

Solar Charge Controller

with integrated LED Driver

LandStar BPL series combines solar charge controller and LED constant current driver into one unit which is ideal for solar LED Lighting, especially when dimmer function is needed. The control parameter can be programmed via Mobile APP, PC Monitor setting software with RS485 communication interface.



Model overview:



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



Features:

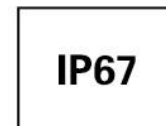
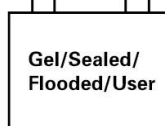
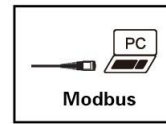
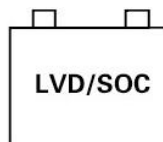
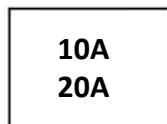
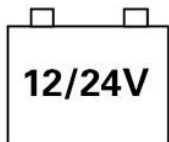
- ◆ 12/24VDC automatically identifying system voltage or user-defined working voltage
- ◆ 3-Stage intelligent PWM charging: Bulk, Boost/Equalize, Float
- ◆ Support 4 charging options: Sealed, Gel, Flooded and user.
- ◆ Battery temperature compensation function
- ◆ Digital precision constant current control and the control accuracy are less than 30mA
- ◆ Maximum output efficiency of 96.7%
- ◆ The output current can be adjusted among the rated power and current range
- ◆ Multiple load control modes
- ◆ Monitoring and setting parameter via Mobile APP, PC Monitor setting software with RS485 communication interface.
- ◆ Use of standard Modbus communication protocol for RS485 bus connections, communication protocol compatibility much better
- ◆ Connecting the IOT(Internet of Things) module and Cloud Server monitoring software to realize remote monitoring of the multi-machine system
- ◆ The RS485 connector can provide power supply
- ◆ Aluminum housing for better cooling
- ◆ IP67 waterproof degree

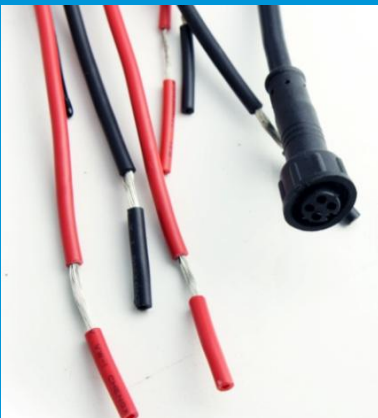
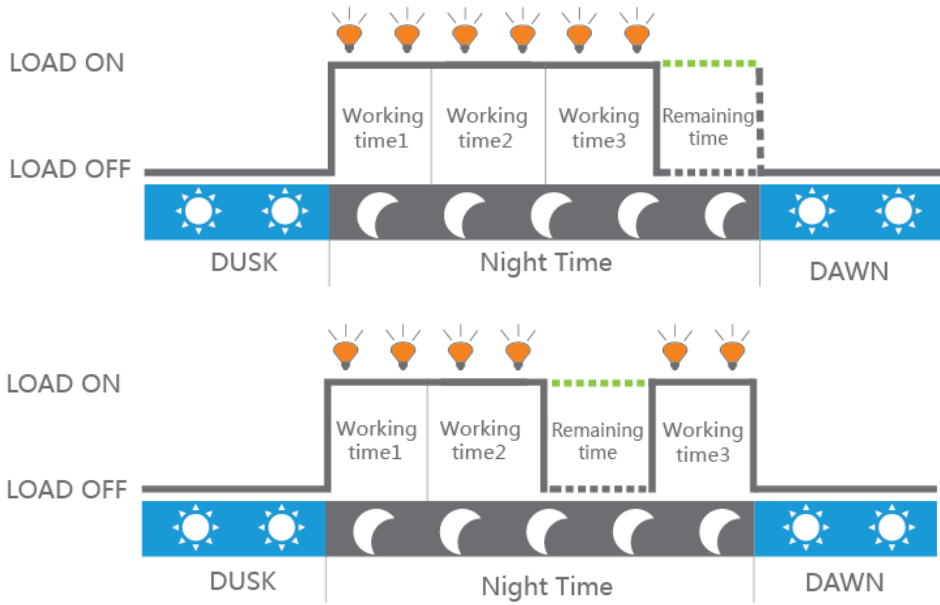
Load control mode:

