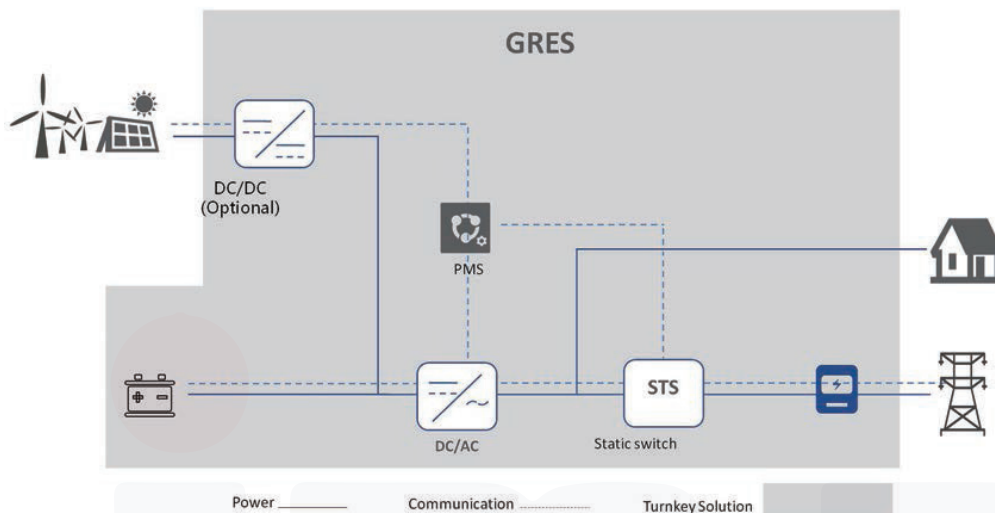


## SYSTEM TOPOLOGY



## Key product features and benefits

### Safe and reliable

- High quality LFP batteries for mobile use.
- Laser welding is used to wiring electrode, which is of high strength and low impedance.
- Battery module is designed with PC bracket and Reinforce steel structure to guarantee the highest safety of the system, in transportation, installation and operation.
- Damping pad design for Battery installation to Improve the impact resistance of the system.
- IP54 , safe and reliable operation in outdoor environment.
- Serially designed PCS and battery pack eliminates circulating current and improve system reliability.
- Integrated BMS, DC, AC multi-layer protection, maximum safety performance design.

### Efficient and Convenient

- Integrated system, standard modular power module and battery module, easy for installation, maintenance and capacity expansion.
- Easy access to PV and diesel generator, intelligent multi-energy management.
- Fixed on the ground or mounted on vehicle, can be loaded and unloaded by forklift and hoisted by lifting ring.
- Multi systems could be connected in parallel.

### Cost optimization

- One investment, multiple benefits: Peak shaving, backup power supply, microgrid building, power quality improving and energy storage, etc.
- Small size, light weight, less space and installation cost.
- Long cycle life, low failure rate, reduce operation and maintenance investment.
- Maximize green energy utilization.



