SHWB48300

Communication base station stacking solar controller



Convenient maintenance:
Modular design supports online hot swap

DC output voltage range:
42~58VDC (adjustable)

DC output current range:
0 ~ 300A

Monitoring and management:
Touch display for easy operation, supports meter data collection,supports base station FSU communication, and supports remote .

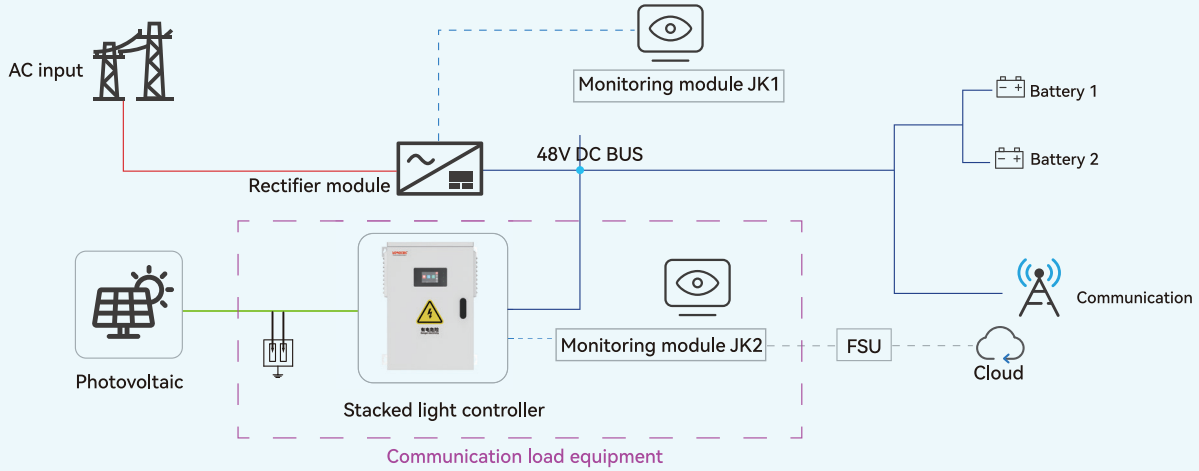
Controller Working Principle

The current generated by the photovoltaic module is connected to the DC busbar of the switching power supply after being stepped down by the DC-DC photovoltaic module of the stacked solar controller. The operating voltage range of the base station equipment is 42V-58V,and the rated operating voltage is 54V. In the case of sufficient sunlight, the DC voltage of the stacked solar controller is 0.5-2.0V higher than the DC voltage of the original power cabinet of the base station (it can be adjusted according to maintenance requirements), ensuring the safe operation of the equipment and giving priority to the consumption of photovoltaic power. The current switching process is a dual-channel online switching.

★When the conversion voltage of the stacked solar controller is greater than the DC voltage of the original power cabinet of the base station, it automatically switches to give priority to photovoltaic power;

★ When the conversion voltage of the stacked solar controller is less than the DC voltage of the original power cabinet of the base station, it seamlessly switches to the original power supply;

★When the power grid has electricity, photovoltaic power generation and the power grid jointly supply power to the load, giving priority to photovoltaic power generation, and the power grid supplements the power supply.



Model	SHWB4875	SHWB48150	SHWB48225	SHWB48300
Power	4000W	8000W	12000W	16000W
Photovoltaic input				
MPPT efficiency	>99%			
Rated voltage	68VDC			
voltage range	60~150VDC(voltage range can be customized)			
Protection voltage	152VDC			
Recovery voltage	148VDC			
DC output				
Voltage range	-42~58VDC (adjustable)			
Rated voltage	54VDC			
Current range	0~300A (system) ; 0~75A (single module)			
Conversion efficiency	≥98%			
Communication mode				
RS485	Standard modbus protocol			
RS232				
RTU 4G	Can be used for remote monitoring (optional)			
Panel display				
LCD touch screen	Module information, voltage, current, power			
DC energy meter	Voltage, current, power generation			
Working environment				
Cooling method	Air cooling			
Working temperature	-20℃~55℃			
Storage humidity	0~95%non-condensing			
Storage temperature	-30℃~80℃			
Protection level	Outdoor IP55, indoor IP21			
Altitude	>3000m non-condensing			
Physical characteristics				
Weight (Kg)	11.6	14.6	18.5	21
Width × depth × height (mm)	390X380X133mm		390X580X180mm	

