



Energy storage battery  
as a bridge to the  
energy transition

# ESS-GRID

LITHIUM-IRON (LFP) **Solutions**

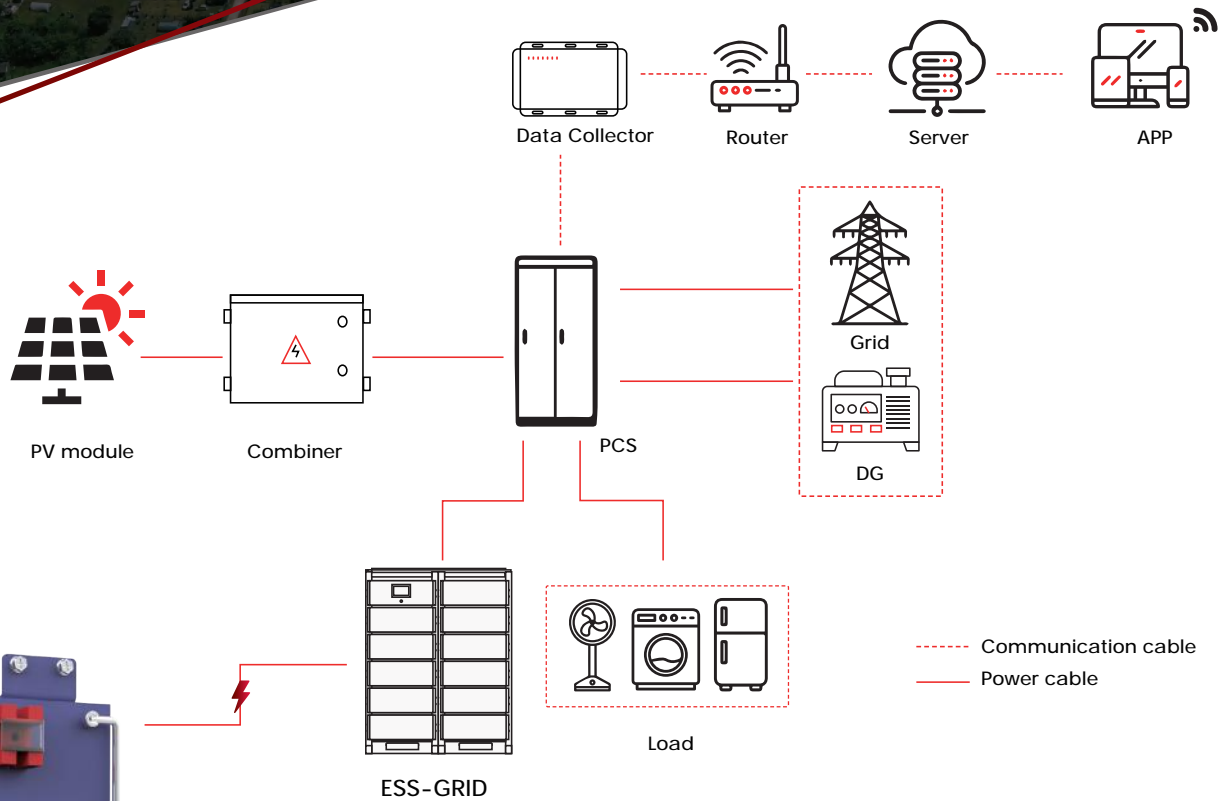
ESS-GRID Solutions, Made and Designed by BSLBATT.

The BSLBATT ESS-GRID series is designed for grid-connected and off-grid connected commercial and industrial energy storage and microgrid applications, with three capacity options of 68kWh / 102kWh / 157kWh for three-phase solar systems.





# HV LiFePO4 ESS FOR HIGHER SYSTEM EFFICIENCY



**ESS-GRID solutions are designed to stand out from the crowd and take into account longevity, reliability and your needs.**

The BSL ESS-GRID series satisfies the highest performance and economic efficiency standards. Are you interested in dynamic peak shaving, Time of Use or back-up power applications, either on-grid or off-grid? Then our ESS-GRID products are sure to impress you. ESS-GRID solutions are allowing flexible installations for Microgrid and commercial/ industrial (C&I) installations.



## Module integration

Adopt rack type box design, the module supports multi-computer parallel connection, flexible expansion at any time and anywhere.



## Strong Load Carrying Capacity

With strong overload capacity, it can widely adapt to various types of shock loads and inductive loads.