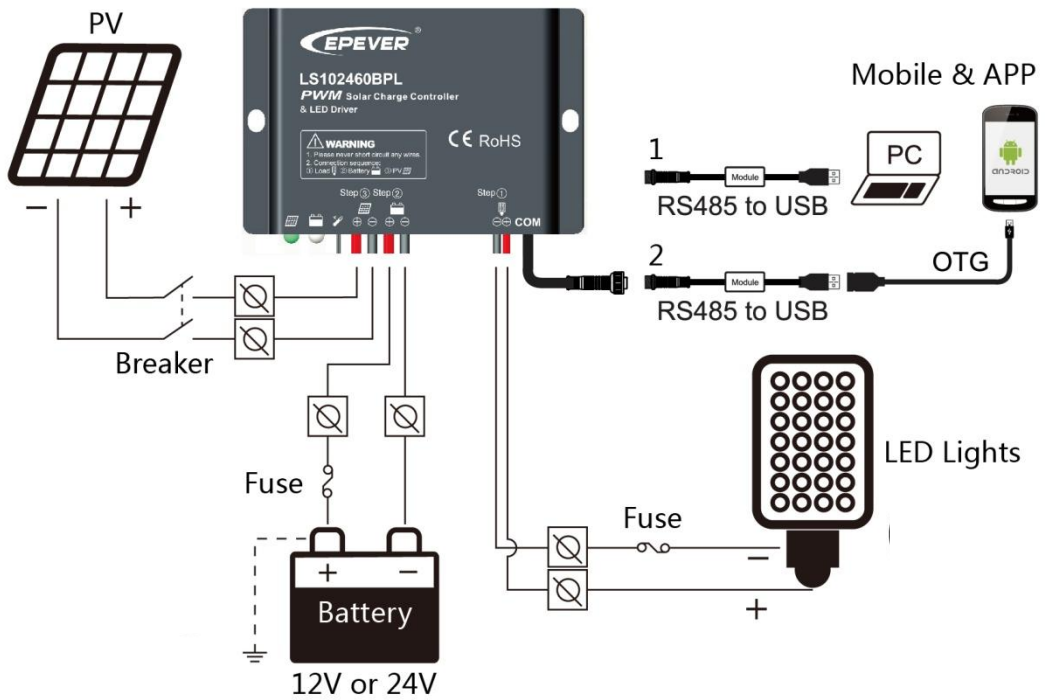
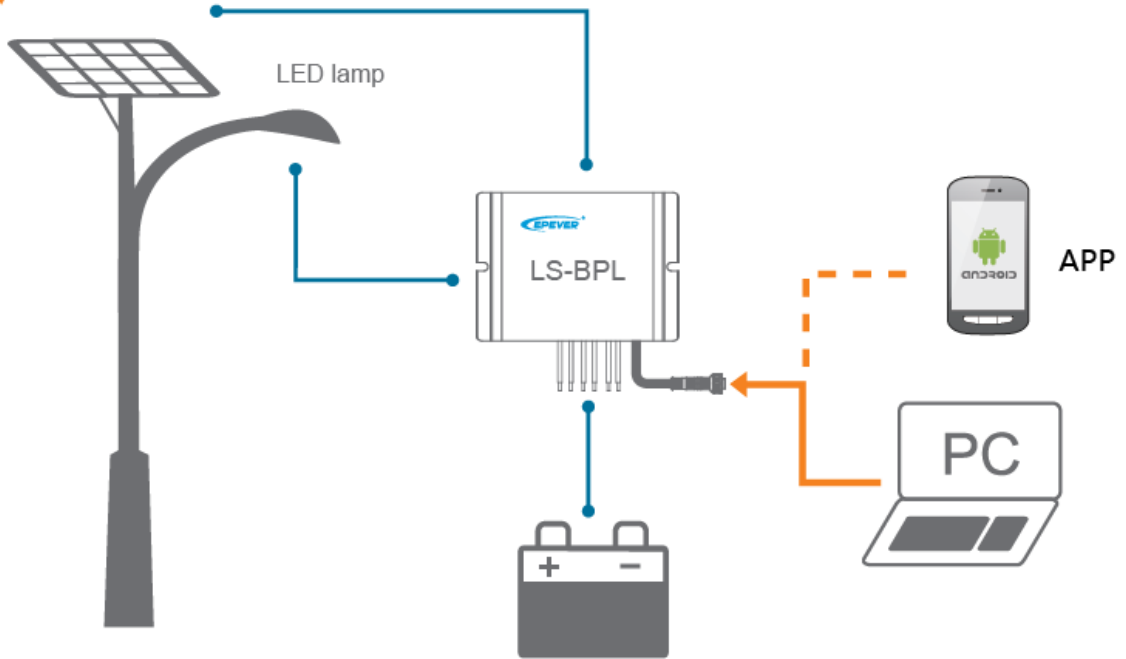
Manual, Light ON/OFF, Light ON+ Timer, Time Control

