal Voltage (V) | | 51.2 | 51.2 | 51.2 |
| Nominal Capacity (wh) | | 5120 | 10240 | 15360 |
| Usable Capacity (wh) | | 4608 | 9216 | 13824 |
| Cell & Method | | 16S1P | 16S2P | 16S1P |
| Dimension(mm)(W*H*D) | | 540*490*147 | 820*490*147 | 950*600*190 |
| Weight(Kg) | | 53 | 95 | 130 |
| Discharge Voltage (V) | | 47 | | |
| Charge Voltage (V) | | 55 | | |
| Charge | Rate. Current / Power | 50A / 2.56kW | 100A / 5.12kW | 100A / 5.12kW |
| | Max. Current / Power | 80A / 4.096kW | 160A / 8.192kW | 160A / 8.192kW |
| | Peak Current / Power | 110A / 5.632kW | 210A / 10.752kW | 210A / 10.752kW |
| Discharging | Rate. Current / Power | 100A / 5.12kW | 200A / 10.24kW | 200A / 10.24kW |
| | Max. Current / Power | 120A / 6.144kW, 1s | 220A / 11.264kW, 1s | 220A / 11.264kW, 1s |
| | Peak Current / Power | 150A / 7.68kW, 1s | 250A / 12.80kW, 1s | 250A / 12.80kW, 1s |
| Communication | | RS232, RS485, CAN, WIFI(Optional), Bluetooth(Optional) | | |
| Depth Of Discharge(%) | | 90% | | |
| Expansion | | up to 32 units in parallel | | |
| Working Temperature | Charge | 0~55℃ | | |
| | Discharge | -20~55℃ | | |
| Storage Temperature | | 0~35℃ | | |
| Short Circuit Current /Duration Time | | 350A, Delay time 500μs | | |
| Cooling Type | | Nature | | |
| Protection Level | | IP20 | | |
| Monthly Self-discharge | | ≤ 3%/month | | |
| Humidity | | ≤ 60% ROH | | |
| Altitude(m) | | < 4000 | | |
| Warranty | | 10 Years | | |
| Design Life | | > 15 Years（25℃ / 77℉） | | |
| Cycle Life | | > 6000 cycles, 25℃ | | |
| Certification & Safety Standard | | UN38.3<br>B-LFP48-200PW: UN38.3, UL1973, IEC62619, CEC | | |

Note: Customized models and adjusted parameters are available upon request.

# B-LFP48 SERIES

51.2V LiFePO4 Rack Batteries

**5.12kWh/10.24kWh/15.36kWh**
100E / 200E / 300E

Discover the power of efficiency and flexibility with BSLBATT's Rack Batteries, featuring lithium iron phosphate technology at its core. Designed to excel in applications with limited space or where seamless integration of multiple batteries into a single system is essential, our Rack Batteries redefine energy storage solutions for diverse needs.

- Modular and scalable
- Maximum 16 in parallel
- 6000 cycle life @90% DOD
- 10-year warranty & technical support
- 30 days delivery period
- For on-grid and off-grid
- UL standard battery pack
- Compatible with multiple inverters
- Safe and reliable LiFePO4





| Item | | General Parameter | | |
|---|---|---|---|---|
| Model | | B-LFP48-100E 3U | B-LFP48-200E | B-LFP48-300E |
| Battery Type | | LiFePO4 | LiFePO4 | LiFePO4 |
| Nominal Voltage (V) | | 51.2 | 51.2 | 51.2 |
| Nominal Capacity (wh) | | 5120 | 10240 | 15360 |
| Usable Capacity (wh) | | 4608 | 9216 | 13824 |
| Cell & Method | | 16S1P | 16S2P | 16S1P |
| Dimension(mm)(W*H*D) | | 538*483(442)*136 | 590*483(442)*222 | 780*483(442)*222 |
| Weight(Kg) | | 46 | 95 | 130 |
| Discharge Voltage (V) | | 47 | | |
| Charge Voltage (V) | | 55 | | |
| Charge | Rate. Current / Power | 50A / 2.56kW | 100A / 5.12kW | 100A / 5.12kW |
| | Max. Current / Power | 80A / 4.096kW | 160A / 8.192kW | 160A / 8.192kW |
| | Peak Current / Power | 110A / 5.632kW | 210A / 10.752kW | 210A / 10.752kW |
| Discharging | Rate. Current / Power | 100A / 5.12kW | 200A / 10.24kW | 200A / 10.24kW |
| | Max. Current / Power | 120A / 6.144kW, 1s | 220A / 11.264kW, 1s | 220A / 11.264kW, 1s |
| | Peak Current / Power | 150A / 7.68kW, 1s | 250A / 12.80kW, 1s | 250A / 12.80kW, 1s |
| Communication | | RS232, RS485, CAN, WIFI(Optional), Bluetooth(Optional) | | |
| Depth Of Discharge(%) | | 90% | | |
| Expansion | | up to 63 units in parallel | | |
| Working Temperature | Charge | 0~55℃ | | |
| | Discharge | -20~55℃ | | |
| Storage Temperature | | 0~35℃ | | |
| Short Circuit Current /Duration Time | | 350A, Delay time 500μs | | |
| Cooling Type | | Nature | | |
| Protection Level | | IP20 | | |
| Monthly Self-discharge | | ≤ 3%/month | | |
| Humidity | | ≤ 60% ROH | | |
| Altitude(m) | | < 4000 | | |
| Warranty | | 10 Years | | |
| Design Life | | > 15 Years（25℃ / 77°F） | | |
| Cycle Life | | > 6000 cycles, 25℃ | | |
| Certification & Safety Standard | | UN38.3<br>B-LFP48-200E: IEC62619<br>B-LFP48-100E 4U: UL1973, IEC62619, CEC | | |

Note: Customized models and adjusted parameters are available upon request.

# MatchBox HVS

204.8V - 716.8V, 10.64kWh -37.27kWh

High Voltage Stackable System



| Model | HVS2 | HVS3 | HVS4 | HVS5 | HVS6 | HVS7 |
|---|---|---|---|---|---|---|
| Rated voltage(V) | 204.8 | 307.2 | 409.6V | 512 | 614.4 | 716.8 |
| Cell model(LFP-3.2V) | 3.2V 52Ah 102.4V 5.32kWh | | | | | |
| System configuration | 64S1P | 96S1P | 128S1P | 160S1P | 192S1P | 224S1P |
| Rate power(KWh) | 10.64 | 15.97 | 21.29 | 26.62 | 31.94 | 37.27 |
| Charge upper voltage | 227.2V | 340.8V | 454.4V | 568V | 681.6V | 795.2V |
| Discharge lower voltage | 182.4V | 273.6V | 364.8V | 456V | 547.2V | 645.12V |
| Recommended current | 26A | | | | | |
| Maximum charging current | 52A | | | | | |
| Maximum discharging current | 52A | | | | | |
| Dimensions（W*D*H,mm） | 665*370*425 | 665*370*575 | 665*370*725 | 665*370*875 | 665*370*1025 | 665*370*1175 |
| Pack weight(kg) | 122 | 172 | 222 | 272 | 322 | 372 |
| Communication protocol | CAN BUS(Baud rate @500Kb/s @250Kb/s)/Mod bus RTU(@9600b/s) | | | | | |
| Host software protocol | CAN BUS(Baud rate @250Kb/s) / Wifi / Bluetooth | | | | | |
| Operation temperature range | Charge:0~55℃ | | | | | |
| | Discharge: -10~55℃ | | | | | |
| Cycle life(25℃) | > 6000 cycles @90% DOD | | | | | |
| Protection level | IP54 | | | | | |
| Storage tempearture | 0~35℃ | | | | | |
| Storage humidity | 10%RH~90%RH | | | | | |
| Internal impedance | ≤1Ω | | | | | |
| Warranty | 10 years | | | | | |
| Service life | 15-20 years | | | | | |
| Multi-group | Max. 5 systems in parrallel | | | | | |

MatchBox HVS Series high-voltage battery is an ideal component and a highlight of the comprehensive BSLBATT one-stop shop energy storage solution. Consisting of 102.4V 52Ah individual battery modules with capacities ranging from 10.64kWh to 37.27kWh each and expandable by paralleling up to 5 towers, the MatchBox HVS is based on a LiFePO4 battery with a BMS built into the HVS control box for various protection and control functions.

