ENVOLTAGE ALL IN ONE ENERGY STORAGE SYSTEM

EV-SBM-I-V Series

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
BATTERY PARAMETERS			
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	-20⁰C~50⁰C		
Charging Operating Temperature	0⁰C~45⁰C		
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^{0}C ~ 50^{0}C		
Working Humidity	20% ~ 95% relative temperature (non-condensing)		
Storage Temperature	-15^{0}C ~ 60^{0}C		
Net Weight (kg)	22.6	26.2	27
Product Dimensions (mm)	550*210*470	550*210*410	550*210*470