## Flexible networking

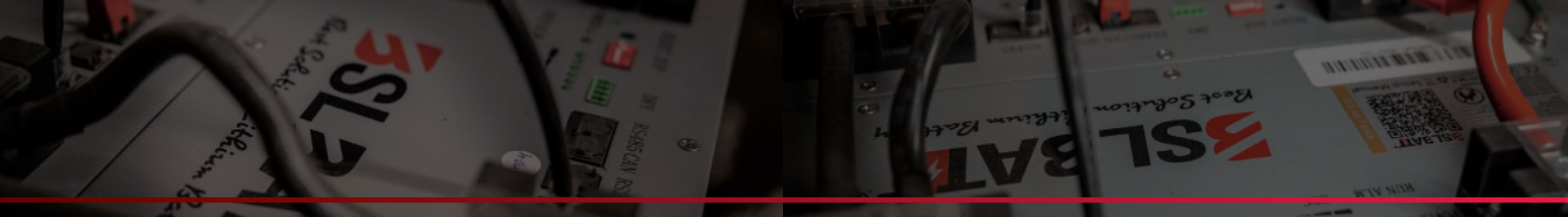
It can be matched with PCS energy storage converter, and can be flexibly networked according to customer requirements.



## Easy installation

All adopt standardized interface, plug and play, improve maintainability and reliability.



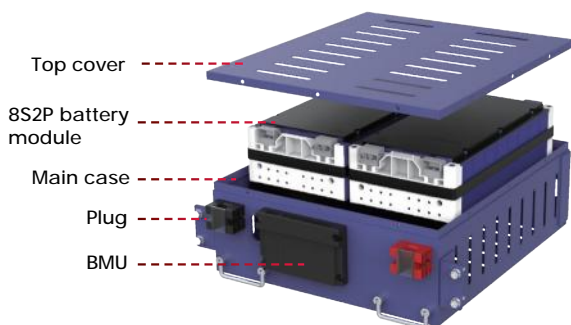


### Cell Specificaton

Item	ESS-GRID B69 CELL	ESS-GRID B105 CELL	ESS-GRID B158 CELL
Series and parallel	16S2P	16S1P	16S1P
Rated capacity	134Ah	205Ah	280Ah
Rated voltage	DC51.2V	DC51.2V	DC51.2V
Voltage range	40V~58.4V	40V~58.4V	40V~58.4V
Rated energy	6.86 kWh	10.49 kWh	14.3 kWh
Max. charge current	130A	205A	280A
Max. discharge current	150A	205A	280A
Peak current	160A(25°C, 50%SOC, 10s)	410A(25°C, 50%SOC, 10s)	560A(25°C, 50%SOC, 10s)
Ip grade	IP20	IP20	IP20
Discharge temp.	-20°C~55°C	-20°C~55°C	-20°C~55°C
Charge temp.	0°C~45°C	0°C~45°C	0°C~45°C
Dimension	515*456*170 (±2mm)	610*396*242 (±2mm)	390*750*255.5 (±2mm)

### System Specificaton

Item	ESS-GRID B69	ESS-GRID B105	ESS-GRID B158
Series and parallel	16S2P	16S1P	16S1P*11=176S1P
Rated capacity	134Ah	205Ah	280Ah
Rated voltage	DC512V	DC512V	DC563.2V
Operating voltage range	400V ~ 584V	400V~584V	40V~58.4V
Voltage range	448V ~ 560V	448V~560V	492.8V~616V
Rated energy	68.6kWh	104.9kWh	157.6kWh
Rated charge current	130A	205A	280A
Rated discharge current	130A	205A	280A
Peak current	160A (25°C,SOC50%,10S)	410A (25°C,SOC50%,10S)	560A (25°C,SOC50%,10S)
Ip grade	IP20	IP20	IP20
Discharge temp.	-20°C ~ 55°C	-20°C~55°C	-20°C~55°C
Charge temp.	0°C ~ 45°C	0°C~45°C	0°C~45°C
Diamension	1132*625*1493 (±2mm)	1012*720*1943 (±2mm)	1000*850*1949 (±3mm)
System composition	10 battery boxes + 1 high voltage box	10 battery boxes + 1 high voltage box	11 battery boxes + 1 high voltage box



### CUSTOM REQUESTS

Scope to customise the systems means you can ensure your project needs are always being met. If you cannot find a pre-configured solution simply get in touch. We can work with you to design a one-of-a-kind BESS built specifically for you and your needs in Single, Dual or Three Phase configurations.

