

BE SERIES-MPPT SOLAR CHARGING CONTROLLER



PRODUCT DESCRIPTION

BE series is our company's maximum power point intelligent tracking (MPPT) solar charge controller. It has high efficiencyRate conversion rate, high stability, automatic system identification, PV wide voltage range input,Can charge a variety of batteries, professional upper computer monitoring software and other advantages

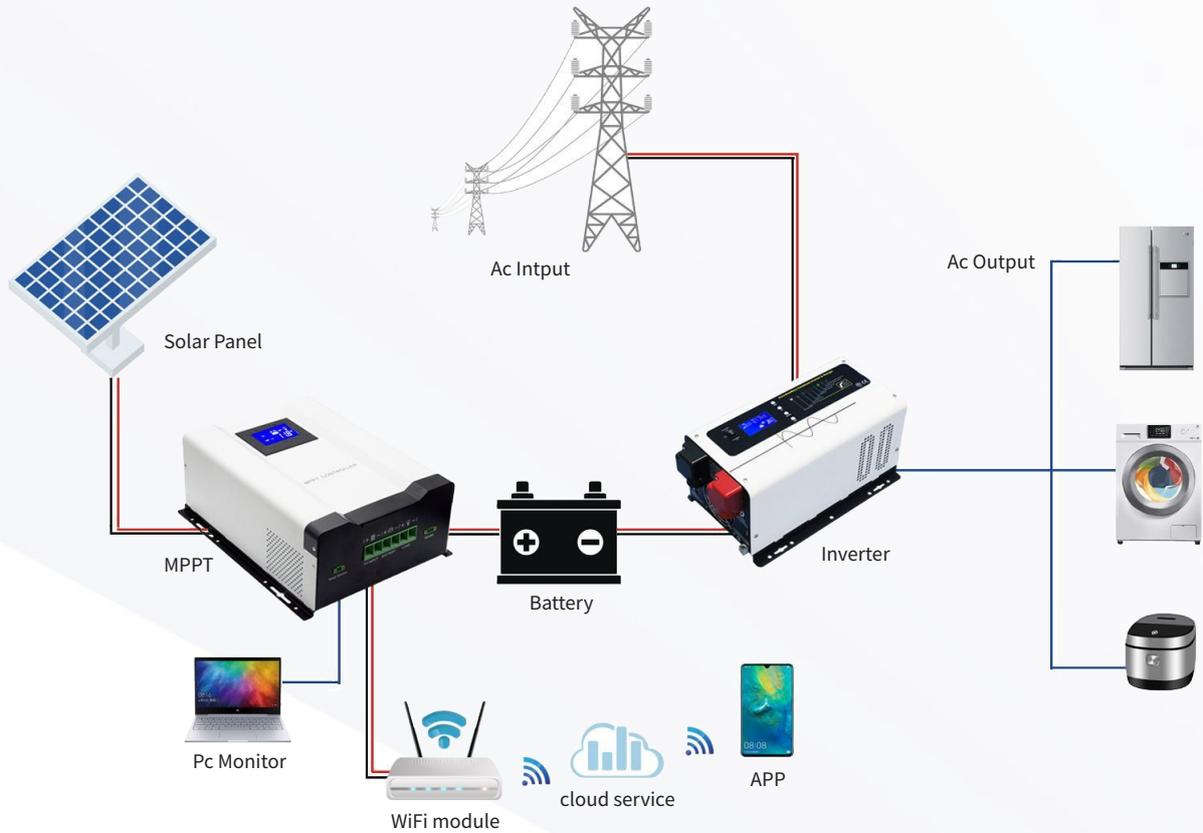
PRODUCT FEATURES:

1. Applicable to 12V/24V/36/48V system, automatic identification of system voltage, parallel design, and expansion of system capacity.
2. Four-stage charging improves the charging efficiency and improves the performance of the battery pack.
3. MPPT tracking efficiency can reach 99.5%, charging efficiency 97.5%.
4. Effectively extend the battery life, LCD screen and LED indicator display, can view any parameters and operating conditions in real time
5. Support PC software monitoring, support WIFI4G module expansion to realize app cloud monitoring (optional)
6. It is suitable for charging various lead-acid batteries, gel batteries and the latest technology lithium batteries.
7. Perfect protection function makes the controller not easy to be damaged
8. Double fan heat dissipation, economical structure design, lower cost and benefit more consumers
9. Simple installation and connection method, saving installation time and steps
10. The computer monitoring software can set various parameters, monitor the real-time operation of the system, and store data
11. Optional port RS485/232, Ethernet effectively improves power generation efficiency, which is more than 30% higher than traditional PWM solar chargers