- Modular and scalable
- Higher energy density
- Maximum 5 groups in parallel
- 10-year warranty & technical support
- 30 days delivery period
- For on-grid and off-grid
- UL standard battery pack
- Higher system efficiency
- Safe and reliable LiFePO4

## Certification

| | |
|---|---|
| Safety | IEC62619/CE |
| Hazardous materials classification | Class 9 |
| Transportation | UN38.3 |

# PowerNest LV Series

All in One LV Integrated Energy Storage System

**5~15kW / 15~35kWh**

PowerNest is a fully integrated solar energy solution comes pre-configured for seamless operation, including factory-set communication between the battery and inverter and pre-assembled power harness connections. Installation is straightforward—simply connect the system to your load, diesel generator, photovoltaic array, or utility grid to immediately benefit from a reliable and efficient energy storage solution.

| Model | LV15 | LV20 | LV25 | LV35 |
|---|---|---|---|---|
| **Battery Parameters** | | | | |
| Cell | 100Ah | | | |
| Battery Model | B-LFP48-100E | | | |
| Combination | 3P*16S1P | 4P*16S1P | 5P*16S1P | 7P*16S1P |
| Rated Voltage | 51.2V | | | |
| Voltage Range | 46.4V~56V | | | |
| Rated Energy | 15.36kWh | 20.48kWh | 25.6kWh | 35.84kWh |
| Certificates | CE, IEC62040 | | | |

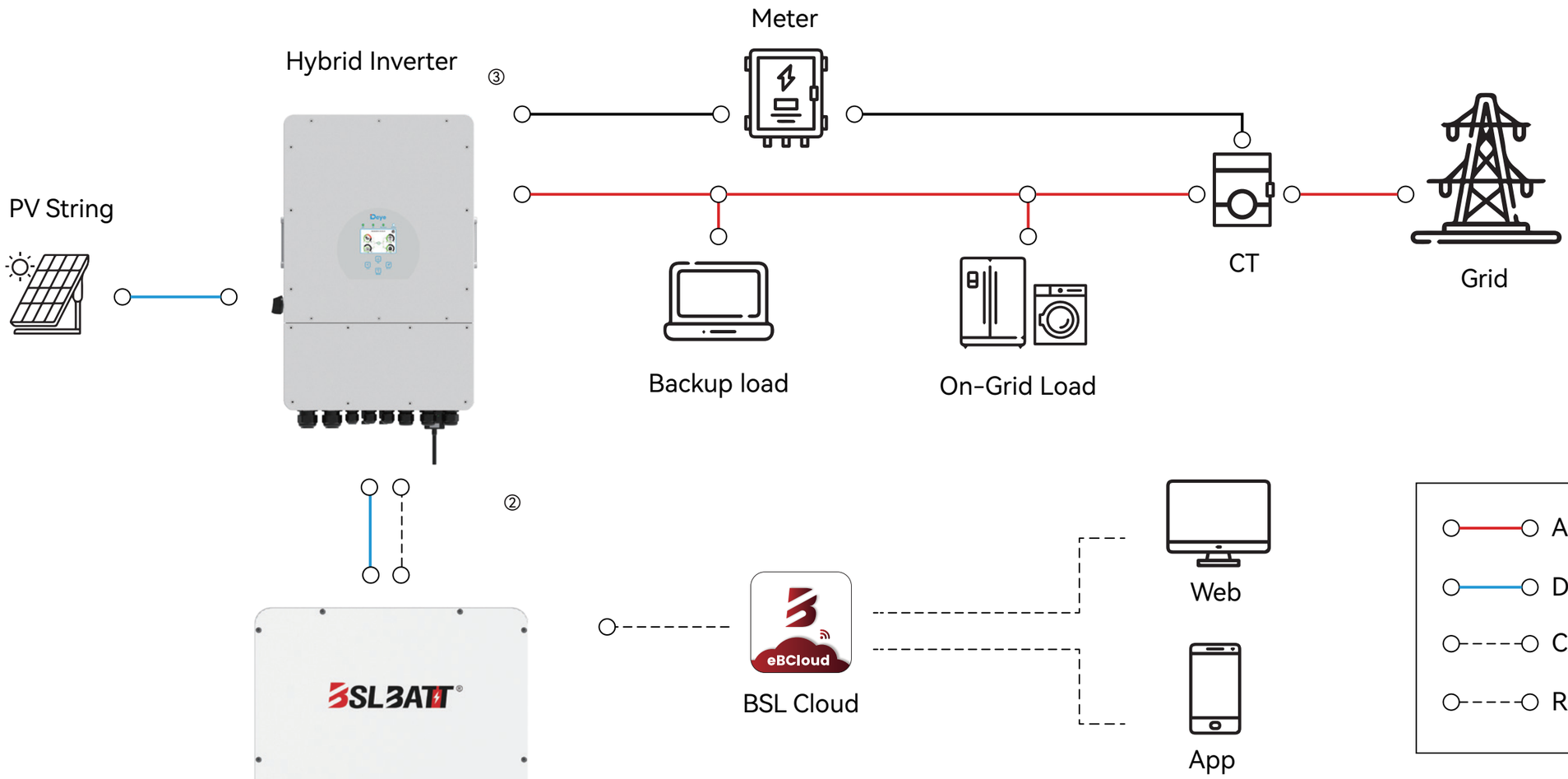


| Model | LV15 | LV20 | LV25 | LV35 |
|---|---|---|---|---|
| **PV Parameters** | | | | |
| Max. Input Power | 6.5kW | 10.4kW | 13kW | 22.5kW |
| Max. Input Voltage | 500V | | 800V | |
| MPPT Voltage Range | 150V~425V | 150V~425V | 200V~650V | 160V~650V |
| MPPT Full Load Voltage Range | 300V~425V | 200V~425V | 350V~650V | 350V~650V |
| Start-up Voltage | 125V | | 160V | |
| Input Rated Voltage | 370V | | 550V | |
| Max. Input Current Per MPPT | 13A+13A | 26A+26A | 26A+13A | 36A+20A |
| Max. Short-circuit Current Per MPPT | 17A+17A | 44A+44A | 34A+17A | 54A+30A |
| Number Of MPPT | 2/1+1 | 2/2+1 | 2/2+1 | 2/2+1 |
| **AC Parameters** | | | | |
| Rated AC Power | 5kW | 8kW | 10kW | 15kW |
| Max. AC Power | 5.5kW | 8.8kW | 11kW | 16.5kW |
| Rated AC Input Current | 22.7A | 36.4A | 15.2A | 22.8A |
| Rated AC Output Current | 21.7A | 34.8A | 14.5A | 21.8A |
| Rated AC Voltage | 220V/230V 0.85Un-1.1Un | | 220V/380V, 230/400V 0.85Un-1.1Un | |
| Grid Connection | L+N+PE | | 3L+N+PE | |
| Voltage Frequency | 50Hz/60Hz | | | |
| Power Factor | -0.8~0.8 | | | |
| Total Current Waveform Distortion Rate | ＜3% | | | |
| **General Parameters** | | | | |
| Operating Temperature Range | -20~55℃ | | | |
| Relative Humidity | ≤60% | | | |
| Max. Working Altitude | 2000m | | | |
| Cooling Method | Intelligent air-cooled | | | |
| Human-machine Interaction | LED+LCD | | | |
| Communication Method | RS232，RS485, CAN | | | |
| Number of Cycles | ＞6000 cycles, 25℃ | | | |
| Protection Level | IP54 | | | |
| Dimension (mm) | 1600*700*800 | 1800*700*800 | 1900*700*800 | 2300*700*800 |
| Weight (Approx.) | 311kg | 384kg | 451kg | 587kg |

**Cabinet is Adapted To The Following Inverter Brands**

victron energy · GOODWE · STUDER · solis inverters · LUXPOWER TEK · SAJ · TBB POWER · Deye · phocos · Afore · SUN SYNK · SOLAX POWER

# Residential Solutions




| Sr. | Units | Availability |
|---|---|---|
| ① | Battery Rack | B-LFP48 Series / PowerLine Series / MatchBox HVS |
| ② | Combiner Box | Customized |
| ③ | PCS | Refer to BSLBATT Compatibility List |

# ESS-GRID HV PACK

High Voltage ESS Solutions From kWH To MWh

**38 kWh - 1,866 kWh**
**288 V-864 V**

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.

- Modular and scalable
- 16 Groups Parallel Connection
- 6000 cycle life @90% DOD
- 10-year warranty & technical support
- 30 days delivery period
- For on-grid and off-grid
- UL standard battery pack
- Compatible with multiple inverters
- Safe and reliable LiFePO4

| Model | HV PACK 5 | HV PACK 8 | HV PACK 10 | HV PACK 12 | HV PACK 15 |
|---|---|---|---|---|---|
| Battery Module | 57.6V 135Ah 7.776kWh | | | | |
| Rated Voltage(V) | 288.0 | 460.8 | 576.0 | 691.2 | 864 |
| Rated Capacity(Ah) | 135 | 135 | 135 | 135 | 135 |
| Cell Model(LFP-3.2V)(Ah) | 135 | 135 | 135 | 135 | 135 |
| System Configuration | 90S1P | 144S1P | 180S1P | 216S1P | 270S1P |
| Battery Single Box Number | 5 pack+ 1 control box | 8 pack+ 1 control box | 10 pack+ 1 control box | 12 pack+ 1 control box | 15 pack+ 1 control box |
| Rate Power(kWh) | 38.88 | 62.21 | 77.76 | 93.3 | 116.64 |
| Charge cut-off Voltage(V) | 319.5 | 511.2 | 639.0 | 766.8 | 944.3 |
| Discharge Cut-off Voltage(V) | 256.5 | 410.4 | 513.0 | 615.6 | 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) | 590*713*1118 | 590*713*1568 | 590*713*1868 | 590*713*2168 | 1180*713*1568 |
| Host Software Protocol | CAN BUS (Baud rate @250Kb/s) | | | | |
| Operation Temperature Range | Charge: 0~55℃ | | | | |
| | Disharge: -20~55℃ | | | | |
| Storage Temperature | 0~35℃ | | | | |
| Cycle Life(25℃) | 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 | | | | |

# ESS-GRID DyniO Series

All-in-one High Voltage ESS Solutions

**15kW / 39-54kWh**
**30kW / 62-93kWh**

ESS-GRID DyniO Series combine 3 Phase hybrid inverter, BMS and batteries together, make it easier to build your solar storage solution in a time. Plug and play design even makes the installation procedure and the maintenance work easier. From 15kW to 30kW, the power, capacity or the appearance can all be customized.