# APPLICATIONS & MARKETS

BSLBATT's energy storage system solutions can be flexibly customized for your use in the above scenarios and markets.



## Commercial & Industrial (C&I)

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



## Utility Scale/Owned

- Fringe of Grid
- Island Power
- Community Batteries
- Centralised Grid Storage
- Remote Communities

## APPLICATIONS



ON-GRID



ON-GRID EPS



VIRTUAL POWER PLANT (VPP)



TIME OF USE MANAGEMENT



MICRO-GRIDS



DIESEL OFF-SET



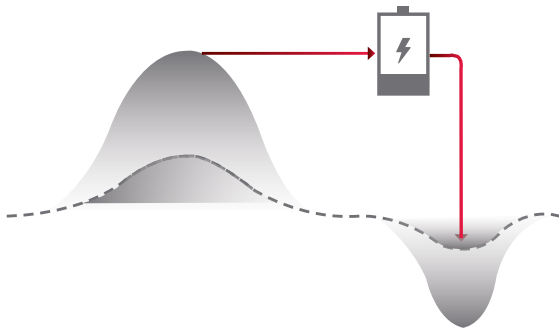
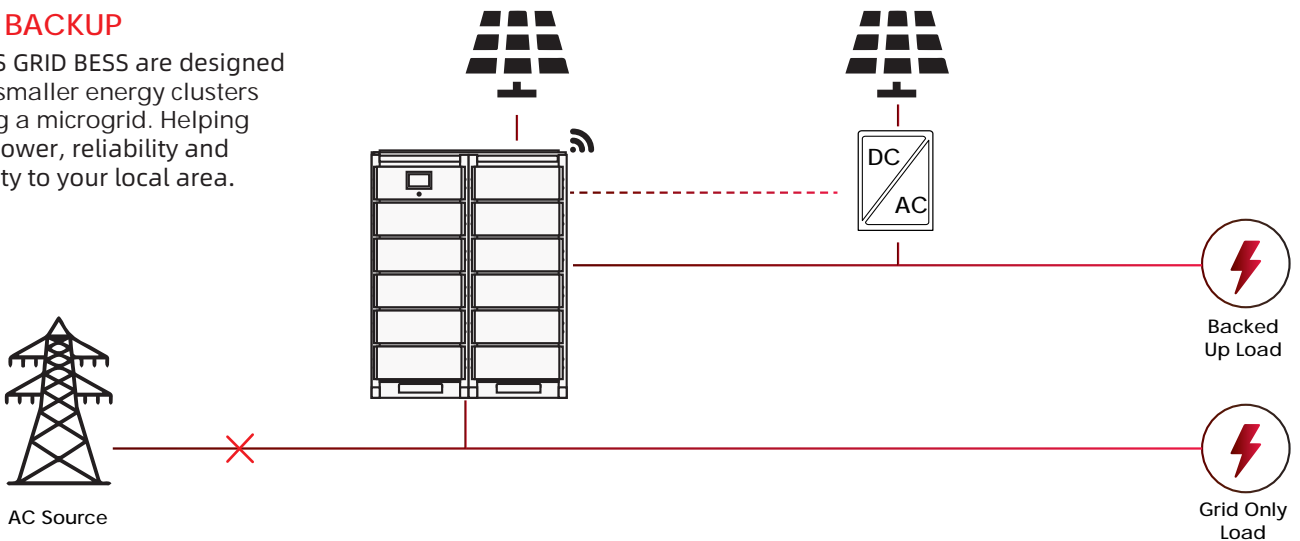
PEAK SHAVING



ENERGY SHIFTING

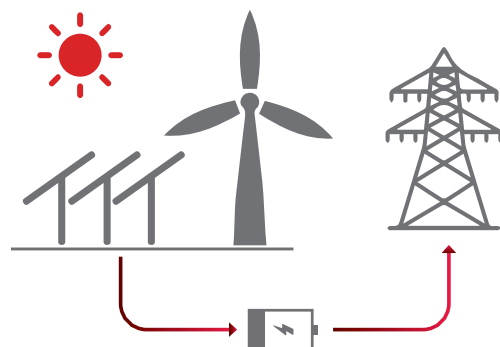
## SECONDARY LOAD BACKUP

Our ESS GRID BESS are designed to suit smaller energy clusters forming a microgrid. Helping bring power, reliability and flexibility to your local area.



## PEAK SHAVING

Utilize electricity price difference, charge battery at low price and discharge at high price to maximize system profit, compensate local transformer limit.



