

SIPY All-in-One Balcony Solar Power System

Number of battery modules: 51.2V 40Ah



BMS protection



Stacked design



Home energy storage



Intelligent communication

Product Introduction

SIPY All-in-One machine, which is used in Balcony solar power system. It is a micro solar power generation system integrating batteries and PV control modules comprised of a battery section and a PV control section, it forms a complete set of balcony PV energy storage system in conjunction with PV modules, micro-inverters, smart electricity meters, and the power grid. This product can efficiently store the direct current generated by solar panels in the storage battery and connect to the electrical loads and the power grid through the micro-inverter, providing people with green electric energy while effectively addressing the key technical challenges such as the usability, safety, and service life of the PV energy storage system.

Product features

- ① Grade A LiFePO4 cell
- ② Wi-Fi communication control
- ③ Parallel support for 3PCS
- ④ 6000 cycles @ DOD80%
- ⑤ Convenient to move and freely combine
- ⑥ Power quantification

Application Area

- ※ Energy storage system, control system, alarm system, power system, database
- ※ Emergency lighting system, emergency power supply, UPS
- ※ Telecommunications, communication, and fire protection

Product Parameters

Battery	
Battery type	LiFePO4
Rated voltage	51.2V(16S)
Battery capacity	2.048kWh
Cycle life	6000(25°C)
Discharge depth	90%
Maximum charging current	60A
DC input (PV input)	
Maximum input power	800Wx2 max
Mpvt voltage range	18V-60V
Start-up voltage	12V
Operating voltage range	12V-60V
Input conversion efficiency)	98% Max
Maximum input voltage	60V
Maximum input current per channel	25A
Maximum input short-circuit protection current (transient) per channel	90A
Number of MPPT tracking	2
MPPT tracking efficiency	99%
DC output (INV output)	
Maximum output power	800Wx2 Max
Output conversion efficiency	98% Max
Operating voltage range	18V-55V
Maximum output voltage	55V
Maximum output current per channel	28
Maximum input short-circuit protection current (transient) per channel	90A
General parameters	
Product dimensions	Control module (with battery):480×230×275mm Battery: 480×230×230mm
Packaging dimensions	520mmx270mmx310mm
Net weight	≈20kg
Maximum number of external parallel slave battery packs	3 PCS
Capacity of a single slave battery pack	2.048kWh
Charging operating temperature	0°C-55°C
Discharging operating temperature	-20°C-60°C
Protection grade	IP65
Communication mode	WIFI
Heat dissipation mode	natural cooling