- Modular and scalable
- Maximum 3 in parallel
- Maximum conversion efficiency of 97.8%
- 150% overload capacity
- Supports oil-engine hybrid operations
- Seamless switching between parallel and off-grid (<5ms)
- Meets a variety of use scenarios
- Remote monitoring and management
- Efficient energy management

## 3 Phase Hybrid Inverter

| System Parameters | |
|---|---|
| Communication Port | EMS:RS485 Battery: CAN/RS485 |
| DIDO | DI: 2-way DO: 2-way |
| Maximum power | 97.8% |
| Installation | Insertion Frame |
| Loss | Standby <10W,<br>No-load power <100W |
| Protection | IP20 |
| Temperature Range | -30~60℃ |
| Humidity Range | 5~95% |
| Cooling | Intelligent Forced Air Cooling |
| Altitude | 2000m (90%/80% reduction for 3000/4000 meters respectively) |
| Inverter Certification | IEC61000/EN50549/IEC62619/ NRS/CE/UN38.3 |
| Battery Certification | IEC62619/IEC62040 /IEC62477 CE/UN38.3 |

| Battery Parameters | | |
|---|---|---|
| Battery Model | HV PACK8 | HV PACK5 |
| Number Of Battery Packs | 8 | 5 |
| Rated Voltage (V) | 460.8 | 288 |
| Voltage Range (V) | 410.4-511.2 | 256.5-319.5 |
| Rated Energy (kWh) | 62.4 | 39 |
| Max. Discharging Current (A) | 67.5 | |
| Cycle Life | 6000 Cycles @90% DOD | |

| PV Parameter | | |
|---|---|---|
| Inverter Model | INV C30 | INV C15 |
| Maximum Power | 19.2kW+19.2kW | 19.2kW+19.2kW |
| Maximum PV Voltage | 850V | |
| PV Starting Voltage | 250V | |
| MPPT Voltage Range | 200V-830V | |
| Maximum PV Current | 32A+32A | 32A+32A |

| AC Side (Grid-connected) | | |
|---|---|---|
| Rated Power | 30kVA | 15kVA |
| Rated Current | 43.5A | 22A |
| Rated Grid Voltage | 400V/230V | |
| Grid Voltage Range | -20%~15% | |
| Voltage Frequency Range | 50Hz/47Hz~52Hz | |
| | 60Hz/57Hz~62Hz | |
| Voltage Harmonics | <5% (>30% Load) | |
| Power Factor | -0.8~0.8 | |

| AC Side (Off-grid) | | |
|---|---|---|
| Rated Output Power | 30kVA | 15kVA |
| Maximum Output Power | 33kVA | 16.5kVA |
| Rated Output Current | 43.5A | 22A |
| Maximum Output Current | 48A | 24.2A |
| Rated Voltage | 400V/230V | |
| Output Voltage Harmonics | < 3% (Resistive Load) | |
| Unbalance | 100% | |
| Frequency Range | 50/60Hz | |
| Output Overload (Current) | 48A < I load ≤54A/100S<br>54A < I load ≤65A/100S | 1.1x continuous /<br>1.25x 30S / 1.5x 0.1S |

| System Parameters | | |
|---|---|---|
| Weight | 617kg | 407kg |
| Dimension(W*L*H) | 590*713*1795 mm | 590*713*1345 mm |

# ESS-GRID Station Series

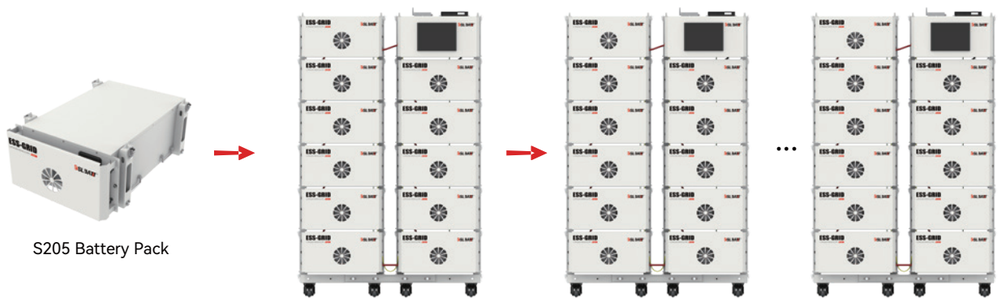
Designed For Indoor Use, C&I Battery Systems


Designed for “behind-the-meter” microgrids, C&I energy backup, solar farms, community power generation, electric vehicle charging, and data center applications, the ESS-GRID Station series features a master-slave mechanism multi-tier battery management system (BMS) that monitors, optimizes, and proactively balances the system.

- Long cycle life, ＞6000 cycles
- High density, over 125wh/kg
- Modular design for rapid expansion and installation
- Equipped with an aerosol fire extinguisher
- WIFI function, remote AOT one-click upgrade
- Maximum 1C charge and discharge

| ESS-GRID | S205-10 | S205-11 | S205-12 | S205-13 | S205-14 | S205-15 | S205-16 |
|---|---|---|---|---|---|---|---|
| Rated Voltage(V) | 512.0 | 563.2 | 614.4 | 665.6 | 716.8 | 768.0 | 819.2 |
| Rated Capacity(Ah) | 205 | | | | | | |
| Cell Model(LFP-3.2V)(Ah) | 205 | | | | | | |
| System Configuration | 160S1P | 176S1P | 192S1P | 208S1P | 224S1P | 240S1P | 256S1P |
| Rate Power(kWh) | 105.0 | 115.5 | 126.0 | 136.4 | 146.9 | 157.4 | 167.9 |
| Charge Upper Voltage(V) | 568.0 | 624.8 | 681.6 | 738.4 | 795.2 | 852.0 | 908.8 |
| Discharge Lower Voltage(V) | 456.0 | 501.6 | 547.2 | 592.8 | 638.4 | 684.0 | 729.6 |
| Recommended Current(A) | 102.5 | | | | | | |
| Max. Charging Current(A) | 200 | | | | | | |
| Max. Discharging Current(A) | 200 | | | | | | |
| Dimension(L*W*H)(MM) | High Voltage Control Box | 501*715*250 | | | | | |
| | Single Battery Pack | 501*721*250 | | | | | |
| Number of Series | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Communication Protocol | CAN BUS / Modbus RTU | | | | | | |
| Host Software Protocol | CANBUS (Baud rate @500Kb/s or 250Kb/s) | | | | | | |
| Operation Temperature Range | Charge:0~55℃ | | | | | | |
| | Discharge: -20~55℃ | | | | | | |
| Cycle Life(25℃) | > 6000 @80%DOD | | | | | | |
| Protection Level | IP20 | | | | | | |
| Storage Temperature | 0~35℃ | | | | | | |
| Storage Humidity | 10%RH ~90%RH | | | | | | |
| Internal Impedance | ≤1Ω | | | | | | |
| Warranty | 10 years | | | | | | |
| Battery Life | ≥15 years | | | | | | |
| Weights(KG) | 907 | 992 | 1093 | 1178 | 1263 | 1348 | 1433 |

Note: Parameters can be adjusted according to customer requirements



S205 Battery Pack

S205 Battery Rack

10*S205 Battery Rack

# ESS-GRID Station Series

Designed For Indoor Use, C&i Battery Systems

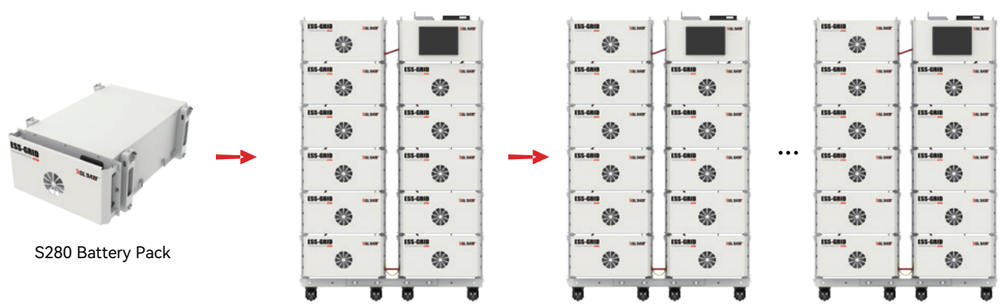

**143.4kWh - 229.4kWh**
S280-10/11/12/13/14/15/16

Designed for “behind-the-meter” microgrids, C&I energy backup, solar farms, community power generation, electric vehicle charging, and data center applications, the ESS-GRID Station series features a master-slave mechanism multi-tier battery management system (BMS) that monitors, optimizes, and proactively balances the system.

