

### PRODUCT OVERVIEW

The SBM-I stacked lithium-ion energy storage system uses high cycle lithium iron phosphate cells and a high performance BMS protection and management battery system. A single group can be stacked up to 7 layers (including the inverter layer) and multiple groups can be combined into up to 15 battery modules in parallel. The capacity can be freely combined and when paired with a 5.5KW off grid photovoltaic inverter system, it can meet various electricity needs of households and industries.

### FEATURES

- **EASY TO UPSCALE** - The system allows for parallel connection of up to 9 batteries, providing a maximum capacity of 45kWh
- **EASY TO INSTALL** - Integrated inverter design, easy to use and quick to install; plug-and-play, eliminates wire clutter
- **USER FRIENDLY** - The system offers various charging methods, including solar power, commercial power or a combination of both
- **INTELLIGENT** - Users can set the charging and discharging time of the battery and mains to save on electricity bills; LCD screen with real-time data
- **SAFETY** - High quality lithium iron phosphate cells; proven Li-ion battery management solutions
- **DESIGNED FOR FAMILIES** - Support off-grid output; multiple charge and discharge modes available

### APPLICATIONS

- Emergency power supply
- Home backup storage
- Telecommunications backup power
- Data storage/UPS backup power
- Off-grid power



### Product Description

| PART#         | DESCRIPTION                         | VOLTAGE | CAPACITY | OUTPUT | MODULES |
|---------------|-------------------------------------|---------|----------|--------|---------|
| EV-SBM-I-V51  | 100Ah LiFePO4 Energy Storage System | 51.2V   | 5.12kWh  | 100Ah  | 1       |
| EV-SBM-I-V102 | 200Ah LiFePO4 Energy Storage System | 51.2V   | 10.24kWh | 200Ah  | 2       |
| EV-SBM-I-V153 | 300Ah LiFePO4 Energy Storage System | 51.2V   | 15.36kWh | 300Ah  | 3       |

### Battery Specifications

| MODEL#                          | EV-SBM-I-V51                            | EV-SBM-I-V102 | EV-SBM-I-V153 |
|---------------------------------|-----------------------------------------|---------------|---------------|
| <b>BATTERY PARAMETERS</b>       |                                         |               |               |
| Standard Voltage                | 51.2V                                   |               |               |
| Standard Capacity               | 100Ah                                   | 200Ah         | 300Ah         |
| Rated Capacity                  | 5.12kWh                                 | 10.24kWh      | 15.36kWh      |
| Working Voltage                 | 43.2~57.6V                              |               |               |
| Standard Charging Current       | 50A                                     | 100A          | 150A          |
| Standard Discharging Current    | 100A                                    | 200A          | 300A          |
| Suggested DOD                   | 80%                                     |               |               |
| Cycle Life                      | > 6000 cycles                           |               |               |
| IP Rating                       | IP21                                    |               |               |
| Discharge Operating Temperature | -20°C~50°C                              |               |               |
| Charging Operating Temperature  | 0°C~45°C                                |               |               |
| Maximum Parallel                | 15 units                                |               |               |
| Communication                   | RS232 / CAN / RS485 (Wi-Fi/BT optional) |               |               |
| Display                         | LCD display screen                      |               |               |
| Warranty                        | 5 years                                 |               |               |
| Certificate                     | UN38.3 / MSDS / CE / ROHS / FCC         |               |               |
| Net Weight (kg)                 | 60                                      | 105.8         | 151.6         |
| Product Dimensions (mm)         | 550*210*530                             | 550*210*1000  | 550*210*1470  |

### Inverter Specifications

| MODEL                     | 5.5kW INVERTER                                                   | 8kW INVERTER | 10kW INVERTER |
|---------------------------|------------------------------------------------------------------|--------------|---------------|
| AC INPUT                  |                                                                  |              |               |
| Voltage                   | 110V / 120V                                                      | 120V / 240V  |               |
| Optional Voltage Range    | 170-280VAC (personal computer): 90-280VAC (household appliances) |              |               |
| Frequency Range           | 50Hz / 60Hz (adaptive)                                           |              |               |
| AC OUTPUT                 |                                                                  |              |               |
| Rated Voltage             | 110V / 120V                                                      | 120V / 240V  |               |
| Peak Power                | 11000VA                                                          | 16000VA      | 20000VA       |
| Efficiency                | Max 93.5%                                                        | Max 98%      |               |
| Transfer Time             | 10ms (personal computer) / 20ms (household appliances)           |              |               |
| Waveform                  | Pure sine wave                                                   |              |               |
| BATTERY                   |                                                                  |              |               |
| Battery Voltage           | 48VDC                                                            |              |               |
| Floating Charging Voltage | 54VDC (settable)                                                 |              |               |
| Overcharge Protection     | 57.6VDC (settable)                                               |              |               |

| SOLAR CHARGING & AC CHARGING |                                                 |             |             |
|------------------------------|-------------------------------------------------|-------------|-------------|
| PV Max Open Circuit Voltage  | 500VDC                                          |             |             |
| PV Maximum Power             | 5500W                                           | 11000W      |             |
| MPPT Range @ Working Voltage | 120-500VDC                                      | 90-500VDC   |             |
| Max AC Charging Current      | 60A                                             | 120A        | 150A        |
| Max Charging Current         | 100A                                            | 150A        |             |
| BASIC PARAMETERS             |                                                 |             |             |
| Working Temperature          | -10°C ~ 50°C                                    |             |             |
| Working Humidity             | 20% ~ 95% relative temperature (non-condensing) |             |             |
| Storage Temperature          | -15°C ~ 60°C                                    |             |             |
| Net Weight (kg)              | 22.6                                            | 26.2        | 27          |
| Product Dimensions (mm)      | 550*210*470                                     | 550*210*410 | 550*210*470 |