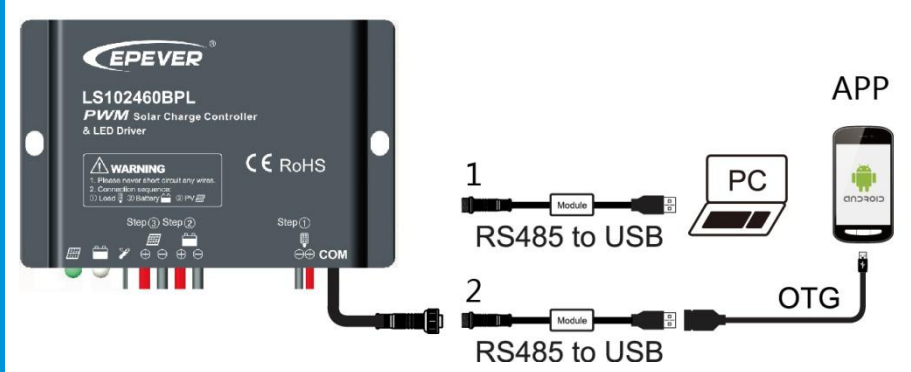
Electronic protections:

- ◆ PV short circuit protection
- ◆ Battery over discharge protection
- ◆ Battery over voltage protection
- ◆ Load overload protection
- ◆ Controller overheating protection
- ◆ PV reverse polarity protection
- ◆ Battery reverse polarity protection
- ◆ Load short circuit protection
- ◆ Battery overheating protection









Two methods to program the controller:

1. PC monitoring setting software "Solar Station Monitor"

Use USB to RS485 converter cable: CC-USB-RS485-150U-22AWG

2. Mobile APP

Use USB to RS485 converter cable: CC-USB-RS485-150U-22AWG

Use OTG cable: Micro 5PIN OTG

APP software can be downloaded from the website of <http://www.epsolarpv.com>

Optional accessories :

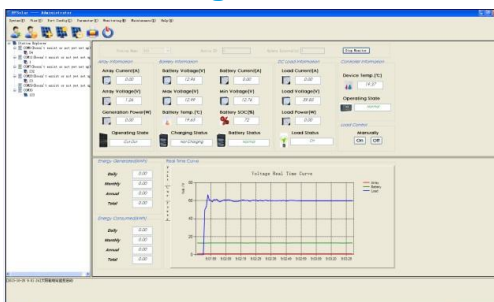


USB to RS485 converter cable:
CC-USB-RS485-150U-22AWG



OTG cable: Micro 5PIN OTG

PC monitoring software:





Technical specifications

Model	LS102460BPL	LS2024100BPL
Nominal system voltage	12/24V auto work	
Battery input voltage range	9~32V	
Max. PV open circuit voltage	50V	
Rated charge current	10A	20A
Max. output power	30W/12V, 60W/24V	50W/12V, 100W/24V
Max. output current	2.0A	3.3A
Max. output efficiency	96.7%	
Output voltage range	Max. battery voltage+2V~60V	
Load open circuit voltage	60V	
Equalize charging voltage	Sealed: 14.6V, Flooded: 14.8V, USER: 9~17V	
Boost charging voltage	Gel: 14.2V, Sealed: 14.4V, Flooded: 14.6V, USER: 9~17V	
Float charging voltage	Gel /Sealed /Flooded: 13.8V, USER: 9~17V	
Low voltage reconnect voltage	Gel /Sealed /Flooded: 12.6V, USER: 9~17V	
Low voltage disconnect voltage	Gel /Sealed /Flooded: 11.1V, USER: 9~17V	
Output current control accuracy	≤30mA	
Self-consumption	≤11mA/12V;≤9mA/24V	
Charge circuit voltage drop	≤0.3V	
Temp. compensation coefficient	-3mV/°C/2V	
Grounding	Common Positive	
Enclosure	IP67	
Overall dimension	107x73x20mm	108.5x102x25.6mm
Power cable	PV/BAT: 14AWG(2.5mm ²) LOAD: 18AWG(1.0mm ²)	PV/BAT:12AWG(4.0mm ²) LOAD: 18AWG(1.0mm ²)
Net weight	0.28kg	0.46kg
Working environment temperature	-35°C ~ +55°C	



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