- Long cycle life, ＞6000 cycles
- High density, over 125wh/kg
- Modular design for rapid expansion and installation
- Equipped with an aerosol fire extinguisher
- WIFI function, remote AOT one-click upgrade
- Maximum 1C charge and discharge

| ESS-GRID | S280-10 | S280-11 | S280-12 | S280-13 | S280-14 | S280-15 | S280-16 |
|---|---|---|---|---|---|---|---|
| Rated Voltage(V) | 512.0 | 563.2 | 614.4 | 665.6 | 716.8 | 768.0 | 819.2 |
| Rated Capacity(Ah) | 280 | | | | | | |
| Cell Model(LFP-3.2V)(Ah) | 280 | | | | | | |
| System Configuration | 160S1P | 176S1P | 192S1P | 208S1P | 224S1P | 240S1P | 256S1P |
| Rate Power(kWh) | 143.4 | 157.7 | 172.0 | 186.4 | 200.7 | 215.0 | 229.4 |
| Charge Upper Voltage(V) | 568.0 | 624.8 | 681.6 | 738.4 | 795.2 | 852.0 | 908.8 |
| Discharge Lower Voltage(V) | 456.0 | 501.6 | 547.2 | 592.8 | 638.4 | 684.0 | 729.6 |
| Recommended Current(A) | 140 | | | | | | |
| Max. Charging Current(A) | 200 | | | | | | |
| Max. Discharging Current(A) | 200 | | | | | | |
| Dimension(L*W*H)(MM) | High Voltage Control Box | 501*840*250 | | | | | |
| | Single Battery Pack | 501*846*250 | | | | | |
| Number of Series | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Communication Protocol | CAN BUS / Modbus RTU | | | | | | |
| Host Software Protocol | CANBUS (Baud rate @500Kb/s or 250Kb/s) | | | | | | |
| Operation Temperature Range | Charge:0~55℃ | | | | | | |
| | Discharge: -20~55℃ | | | | | | |
| Cycle Life(25℃) | > 6000 @80%DOD | | | | | | |
| Protection Level | IP20 | | | | | | |
| Storage Temperature | 0~35℃ | | | | | | |
| Storage Humidity | 10%RH ~90%RH | | | | | | |
| Internal Impedance | ≤1Ω | | | | | | |
| Warranty | 10 years | | | | | | |
| Battery Life | ≥15 years | | | | | | |
| Weights(KG) | 1214 | 1329 | 1463 | 1578 | 1693 | 1808 | 1923 |

Note: Parameters can be adjusted according to customer requirements



S280 Battery Pack

S280 Battery Rack

10*S280 Battery Rack

# ESS-GRID Station Series

Designed For Indoor Use, C&I Battery Systems


**155.6kWh - 249kWh**
S304-10/11/12/13/14/15/16

Designed for “behind-the-meter” microgrids, C&I energy backup, solar farms, community power generation, electric vehicle charging, and data center applications, the ESS-GRID Station series features a master-slave mechanism multi-tier battery management system (BMS) that monitors, optimizes, and proactively balances the system.

- Long cycle life, ＞6000 cycles
- High density, over 125wh/kg
- Modular design for rapid expansion and installation
- Equipped with an aerosol fire extinguisher
- WIFI function, remote AOT one-click upgrade
- Maximum 1C charge and discharge

| ESS-GRID | S304-10 | S304-11 | S304-12 | S304-13 | S304-14 | S304-15 | S304-16 |
|---|---|---|---|---|---|---|---|
| Rated Voltage(V) | 512.0 | 563.2 | 614.4 | 665.6 | 716.8 | 768.0 | 819.2 |
| Rated Capacity(Ah) | 304 | | | | | | |
| Cell Model(LFP-3.2V)(Ah) | 304 | | | | | | |
| System Configuration | 160S1P | 176S1P | 192S1P | 208S1P | 224S1P | 240S1P | 256S1P |
| Rate Power(kWh) | 155.6 | 171.2 | 186.8 | 202.3 | 217.9 | 233.5 | 249.0 |
| Charge Upper Voltage(V) | 568.0 | 624.8 | 681.6 | 738.4 | 795.2 | 852.0 | 908.8 |
| Discharge Lower Voltage(V) | 456.0 | 501.6 | 547.2 | 592.8 | 638.4 | 684.0 | 729.6 |
| Recommended Current(A) | 152 | | | | | | |
| Max. Charging Current(A) | 200 | | | | | | |
| Max. Discharging Current(A) | 200 | | | | | | |
| Dimension(L*W*H)(MM) | High Voltage Control Box | 501*840*250 | | | | | |
| | Single Battery Pack | 501*846*250 | | | | | |
| Number of Series | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Communication Protocol | CAN BUS / Modbus RTU | | | | | | |
| Host Software Protocol | CANBUS (Baud rate @500Kb/s or 250Kb/s) | | | | | | |
| Operation Temperature Range | Charge:0~55℃ | | | | | | |
| | Discharge: -20~55℃ | | | | | | |
| Cycle Life(25℃) | > 6000 @80%DOD | | | | | | |
| Protection Level | IP20 | | | | | | |
| Storage Temperature | 0~35℃ | | | | | | |
| Storage Humidity | 10%RH ~90%RH | | | | | | |
| Internal Impedance | ≤1Ω | | | | | | |
| Warranty | 10 years | | | | | | |
| Battery Life | ≥15 years | | | | | | |
| Weights(KG) | 1214 | 1329 | 1463 | 1578 | 1693 | 1808 | 1923 |

