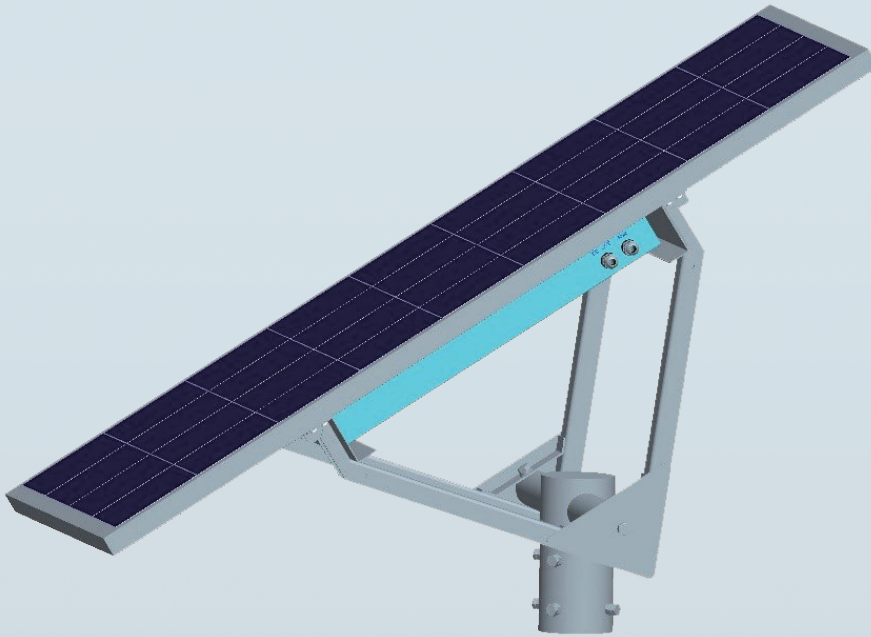


Si-Fe Battery system



System Introduction

Si-Fe battery system mostly consisting of PV panel, Fe battery, controller and support structure is designed for LED solar energy lamp. The PV panel can convert sunlight to electricity which will be stored in the battery. The battery based on Lithium iron phosphate battery of BYD, have excellent performance. The controller can carry on the all-round management and protection to the battery, and has two output modes with CC(constant current) and CV(constant voltage) for selection.

System Features

- **Automotive standard battery**

As the world's largest Electric Vehicle manufacturer, BYD brings automotive battery standards to solar energy lamp solutions. 6+ years' track records of large scale applications in Electric Vehicle ensure its safety and reliability.

- **Intelligent working mode
(Light control + Time control)**

The product is fully automatic, and can adjust the output power after preset time.

- **Long service time**

5 Years Warranty provides the best guarantee of operation.

- **Using high-capacity LFP cell**

LiFePO₄ battery which has been widely recognized as one of the safest battery technologies, has excellent performance. And the application of single cell is outstanding for battery performance.

- **Self-design controller
(BMS+ Boost circuit + Constant current drive)**

Controller is also designed by BYD, which can make the system match the general product 18V PV and lamp for customer.

- **Easy installation and Maintenance free**

All systems have module design.

CC Series System parameters

Type	NP-P150200-12V-4A-CC	NP-P300400-12V-8A-CC
PV Panel (Standard light intensity)	18V/150Wp	18V/300Wp
LFP battery	3.2V/200AH	3.2V/400AH
Output mode	Constant current (CC)	
Circuit topology structure	Boost (from 3.2V to 12.8V)	
Output voltage range [V]	9~14	
Rated output power [W]	60	120
System control mode	Light control、Time control (half power operation after 5 hours)	
Operating temperature	-10-55℃	
Operating humidity	5~90%RH	
Storage temperature	0~45℃	
Battery full charge time [H]	6	
Dimension[L*W*H,mm]	1348*676*638	1367*1348*638
Weight [kg]	40	70
IP Grade	IP65	
Anti-wind grade	12 (37M/S)	
Continuous operation time	30W LED Lamp ≥ 2days(whole night)	60W LED ≥ 2days(whole night)

NOTE: LED lamp no need driver and pay attention to whether the lamp starting voltage is consistent with the System output voltage.

CV Series System parameters

Type	NP-P150200-12V-4A-CV	NP-P150400-12V-4A-CV
PV Panel (Standard light intensity)	18V/150Wp	18V/150Wp
LFP battery	3.2V/200AH	3.2V/400AH
Output mode	Constant voltage (CV)	
Circuit topology structure	Boost (from 3.2V to 12.8V)	
Output voltage [V]	12.8	
Rated output power [W]	80	80
System control mode	Light control	
Operating temperature	-10-55℃	
Operating humidity	5~90%RH	
Storage temperature	0~45℃	
Battery full charge time [H]	6	12
Dimension[L*W*H,mm]	1348*676*638	1348*676*638
Weight [kg]	40	47
IP Grade	IP65	
Anti-wind grade	12 (37M/S)	
Continuous operation time	30W LED Lamp ≥ 20H	60W LED ≥ 20H

NOTE:The LED lamp should have its own drive