WIRING DIAGRAM



SYSTEM APPLICATION DIAGRAM



BE series MPPT parameter table

Model: MPPT-40/50/60 Series	30A	40A	50A	60A	80A	100A
Charging Mode	MPPT Automatic maximum power point tracking					
Charging Method	Three stages: constant current (MPPT), balanced charge, floating charge					
System Type	12V-24V-48V/48V			Automatic identification / manual setting		
System voltage range	12V System			DC9V-DC15V		
	24V System			DC18V-DC30V		
	48V System			DC36V-DC60V		
Soft start time	12V/24V/48V			W10s		
Dynamic response recovery time	12V/24V/48V			W500us		
Static power	12V/24V/48V			W2W		
Efficiency	12V/24V/48V			>96.5%		
PV module utilization	12V/24V/48V			W99.97%		

BE series MPPT parameter table

Input Features

MPPT working Voltage	12V	DC18V-DC150V					
	24V	DC34V-DC150V					
	48V	DC65V-DC150V					
Input low voltage protection point	12V	DC16V					
	24V	DC30V					
	48V	DC60V					
low voltage input recovery point	12V	DC18V					
	24V	DC34V					
	48V	DC65V					
Max PV input Voltage	12V/24V/48V	DC170V					
Over voltage protection point	12V/24V/48V	DC175V					
Over voltage input recovery point	12V/24V/48V	DC170V					
MAX solar input power	12V System	420W	570W	700W	900W	1140W	1400W
	24V System	840W	1130W	1400W	1700W	2260W	2600W
	48V System	1650W	2270W	2800W	3400W	4540W	5600W

Output Features

Same as battery voltage

Battery Type(The default is lead-acid maintenance-free battery)

12V/24V/48V

Lead-acid maintenance-free batteries, gel batteries, liquid batteries, lithium batteries
(You can also customize to charge other types of batteries)

Floating voltage

12V

13.8V

(Lead-acid batteries)
(can be set by user)

24V

27.60V

48V

55.20V

Charging voltage

12V

14.5V

(Lead-acid batteries)
(can be set by user)

24V

29V

48V

58V

Rated Current

12V/24V/48V

30A

40A

50A

60A

80A

100A

Current limit protection

12V/24V/48V

32A

42A

52A

62A

82A

102A

Temperature Coefficient

12V/24V/48V

±0.02%/°C

Automatic temperature compensation

12V/24V/48V

14.2V- (maximum temperature-25°C) *0.3

Output voltage regulation accuracy

12V/24V/48V $\pm 1.5\%$

LCD displaying LCD display instructions for details

LED displaying Charging indication' DC output switch status indication

PC Upper computer (Communication PORT) Rs485 (optional)

BE series MPPT parameter table

Protections	
Input low voltage	See input characteristics
Input high voltage	See input characteristics
Input polarity reverse	With reverse polarity protection
Output polarity reverse	With reverse polarity protection
Short circuit protection	Enter the protection state after 5 trial startups, and resume from startup
Temperature protection	85 degrees
Temperature rise	Reduce power output above 80°C
Other Data	
Noise	W50dB
Cooling way	Forced air cooling, the fan speed is adjusted by temperature, when the internal temperature is low, the fan runs slowly or stops; when the controller stops working, the fan stops running;
element	Imported materials, in line with EU standards. The rated temperature of the electrolytic cell for all temperature selections is not less than 105°C
odor	Does not produce peculiar smell and harmful smell
Environment	Meets 2002/95/EC; no cadmium, hydride and fluoride
Machine size	Length*width*height (mm)
Package dimensions	Length*width*height (mm)
net weight	Kilogram (KG)
Gross weight	Kilogram (KG)

	190*168*95	245*190*95	320*235*130
	245*230*145	285*270*140	320*260.5*130
	2.5	3.5	7.5
	3	4	8