Note: Parameters can be adjusted according to customer requirements

S304 Battery Pack

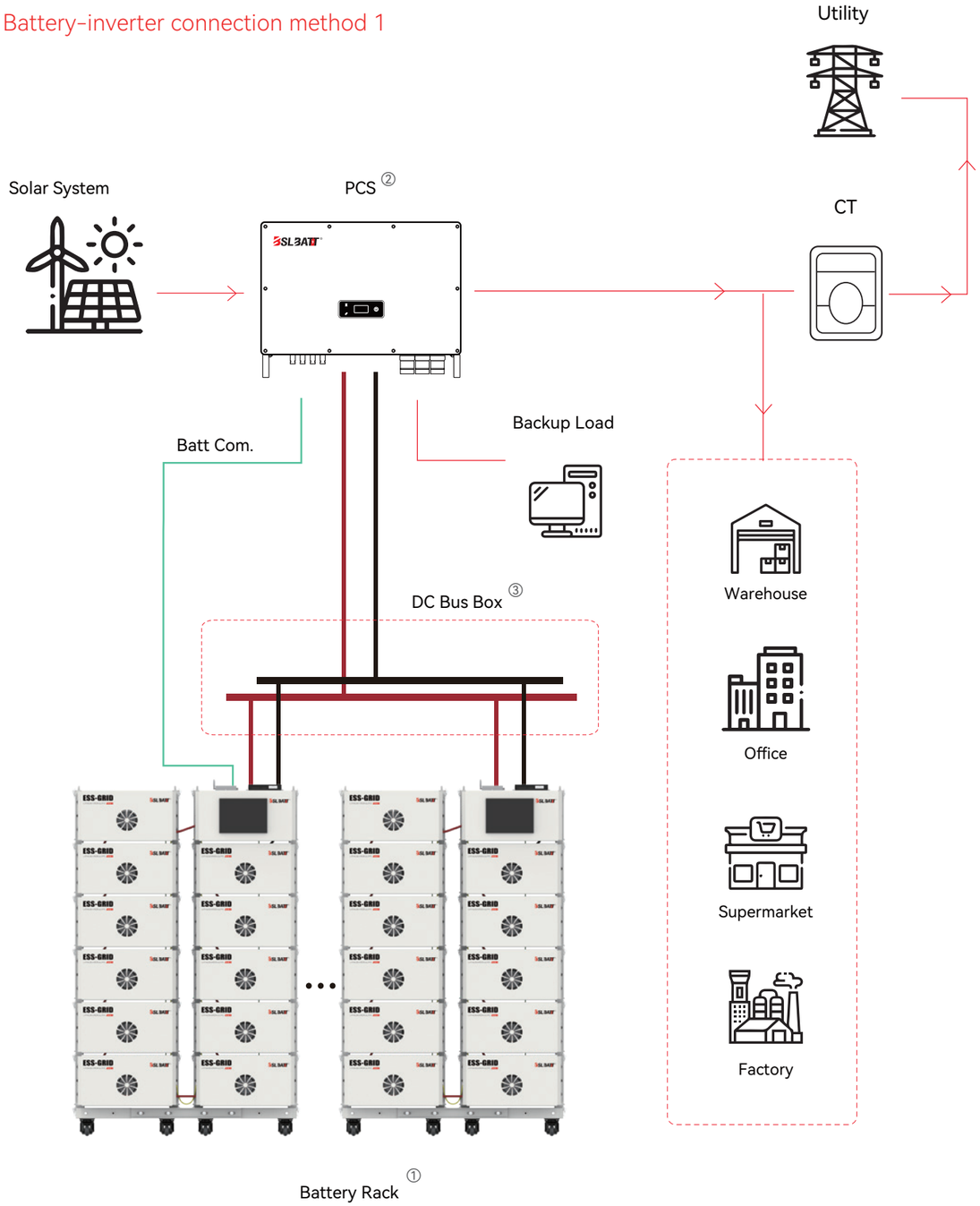
S304 Battery Rack

10*S304 Battery Rack

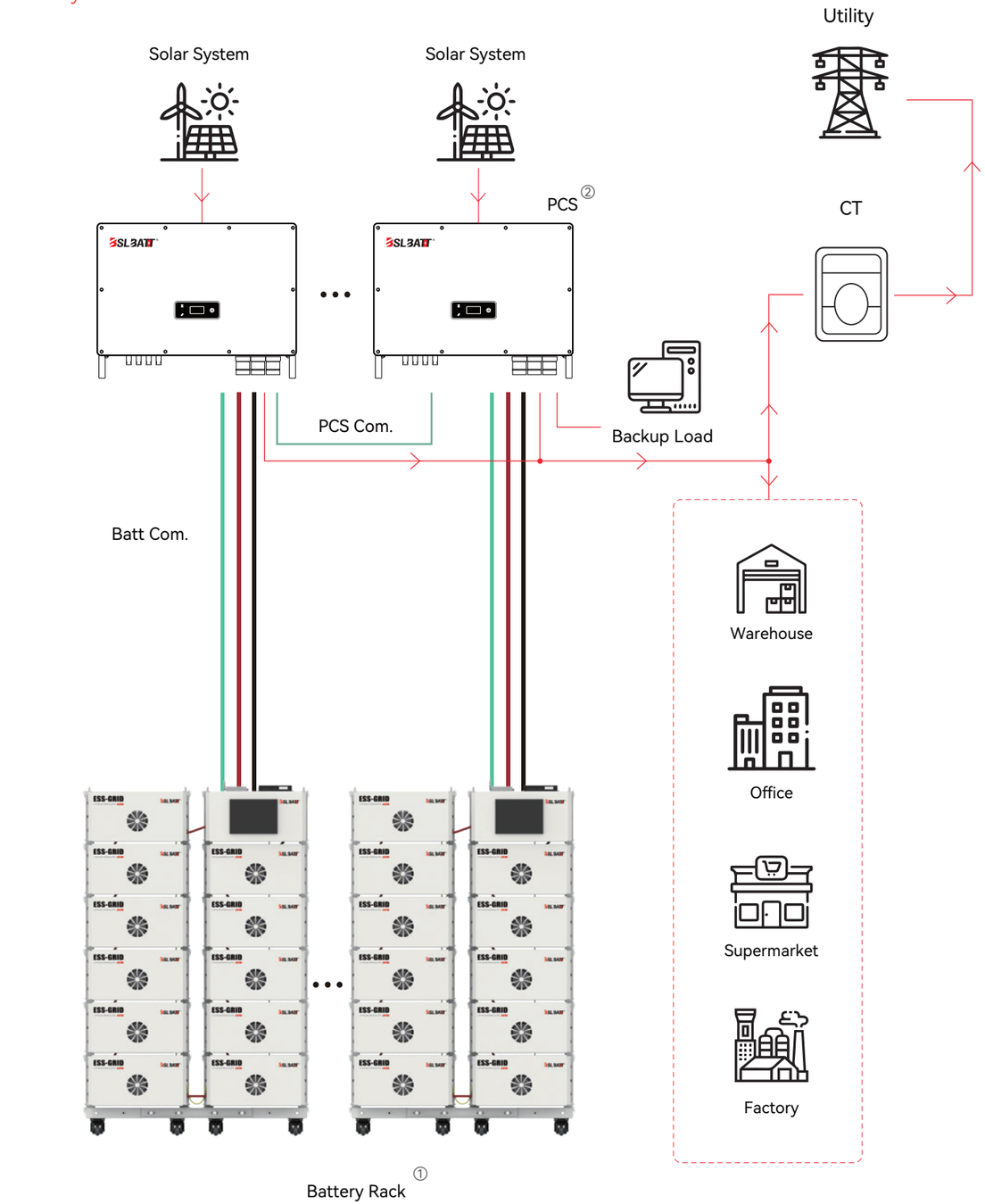
# C&I Solutions

| Sr. | Units | Availability | Parameters |
|---|---|---|---|
| ① | Battery Rack | HV PACK/S205/S280/S304 | Up to 2MWh |
| ② | Combiner Box | Customized | |
| ③ | PCS | Refer to BSLBATT Compatibility List | |

## Battery-inverter connection method 1




## Battery-inverter connection method 2



# ESS-BATT Cubicon Series

The Ultimate Battery Solution for Large-scale Applications


**200kWh/215kWh/225kWh/241kWh**

200C / 215C / 225C / 241C

ESS-BATT Cubicon Series battery system is engineered to meet the vast energy demands of industrial and commercial enterprises. As the most powerful model in BSLBATT's acclaimed ESS-GRID series, the system offers unmatched energy storage capacity, ensuring a reliable and continuous supply of power for demanding applications.

- Huge energy capacity
- Advanced LFP technology
- Modularity and scalability
- Intelligent temperature control system
- 10-year warranty
- IP55 safety protection

| Item | General Parameter | | | |
|---|---|---|---|---|
| Model | ESS-BATT-200C | ESS-BATT-215C | ESS-BATT-225C | ESS-BATT-241C |
| Series and Parallel | 16S1P*14=224S1P | 16S1P*15=240S1P | 16S1P*14=224S1P | 16S1P*15=240S1P |
| Cooling Method | Air-cooling | | | |
| Rated Capacity | 280Ah | | 314Ah | |
| Rated Voltage | DC716.8V | DC768V | DC716.8V | DC768V |
| Voltage Range | 705.6V~907.2V | | | |
| Operating Voltage Range | 730.8V~882V | | | |
| Cell Capacity | 200.7kWh | 215kWh | 225kWh | 241kWh |
| Rated Charge Current | 140A | | 157A | |
| Rated Discharge Current | 140A | | 157A | |
| Peak Current | 200A(25℃, SOC50%, 1min) | | | |
| Protection Level | IP55 | | | |
| Firefighting Configuration | Pack level + Aerosol | | | |
| Discharge Temp. | -20℃~55℃ | | | |
| Charge Temp. | 0℃~55℃ | | | |
| Storage Temp. | 0℃~35℃ | | | |
| Cycle Life | ＞6000 Cycles (80% DOD @25℃ 0.5C) | | | |
| Dimension(mm) | 1150*1265*2300(±10) | | | |
| Weight(With Batteries Approx.) | 2210Kg ±3% | 2300Kg ±3% | 2247Kg ±3% | 2360Kg ±3% |
| Operating Temp. | -20℃~55℃ | | | |
| Communication Protocol | CAN/RS485 ModBus/TCP/IP/RJ45 | | | |
| Noise Level | ＜65dB | | | |
| Functions | Pre-charge, Over-Less Voltage/Over-Less Temperature Protection, Cells Balancing/SOC-SOH Calculation etc. | | | |
| Certifications | IEC62619 / IEC62477 / IEC62040 / IEC61000 / CE | | | |

Note: The above models are typical configurations, and can also be used for micro-grid and other scenarios with optional photovoltaic charging modules, switching modules, industrial frequency transformers and other components, integrated optical storage, and integrated system cabinets.

# ESS-GRID C108

The Ultimate ESS Solution for C&I Applications


ESS-GRID Cabinet integrated system is engineered to meet the vast energy demands of industrial and commercial enterprises. From remote communities in Africa to industrial parks in Europe, the demand for stable and cost-effective energy solutions is growing. The ESS-GRID C108 outdoor battery cabinet is designed to tackle challenges like grid instability, high electricity costs, and renewable energy integration.

