

Overview

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.



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
- Intelligent power mode with 365-day lighting control technology
- Load test function for detecting the system
- Multiple load control modes
- Extensive Electronic protection
- 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

Electronic protections

- PV Short Circuit
- PV Reverse Polarity
- Battery Reverse Polarity
- Battery Over Voltage
- Battery Over Discharge
- Battery Overheating
- Libattery low temperature
- Load Short Circuit
- Controller Overheating
- High Voltage Transients



Solar Car



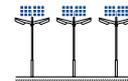
Solar Home



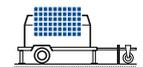
Solar Backpack



Solar Boat



Solar Street Light



Solar Power Generator

Technical Specifications

Item	LS102460BPL	LS2024100BPL
Nominal system voltage	12/24VDC Auto	
Battery input voltage range	9V~32V	
Max. PV open circuit voltage	50V	
Rated charge current	10A	20A
Max. output current	2.0A	3.3A
Max. output power	30W/12V;60W/24V	50W/12V;100W/24V
Output voltage range	Max. battery voltage+2V~60V	
Load open circuit voltage	60V	
Max. output efficiency	96.70%	
Output current control accuracy	≤30mA	
Battery Type	Sealed(default)/Gel/Flooded/User	
Self-consumption	≤11mA/12V;≤9mA/24V	
Charge Circuit Voltage Drop	≤0.3V	
Temperature compensation coefficient	-3mV/°C/2V	
Working environment temperature	-35°C~+55°C	
Enclosure	IP67	
Grounding	Common Positive	
Overall dimension	107x73x20mm	108.5x102x25.6mm
Mounting dimension	100mm	100.5x80mm
Mounting hole size	Φ4	Φ5
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