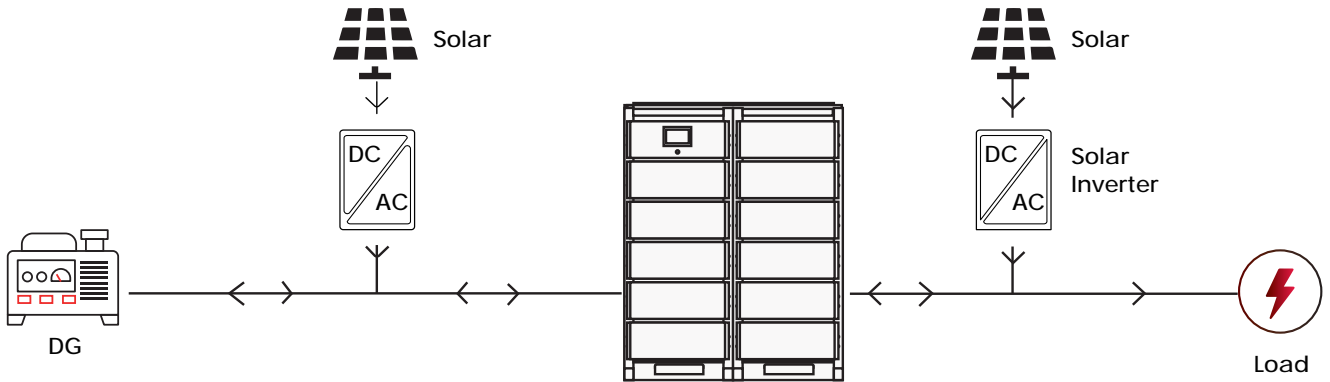
## ENERGY SHIFTING

Fully leverage the flexible energy storage system to increase the consumption of electricity generated from renewable energy sources and reduce the curtailment of wind and solar power.

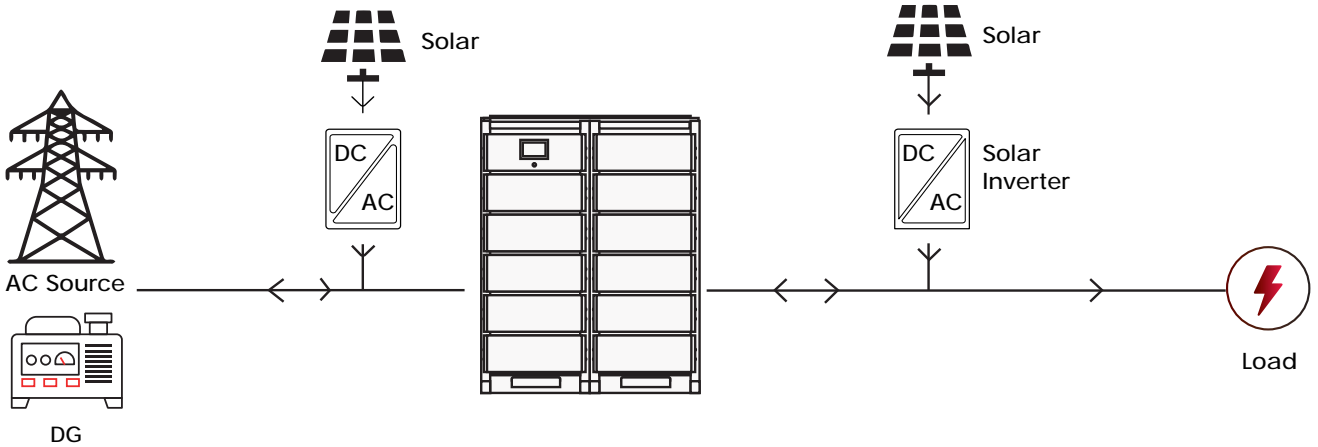
# APPLICATION LOGIC FOR DIFFERENT SCENARIOS

Our ESS-GRID system can be applied very flexibly in off-grid or grid-connected systems for microgrid, power backup and other requirements, see the configuration examples below.

## MICROGRID BARRERY SYSTEM






## BACK UP BARRERY SYSTEM



## SCALABILITY



Supported by the BSLATT technical team, after many tests and projects, the ESS-GRID BESS shows a high level of reliability and security.

-  Max = 16 Cluster of the same models in Parrallel
-  Decentralized Grid Communities  
Every installation of ESS-GRID is a step towards a greener future
-  Facing the Future  
We can always update ESS-GRID to make the product better and more efficient.