- High degree of integration
- Excellent protection
- Multifunctional
- Space-saving
- Efficient and flexible
- Intelligent management

| Item | General Parameter |
|---|---|
| Model | ESS-GRID C108 |
| System Parameter | 50kW / 108kWh |
| Cooling Method | Air-cooled |
| **Battery Parameters** | |
| Rated Battery Capacity | 108.86kWh |
| Rated System Voltage | DC 806.4V |
| Battery Type | Lithium Iron Phosphate Battery (LFP) |
| Cell Capacity | 135Ah |
| Recommended Max. Charge/Discharge Current | 68A |
| Battery Series-parallel Connection Method | 18S1P*14=252S1P |
| Charge temp./Discharge temp.Method | 0~55℃ / -20~55℃ |
| **PV Parameters** | |
| Max. PV Input Voltage | 900V |
| Max. PV Power | 55kW |
| MPPT Quantity | 1 |
| MPPT Voltage Range | 250-620V |
| MPPT Full Load Open Circuit Voltage Range (Recommended)* | 345-620V |
| **AC Parameters** | |
| Rated AC Power | 50kW |
| Nominal AC Current Rating | 72A |
| Max. AC Current Rating | 79A |
| Rated AC Voltage | 400Vac/230Vac ,3W+N+PE /3W+PE |
| DC Side Voltage Range | 600~1000V (3P3W) / 680~1000V (3P4W) |
| DC Side Full Load Voltage Range | 625~950V (3P3W) / 680~950V (3P4W) |
| Rated Frequency | 50Hz/60Hz(±5Hz) |
| Total Current Harmonic Distortion (THD) | <3% (Rated Power) |
| Power Factor Adjustable Range | 1 Ahead ~ +1 Behind |
| **General Parameters** | |
| Protection Level | IP55 |
| Fire Protection System | Aerosols / Perfluorohexanone / Heptafluoropropane |
| Isolation Method | Non-isolated (Optional Transformer) |
| Operating Temperature | -25℃~55℃ (>45℃ derating) |
| Altitude | 3000m(>3000m Derating) |
| Communication Interface | RS485 / CAN2.0 / Ethernet / Dry contact |
| Dimension (L*W*H) | 2200*1100*1260mm |
| Weight (With Batteries Approx.) | 1685kg ±3% |
| **PCS Certification** | |
| Electric Safety | IEC62619/IEC62477/EN62477 |
| EMC (Electromagnetic Compatibility) | IEC61000/EN61000/CE |
| Grid-connected And Islanded | IEC62116 |
| Energy Efficiency And The Environment | IEC61683/IEC60068 |

Note: The above models are typical configurations, and can also be used for micro-grid and other scenarios with optional photovoltaic charging modules, switching modules, industrial frequency transformers and other components, integrated optical storage, and integrated system cabinets.

# ESS-GRID Cabinet Series

Integrated Turnkey C&I ESS Solution


**200kWh/215kWh/225kWh/241kWh**
C200 / C215 / C225 / C241

ESS-GRID C200/C215/C225/C241 boasts outstanding performance, making it versatile for applications in farms, livestock, hotels, schools, warehouses, communities, and solar parks. It supports grid-tied, off-grid, and hybrid solar systems.

- High degree of integration
- Excellent protection
- Multifunctional
- Space-saving
- Efficient and flexible
- Intelligent management



| Item | General Parameter | | | |
|---|---|---|---|---|
| Model | ESS-GRID C200 | ESS-GRID C215 | ESS-GRID C225 | ESS-GRID C241 |
| System Parameter | 100kW/200kWh | 100kW/215kWh | 125kW/225kWh | 125kW/241kWh |
| Cooling Method | Air-cooled | | | |
| **Battery Parameters** | | | | |
| Rated Battery Capacity | 200.7kWh | 215kWh | 225kWh | 241kWh |
| Rated System Voltage | 716.8V | 768V | 716.8V | 768V |
| Battery Type | Lithium Iron Phosphate Battery (LFP) | | | |
| Cell Capacity | 280Ah | 280Ah | 314Ah | 314Ah |
| Max. Charge/Discharge Current | 140A | 140A | 157A | 157A |
| Battery Series-parallel Connection Method | 1P*16S*14S | 1P*16S*15S | 1P*16S*14S | 1P*16S*15S |
| Charge temp./Discharge temp.Method | 0~55℃ / -20~55℃ | | | |
| **PV Parameters** (Optional; none /50kW/150kW) | | | | |
| Max. PV Input Voltage | 1000V | | | |
| Max. PV Power | 100kW | | 125kW | |
| MPPT Quantity | 3 | | | |
| MPPT Voltage Range | 250-620V | | | |
| MPPT Full Load Open Circuit Voltage Range (Recommended)* | 345V-580V | 345V-620V | 360V-580V | 360V-620V |
| **AC Parameters** | | | | |
| Rated AC Power | 100kW | | 125kW | |
| Nominal AC Current Rating | 144A | | 181A | |
| Max. AC Current Rating | 159A | | 199A | |
| Rated AC Voltage | 400Vac/230Vac ,3W+N+PE /3W+PE | | | |
| DC Side Voltage Range | 580~1000V (3P3W) / 670~1000V (3P4W) | | | |
| DC Side Full Load Voltage Range | 625~950V (3P3W) / 670~950V (3P4W) | | | |
| Rated Frequency | 50Hz/60Hz(±5Hz) | | | |
| Total Current Harmonic Distortion (THD) | <3% (Rated Power) | | | |
| Power Factor Adjustable Range | 1 Ahead ~ +1 Behind | | | |
| **General Parameters** | | | | |
| Protection Level | IP55 | | | |
| Fire Protection System | Aerosols / Perfluorohexanone / Heptafluoropropane | | | |
| Isolation Method | Non-isolated (Optional Transformer) | | | |
| Operating Temperature | -25℃~60℃ (>45℃ derating) | | | |
| Altitude | 3000m(>3000m Derating) | | | |
| Communication Interface | RS485 / CAN2.0 / Ethernet / Dry contact | | | |
| Dimension (L*W*H) | 1850*1430*2300mm | | | |
| Weight (With Batteries Approx.) | 3150kg ±3% | 3250kg ±3% | 3197kg ±3% | 3310kg ±3% |
| **Certification** | | | | |
| Electric Safety | IEC62619/IEC62477/EN62477 | | | |
| EMC (Electromagnetic Compatibility) | IEC61000/EN61000/CE | | | |
| Grid-connected And Islanded | IEC62116 | | | |
| Energy Efficiency And The Environment | IEC61683/IEC60068 | | | |

# ESS-GRID FlexiO Series

Resilient, Reliable and Quick Delivery Microgrid System

**500kW / 1MWh**

ESS-GRID FlexiO is an air-cooled industrial/commercial battery solution in the form of a split PCS and battery cabinet with 1+N scalability, combining solar photovoltaic, diesel power generation, grid and utility power. It is suitable for use in microgrids, in rural areas, in remote areas, or in large-scale manufacturing and farms, as well as for charging stations for electric vehicles.

- 3D visualization technology, one-click monitoring
- Parallel and off-grid, maximum power 1MW
- Support diesel power, utility power, photovoltaic
- Efficient energy management, multiple modes of operation
- Transportation of the whole cabinet, easy to install
- Intelligent system control for optimal operation and management
- Advanced patented LFP module technology
- Intelligent temperature control + multi-level fire protection architecture
- Protection class IP54, perfect for extreme weather

| DC PV CABINET | |
|---|---|
| Model | ESS-GRID P500L |
| **AC (GRID-CONNECTED)** | |
| Photovoltaic (DC/DC) Power Rating | 500kW |
| PV (Low Voltage Side) DC Voltage Range | 312V~500V |
| PV Maximum DC Current | 1600A |
| Number Of PV MPPT Circuits | 10 |
| Protection Grade | IP54 |
| Protection Grade | I |
| Display | Touch LCD touch screen |
| Relative Humidity | 0~95% (non-condensing) |
| Noise Level | Less than 78dB |
| Ambient Temperature | -25℃~60℃ (Derating above 45℃) |
| Cooling Method | Intelligent air cooling |
| EMS Communication | Ethernet / 485 |
| Dimension (W*D*H) | 1300*1000*2300mm |
| Weight | 500kg |

| BATTERY CABINET PARAMETERS | |
|---|---|
| Model | ESS-GRID 241C |
| Rated Battery Capacity | 241kWh |
| Rated System Voltage | 768V |
| System Voltage Range | 360V~620V |
| Cell Capacity | 314Ah |
| Battery Type | LiFePO4 battery（LFP） |
| Battery Series-parallel Connection | 1P*16S*15S |
| Maximum Charge/Discharge Current | 157A |
| Protection Grade | IP55 |
| Protection Grade | I |
| Cooling And Heating Air Conditioning | 3kW |
| Noise Level | Less than 78dB |
| Cooling Method | Intelligent air-cooling |
| BMS Communication | CAN |
| Dimension (W*D*H) | 1850*1430*2300mm |
| Weight (With Battery Approx.) | 3310kg ±3% |