### **BESS-75-50**

Battery capacity : **75kWh**

PCS capacity : **50kW**

Dimension: **1680\*1500\*1700** (W\*D\*H)mm

### **BESS-150-100**

Battery capacity : **150kWh**

PCS capacity : **100kW**

Dimension: **1680\*2270\*1700** (W\*D\*H)mm



### **BESS-225-150**

Battery capacity : **225kWh**

PCS capacity : **150kW**

Dimension: **1680\*3050\*1700**(W\*D\*H)mm

### **BESS-300-200**

Battery capacity: **300kWh**

PCS capacity: **200kW**

Diemnsion: **1680\*3830\*1700**(W\*D\*H) mm



## Specification

| Model                                | BESS-75-50                                                                |                | BESS-150-100   |                | BESS-225-150 |  | BESS-300-200 |  |
|--------------------------------------|---------------------------------------------------------------------------|----------------|----------------|----------------|--------------|--|--------------|--|
| PV Parameters                        |                                                                           |                |                |                |              |  |              |  |
| MPPT voltage range                   | DC200V ~ DC700V                                                           |                |                |                |              |  |              |  |
| MPPT full power Volt range           | DC370V ~ DC700V                                                           |                |                |                |              |  |              |  |
| MPPT channel Qty                     | 1-3 (Optional)                                                            |                |                |                |              |  |              |  |
| Single channel maximum current       | 135A                                                                      |                |                |                |              |  |              |  |
| AC grid connected parameters         |                                                                           |                |                |                |              |  |              |  |
| Rated power (kW)                     | 50                                                                        | 100            | 150            | 200            |              |  |              |  |
| Maximum power (kW)                   | 55                                                                        | 110            | 165            | 220            |              |  |              |  |
| Rated voltage (V)                    | AC 380/400                                                                |                |                |                |              |  |              |  |
| Output                               | 3W+N+PE                                                                   |                |                |                |              |  |              |  |
| Voltage range                        | -15% ~ +10%                                                               |                |                |                |              |  |              |  |
| Rated frequency (Hz)                 | 50/60                                                                     |                |                |                |              |  |              |  |
| Frequency range (Hz)                 | ±2                                                                        |                |                |                |              |  |              |  |
| Output harmonics                     | <3% (Rated power)                                                         |                |                |                |              |  |              |  |
| Power factor                         | >0.99 (Rated power)                                                       |                |                |                |              |  |              |  |
| Power factor adjustable range        | 1(lead) ~ 1(lag)                                                          |                |                |                |              |  |              |  |
| AC off-grid parameters               |                                                                           |                |                |                |              |  |              |  |
| Rated power (kW)                     | 50                                                                        | 100            | 150            | 200            |              |  |              |  |
| Maximum power (kW)                   | 55                                                                        | 110            | 165            | 220            |              |  |              |  |
| Rated voltage (V)                    | 3W+N+PE, 380                                                              |                |                |                |              |  |              |  |
| Output voltage harmonics             | <3%(Linear Load)                                                          |                |                |                |              |  |              |  |
| Rated frequency(Hz)                  | 50/60                                                                     |                |                |                |              |  |              |  |
| Overload capacity                    | 105%]: continuous operation; (105% ~ 120%]: 10min; 120%) : stop operation |                |                |                |              |  |              |  |
| Battery Parameter                    |                                                                           |                |                |                |              |  |              |  |
| Cell type                            | LFP                                                                       |                |                |                |              |  |              |  |
| Module power (kWh)                   | 5.12                                                                      |                |                |                |              |  |              |  |
| Module Qty                           | 15                                                                        | 30             | 45             | 60             |              |  |              |  |
| System rated power (kWh)             | 76.8                                                                      | 153.6          | 230.4          | 307.2          |              |  |              |  |
| Running Time (h)                     | 1.5 (Optional by Changing module qty)                                     |                |                |                |              |  |              |  |
| Life cycle                           | 25℃ 0.5C/0.5C 100%DOD EOL80% ≥ 4000                                       |                |                |                |              |  |              |  |
| System Efficiency                    |                                                                           |                |                |                |              |  |              |  |
| Maximum efficiency                   | 95%                                                                       |                |                |                |              |  |              |  |
| Protection                           |                                                                           |                |                |                |              |  |              |  |
| DC switch                            | YES                                                                       |                |                |                |              |  |              |  |
| AC switch                            | YES                                                                       |                |                |                |              |  |              |  |
| Grid monitoring                      | YES                                                                       |                |                |                |              |  |              |  |
| Insulation monitoring                | YES                                                                       |                |                |                |              |  |              |  |
| DCEN protection                      | YES                                                                       |                |                |                |              |  |              |  |
| Earth-fault protection               | YES                                                                       |                |                |                |              |  |              |  |
| Surge protection                     | DC II/AC II                                                               |                |                |                |              |  |              |  |
| Basic Parameters                     |                                                                           |                |                |                |              |  |              |  |
| Dimension W*D*H (mm)                 | 1680*1500*1700                                                            | 1680*2270*1700 | 1680*3050*1700 | 1680*3830*1700 |              |  |              |  |
| Weight (kg)                          | 1395                                                                      | 2470           | 3545           | 4620           |              |  |              |  |
| Isolation                            | No                                                                        |                |                |                |              |  |              |  |
| Protection                           | IP54                                                                      |                |                |                |              |  |              |  |
| Working temperature                  | -20 ~ 55℃ (>45℃ derating)                                                 |                |                |                |              |  |              |  |
| Relative humidity (No condensation ) | 0 ~ 95%                                                                   |                |                |                |              |  |              |  |
| Cooling                              | Air cooling, intelligent fan regulation                                   |                |                |                |              |  |              |  |
| Working altitude (m)                 | 4000 (>2000 derating)                                                     |                |                |                |              |  |              |  |
| Data display                         | Touch screen                                                              |                |                |                |              |  |              |  |
| Communication Interface              | RS485 、CAN                                                                |                |                |                |              |  |              |  |
| Protocol                             | Modbus-RTU 、CAN2.0B                                                       |                |                |                |              |  |              |  |