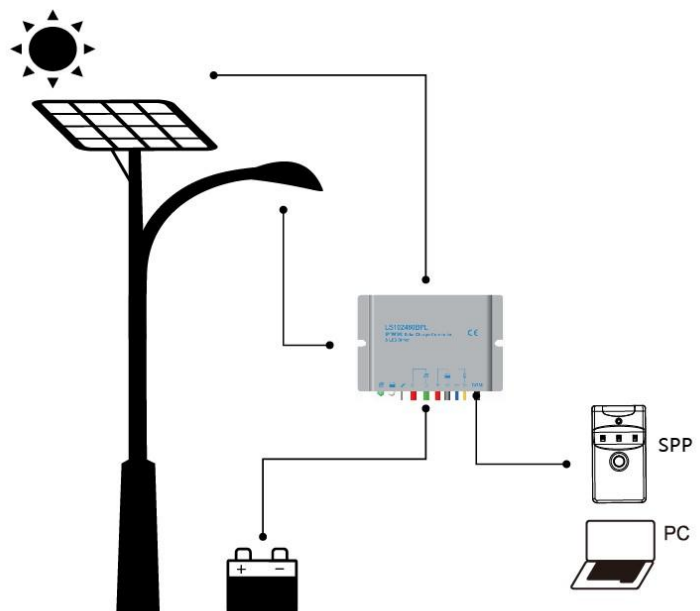


# Solar Charge Controller with integrated LED Driver

LandStar BPL series solar charge controller combines the solar charge controller and LED constant current driver into one unit which is ideal for solar LED Lighting, especially for the application for LED lamp which requires dimmer function. It can also reduce the system cost and increase the system flexibility.

Fully encapsulated PCB, IP67 design, aluminum case ensures the controller can work in extremely terrible, and increase system operation, reliability and efficiency.



## Model overview:



- ★ LS102460BPL 30W/12V, 60W/24V 12/24V auto
- ★ LS152480BPL 40W/12V, 80W/24V 12/24V auto
- ★ LS2024100BPL 50W/12V 100W/24V 12/24V auto



## Features:

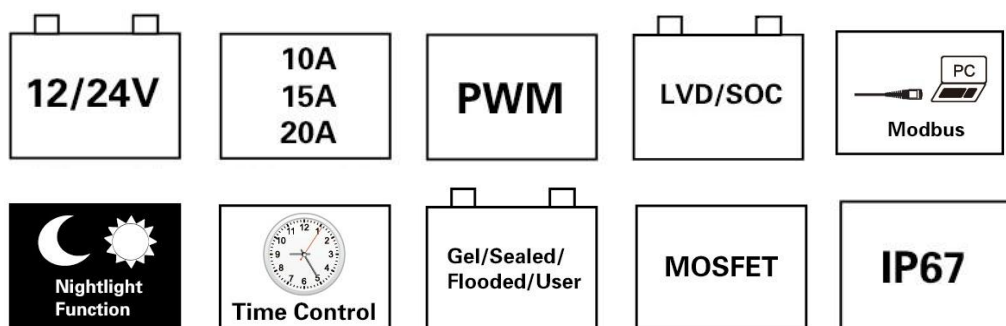
- ◆ 12V/24V automatic identify or user-defined working voltage.
- ◆ Gel, Sealed, Flooded and user-defined battery type option.
- ◆ With functions of current power calculation, it is convenient to view charging and discharging energy of each day, month, year and total value.
- ◆ Wide input voltage range: DC8.0V—DC32V, compatible with 12V/24V full voltage range.
- ◆ Digital precision constant current control and the control accuracy are better than  $\pm 2\%$ .
- ◆ Maximum output efficiency of 95%.
- ◆ The rated output current can be adjusted at rated power and current range.
- ◆ The max output voltage can reach up to 60V
- ◆ Charge control parameter, the load control parameter and the output current value can be set separately.
- ◆ Use of standard Modbus communication protocol for TTL232 bus connections, communication protocol compatibility much better.
- ◆ Fully encapsulated PCB, IP67 protection.
- ◆ Aluminum housing.

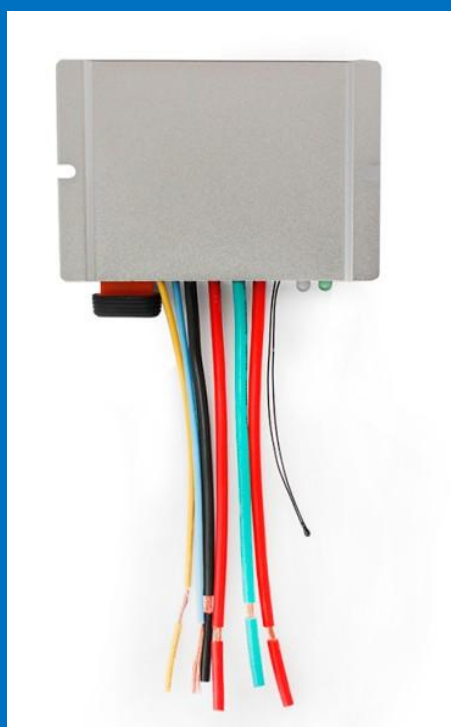
## Load control mode:

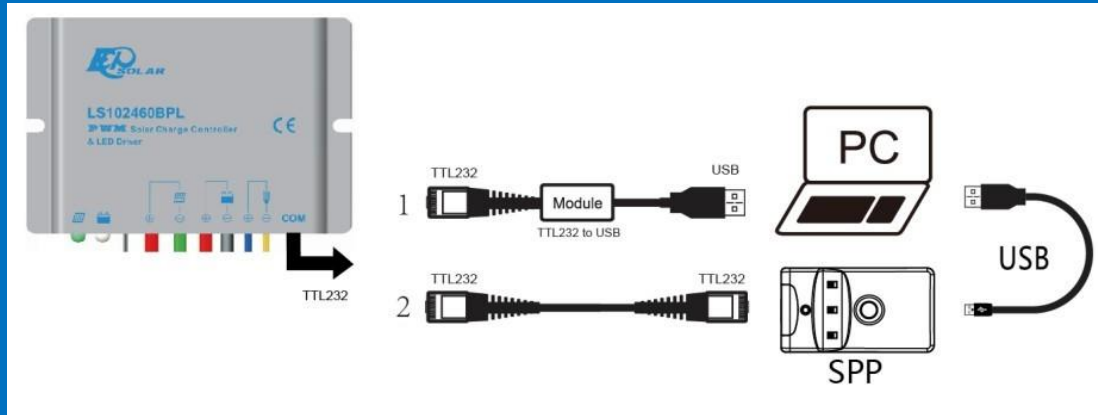
Manual, Light ON/OFF, Light ON+ Timer, Time Control

## Electronic protections:

- |                          |                       |                            |
|--------------------------|-----------------------|----------------------------|
| ◆ PV array Short Circuit | ◆ PV reverse polarity | ◆ High voltage transients  |
| ◆ Overcharge             | ◆ Over discharge      | ◆ Battery reverse polarity |
| ◆ Load short circuit     | ◆ Load overload       | ◆ Overheating              |







## Two methods to program the controller:

- 1–PC monitoring setting software “Solar Station Monitor”
- 2–Super Parameter Programmer, SPP-01

## Optional accessories :

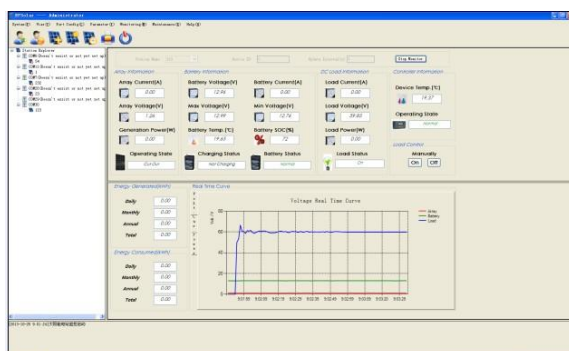


Super parameter programmer  
SPP-01



Communication cable  
CC-USB-TTL-150U

## PC monitoring software:



## Technical specifications :

Model	LS102460BPL	LS152480BPL	LS2024100BPL
Nominal system voltage	12/24V		
Max. PV input voltage	50V		
Battery terminal voltage	8~32V		
Rated charge current	10A	15A	20A
Rated output power	30W/12V, 60W/24V	40W/12V, 80W/24V	50W/12V, 100W/24V
Rated output current	2.0A	2.6A	3.3A
Max. efficiency	95%		
Output voltage range	Voltage of battery~60.0V		
Load open circle voltage	60.0V		
Power output adjustment time	<10s		
Self-consumption	≤9.1mA(12V); ≤7.0mA(24V)		
Control accuracy	< 2%		
Temp. compensation coefficient	-3mV/°C/2V ( 25°C )		

Model	LS102460BPL	LS152480BPL	LS2024100BPL
Overall dimension	108.5(4.27)x73(2.87)x 25.6(1.01) mm/inches	108.5(4.27)x96(3.78)x 25.6(1.01) mm/inches	108.5(4.27)x110(4.33)x 25.6(1.01) mm/inches
Power cable	4mm <sup>2</sup> (PV/Batt.) 1.0mm <sup>2</sup> (Load)	6mm <sup>2</sup> (PV/Batt.) 1.5mm <sup>2</sup> (Load)	6mm <sup>2</sup> (PV/Batt.) 1.5mm <sup>2</sup> (Load)
Net weight	0.4kg	0.5kg	0.6kg

### Environmental parameters

Working temperature	-35°C to +55°C
Humidity	≤90% (NC)
Enclosure	IP67



BEIJING EPSOLAR TECHNOLOGY CO.,LTD.  
 Add: BLDG #18, CO.PARK ,NO.8 HEYING ROAD ,  
 CHANGPING DISTRICT, BEIJING, CHINA  
 Tel: 010-82894962 / 82894112  
 Fax: 010-82894882  
 E-mail: info@epsolarpv.com