The system uses 5 clusters of 241kWh batteries for a total of 1.205MWh

| AC ENERGY STORAGE CABINETS | |
|---|---|
| Model | ESS-GRID P500E |
| **AC (GRID-CONNECTED)** | |
| PCS Rated AC Power | 500kW |
| PCS Maximum AC Power | 550kW |
| PCS Rated AC Current | 720A |
| PCS Maximum AC Current | 790A |
| PCS Rated AC Voltage | 400V，3W+PE/3W+N+PE |
| PCS Rated AC Frequency | 50/60±5Hz |
| Total Harmonic Distortion Of Current THDI | <3% (rated power) |
| Power Factor | -1 overrun ~ +1 hysteresis |
| Voltage Total Harmonic Distortion Rate THDU | <3% (linear load) |
| **AC (OFF-GRID LOAD SIDE)** | |
| Load Voltage Rating | 400Vac，3W+PE/3W+N+PE |
| Load Voltage Frequency | 50/60Hz |
| Overload Capacity | 110% long term operation; 120% 1 minute |
| Off-grid Output THDU | ≤ 2% (linear load) |
| **DC SIDE** | |
| PCS DC Side Voltage Range | 625~950V (three-phase three-wire) / 670~950V (three-phase four-wire) |
| PCS DC Side Maximum Current | 880A |
| **SYSTEM PARAMETERS** | |
| Protection Grade | IP54 |
| Protection Grade | I |
| Isolation Mode | Transformer isolation: 500kVA |
| Self-consumption | <100W (without transformer) |
| Display | Touch LCD touch screen |
| Relative Humidity | 0~95% (non-condensing) |
| Noise Level | Less than 78dB |
| Ambient Temperature | -25℃~60℃ (Derating above 45℃) |
| Cooling Method | Intelligent air cooling |
| Altitude | 2000m (over 2000m derating) |
| BMS Communication | CAN |
| EMS Communication | Ethernet / 485 |
| Dimension (W*D*H) | 1450*1000*2300mm |
| Weight | 1700kg |

# Lead-acid Replacement Series

Replacement for Lead Acid,GEL or AGM in LFP Battery Solutions


**12.8V/25.6V/38.4V**
12.8/25.6/38.4/51.2kWh

BSLBATT 12V/24V lithium battery is designed to replace lead-acid batteries and can be used in various scenarios such as marine/RV/UPS/golf cart/solar energy.

- Higher energy density
- Advanced LFP technology
- Longer duration
- 5X faster charging speed
- >3500 cycle life
- Smaller size

| Item | General Parameter | | | |
|---|---|---|---|---|
| Model | B-LFP12-100 | B-LFP12-200 | B-LFP12-300 | B-LFP24-100 |
| Voltage Range(V) | 12.8 | 12.8 | 12.8 | 25.6 |
| Typical Capacity (At 0.2c Discharge Rate) | 100±1.5Ah | 200±3Ah | 300±5Ah | 100±1.5Ah |
| Energy(Wh) | 1280 | 2560 | 3840 | 2560 |
| Charging Cutoff Current | About 2A | About 10A | About 75A | About 5A |
| Discharging Inner Resistance | ≤ 60mΩ | ≤ 60mΩ | ≤ 60mΩ | ≤ 60mΩ |
| Weight（kg） | About 10.5±0.5 | About 19 | About 25 | About 19 |
| Dimension（L*W*H）±2mm | 339.7*184.9*218.5 | 502*186*238.5 | 502*186*238.5 | 521*243*222.3 |
| Modules In Series | 4 | 4 | 4 | 2 |
| Cycle | ≥3500, 80%DOD (0.5C, 25℃) | ≥3500, 80%DOD (0.5C, 25℃) | ≥3500, 80%DOD (0.5C, 25℃) | ≥3500, 80%DOD (0.5C, 25℃) |
| Output Mode | M8 Terminal | M8 Terminal | M8 Terminal | M8 Terminal |
| Pack Configuration | 4P/4S | 4P/4S | 4P/4S | 4P/2S |

| Item | General Parameter | | |
|---|---|---|---|
| Model | B-LFP24-150 | B-LFP24-208 | B-LFP36-100 |
| Voltage Range(V) | 25.6 | 25.6 | 38.4 |
| Typical Capacity (At 0.2c Discharge Rate) | 150±3Ah | 200±3Ah | 100±1.5Ah |
| Energy(Wh) | 3840 | 5120 | 3840 |
| Charging Cutoff Current | About 7.5A | About 20A | About 5A |
| Discharging Inner Resistance | ≤ 60mΩ | ≤ 60mΩ | ≤ 60mΩ |
| Weight（kg） | About 25 | About 37 | About 28.5 |
| Dimension（L*W*H）±2mm | 521*243*222.3 | 520*268*219 | 520*268*219 |
| Modules In Series | 2 | 2 | 2 |
| Cycle | ≥3500, 80%DOD (0.5C, 25℃) | ≥3500, 80%DOD (0.5C, 25℃) | ≥3500, 80%DOD (0.5C, 25℃) |
| Output Mode | M8 Terminal | M8 Terminal | M8 Terminal |
| Pack Configuration | 4P/2S | 4P/2S | 4P/2S |

| | | |
|---|---|---|
| Operation Temperature | Charge | 0℃～+55℃ |
| | Discharge | -20℃～+60℃ |
| Storage Temperature | -20℃～45℃ | |
| Protection Function | Overcharge, over-discharge, over-current, short circuit and other protection functions | |
| Shell Material | ABS | |

Note: Customized models and adjusted parameters are available upon request.

# Lead-acid Replacement Series

Ultra-thin LFP RV Energy Storage Battery


This battery is designed to make the most of your vehicle space, and its ultra-thin design can save more space. With ferroelectric as the core of storage, you can enjoy your trip without worry.

- Higher energy density
- Advanced LFP technology
- Faster charging speed
- Save 1/3 of the space
- ＞4000 cycle life
- Longer cycle life

| Item | General Parameter | |
|---|---|---|
| Model | B-LFP12-100S | B-LFP12-200S |
| Voltage Range(V) | 9.2~14.6 | 9.2~14.6 |
| Cell | 3.2V 100Ah | 3.2V 200Ah |
| Cell Series & Parallels | 4S1P | 4S1P |
| Rated Voltage(V) | 12.8 | 12.8 |
| Rated Capacity(Ah) | 100 | 200 |
| Rated Energy(kWh) | 1.28 | 2.56 |
| Maximum Charge Current(A) | 100 | 200 |
| Maximum Discharge Current(A) | 200 | 200 |
| Pulse Current(A)(5s) | 300 | 300 |
| Recommended Discharge Voltage(V) | 11.2 | 11.2 |
| Life Cycle(@25 0.5C/0.25C, 80%DOD) | ＞4000 | ＞4000 |
| Short-circuit Current(＜ 10ms) | Approx. 1200A | Approx. 2500A |
| Dimension(W*D*H) | 270*600*65 MM | 275*850*70 MM |
| Total Weight(Kg) | Approx. 15 | Approx. 28 |
| Internal Resistance Fully Charged @25C | 10m Ohms | ≤5m Ohms |
| Thermal Management | Nature Cooling | Nature Cooling |
| Operating Temperature Charge | 50℃ | 50℃ |
| Operating Temperature Discharge | -20~65℃ | -20~65℃ |
| Operating Humidity | 60±25% R.H. | 60±25% R.H. |
| Recommended Discharge Voltage(V) | 13.6~13.8 | 13.6~13.8 |


# Portable Power Station

Portable Backup Power for Energy Everywhere


| Item | General Parameter |
|---|---|
| Model | Energipak 3840 |
| Capacity | 3840wh |
| Battery Spec | EVE Brand LiFePO4 Battery #40135 |
| Battery Cycles Life | 4000+ |
| Dimension | 630*313*467 MM |
| Weight | 40 KG |
| AC Charging Time | 3 Hours (1500W Input Power) |
| UBS Output | QC3.0*2(USBA)<br>PD30W*1(Type-C)<br>PD100W*1(Type-C) |
| Charging Modes | AC Charginga<br>Solar Charging (MPPT)<br>Car Charging |
| AC Output | 3300W Max (JP Standard)<br>3600W Max (USA & EU Standard) |
| Input Power | Adjustable by Knob 300W/600W/900W/1200W/1500W |
| LED Light | 3W*1 |
| UPS Mode | Switchover Time < 10ms |
| Cigar Output | 12V/10A*1 |
| Working Temperature | -10~45℃ |

# Battery Manager System(BMS)

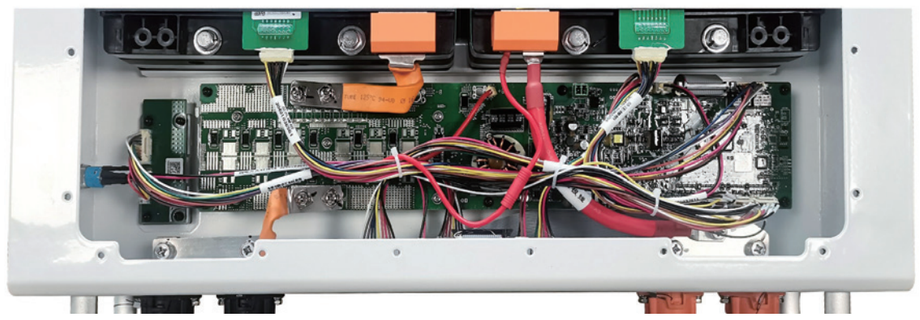
LEADING SMART BMS
Developed & designed by BSLBATT

**50A-300A**

Multiple discharge rate options

**Over 40+**

Adaptive inverter protocol selection

**Detection & Control**

Real-time monitoring of battery voltage, current, temperature and other parameters, and control according to the set parameter range.

**Signal Processing**

Receive control instructions from the external system and send battery status information, and process the received instructions and information.

**Data Processing & Storage**

Process and analyze the collected battery parameters, and record and store the battery's operating status and historical data.

**Bluetooth, WiFi Function**

Remote real-time monitoring, online parameter setting, OTA software upgrade.



# APP Monitoring

Control and Monitor the system
Check the battery status

eBCloud


## BSL Cloud

| | | |
|---|---|---|
| Dynamic Power Flow & Generation Report | Real-time Monitoring & Comprehensive Visualization | Multi-terminal Compatibility & Sharing |
| Remote OTA Upgrade Reduce Maintenance Costs | Integrated After-sales Service | Backup Function & Data Encryption |

BSLBATT

# Global Cases

Over 90,000 batteries
in operation

4* B-LFP48-200PW 40kWh

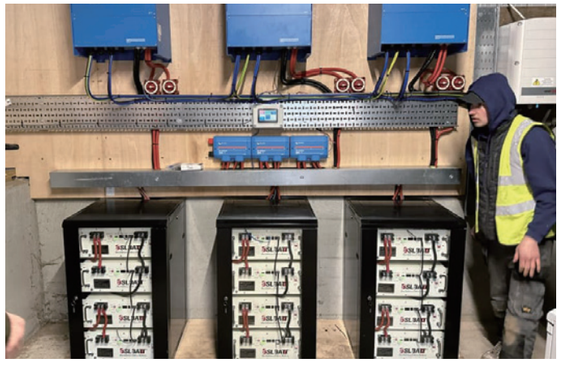
8* B-LFP48-170E 36kWh

3* PowerLine-5 15kWh

6* B-LFP48-200PW 60kWh

6* B-LFP48-200PW 60kWh

7* B-LFP48-200PW 70kWh

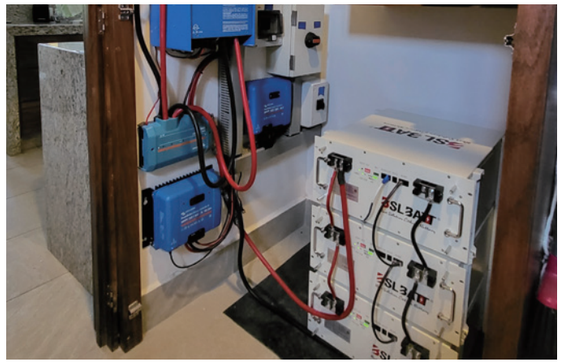


12* B-LFP48-100E 60kWh

3* B-LFP48-200PW 30kWh

96kW Deye Inverter /
10*B-LFP48-300PW
153kWh / 120kWp Panel

10* B-LFP48-200E 107kWh



3* B-LFP48-100E 15kWh

3* B-LFP48-100E 15kWh

6* B-LFP48-100E 30kWh

1* B-LFP48-100PW 5kWh

2* B-LFP48-200PW 20kWh

4* B-LFP48-200E 40kWh

1* B-LFP48-200PW 10kWh

2* B-LFP48-200PW 20kWh

4* PowerLine-5 20kWh

2* PowerLine-5 10kWh

3* B-LFP48-100PW 15kWh

6* PowerLine -5 30kWh

3* PowerLine-5 15kWh

2* B-LFP48-200PW 20kWh

4* B-LFP48-170E 35.2kWh

8* PowerLine-5 40kWh

15* B-LFP48-100E 76.8kWh

6* B-LFP48-200PW 60kWh

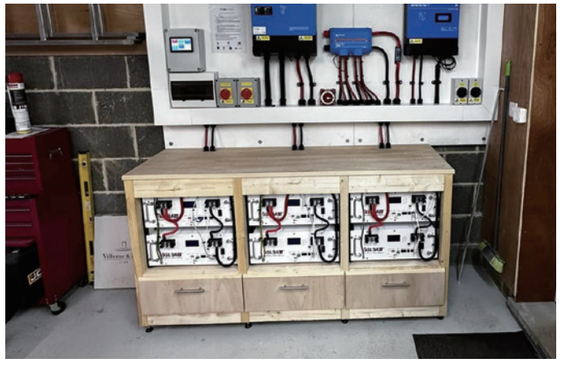
10* B-LFP48-100E 51.2kWh

20* B-LFP48-170E 176kWh

6* B-LFP48-200PW 60kWh

12* B-LFP48-125E 76.8kWh

6* B-LFP48-100E 30kWh



6* B-LFP48-100E 30kWh

**Installation Location:**

Estonia

**Inverter:**

2*25kW Hybrid Inverter

**Battery:**

2*ESS-GRID S205-10
210kWh Energy Storage

**System Benefits:**

· Peak Shaving
· Increase PV Self-consumption
· Reduce Electricity Costs

**Installation Location:**

Australia

**Inverter:**

8kW Victron Inverter

**Battery:**

6*B-LFP48-100E
30.72kWh Energy Storage

**System Benefits:**

· Back-up Power
· Off-grid ESS
· Reduced Electricity Bill
· Increase in PV Self-use Rate

**Installation Location:**

South Africa

**Inverter:**

6*15kW Victron MultiPlus

**Battery:**

28*B-LFP48-100E
143.36kWh Energy Storage

**System Benefits:**

· 24h UPS
· Off-grid ESS
· Mobile Power Vehicle

**Installation Location:**

Zimbabwe

**Inverter:**

ATESS HPS30 30kVa

**Battery:**

32*B-LFP48-100E HV
122kWh Energy Storage

**System Benefits:**

· Back-up power
· Solar Healthcare Infrastructure
· Community Electricity
· Microgrids

Exhibition

# Trade Shows & Events






The BSLBATT Global Exhibition Program is your choice for advice on the world's fastest growing energy products. More than just an event, it is a program where installers, distributors, project developers, policy makers, solution providers, and technology leaders come together - where you can grow your solar and energy storage projects by building strong relationships.













OFFICIAL LISTING PARTNERS

COMPATIBLE BRANDS





20 years Experience | BSLBATT®

# COMPANY **OVERVIEW**

**90,000**
Global Residential ESS

**Top 10**
Global Residential ESS Supplier

**50+Countries**
Globa Deliveries

**20+**
Years Lithium Experience

**3GWH+**
Delivered Capacity

**Flexible Battery Solutions**
12v~800v Battery

**6.2%**
Continuous R&D Investment

**40+**
Self-developed Patents

BSLBATT®, a leading global manufacturer and supplier of lithium-ion energy storage solutions, with the booming development of solar rooftops and other renewable energy sources, we are committed to providing innovative and affordable renewable energy solutions for residential and commercial applications.

Our product line is comprehensive, offering standardised, cost-effective solutions for both home solar batteries and large-scale industrial energy storage batteries. Our goal is to provide the best lithium battery solutions and to let our customers feel BSLBATT's commitment to quality.

As BSLBATT, we see your needs as our challenge.

Best Lithium BSLBATT® Solution Battery



# CORPORATE **CULTURE**

We provide more than just know-how. Impeccable customer service is a pillar of our success. We walk with you every step of the way, from the initial assessment of your specific application to the post-sales service.

Through hard work and humility, talented teams trained to the highest industry standards, and genuine care and concern for our partners, our in-depth resources make adopting lithium-ion technology an easy transition for your business.

BEST LITHIUM ION BATTERY COMPANY, IS YOUR CHOICE

# Energy Transformation Needs Enablers

Work with a solar battery supplier you can support and a partner that offers personalized OEM service, technical training and 24/7 global support. That's BSLBATT.

**Reliable**

Operator-grade product quality, all passed national/ Industry standard testing and certification.

**Focus**

Focus on photovoltaic energy storage battery products, rich product line and on-grid service experience.

**Innovation**

Following user demand orientation, constantly reviewing product value and continuous technology investment.


## Huizhou Factory


**Floor Area**
12000 m²

**Number of Employees**
200+

**Building Modeling**
3000 m²

**Delivered Capacity**
3 Gwh

## Anhui Factory

**Floor Area**
1000 m²

**Number of Employees**
100+

**Building Modeling**
4000 m²

**Delivered Capacity**
1 Gwh

BSL NEW ENERGY TECHNOLOGY CO., LTD

Victron official website authentication

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Website

Tiktok

Youtube