

# PWM Solar Charge Controller with built-in LED Driver



## LandStar EPLI series

It 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. The control parameter can be programmed by Mobile APP, Remote Meter and SPP-02 with infrared(IR) function.

#### Models:

- LS101240EPLI, 10A, 12V
- LS102460EPLI, 10A, 12/24V Auto work
- LS2024100EPLI, 20A,12/24V Auto work

#### Features:

- 12/24VDC automatic identify or user-defined working voltage
- Without any key, parameter setting via Mobile APP, Remoter Meter and SPP-02 with IR function
- Maximum output efficiency of 96%
- Dimming function
- Digital precision constant current control and the control accuracy are less than 30mA
- Figure 3 Setting Ways
- Real-time energy statistics function
- Widely used, automatic recognize day/night
- Fully encapsulated PCB, IP68 protection
- Aluminum housing
- Support firmware upgrade

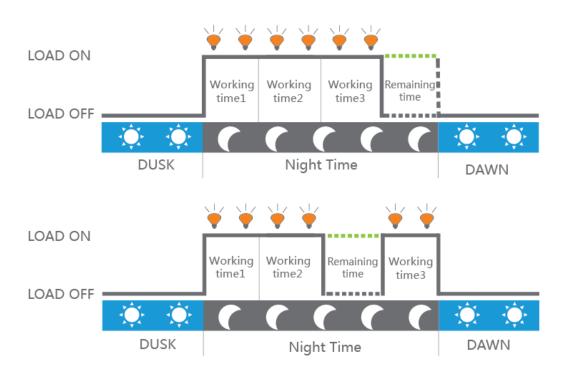


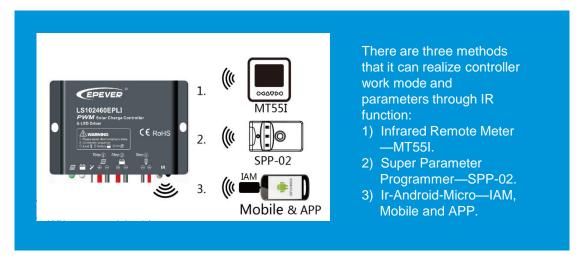
### **Electronic protections:**

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

#### Load mode:

- Manual Control (ON/OFF)
- Light ON + Timer (1-15H on)
- Dusk-to-Dawn (Light ON+Light OFF)(Default)
- Real-time Control







## **Optional accessories:**

## **Super parameter programmer SPP-02**



This method can realize one-key setting operation which is suitable for bulk quantity products setting or applied in the projects.

## APP



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## **Technical Specifications:**

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Item	LS101240EPLI	LS102460EPLI	LS2024100EPLI
Nominal system voltage	12VDC	12/24VDC auto	12/24VDC auto
Rated charge current	10A	10A	20A
Max. PV open circuit voltage	30V	50V	50V
Battery input voltage range	9∼16V	9∼32V	9~32V
Max. output power	40W	30W/12V;60W/24V	50W/12V;100W/24V
Max. output current	2.6A	2.0A	3.3A
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 voltage range	Max. Battery Voltage +2V∼60V		
Load open circuit voltage	60V		
Maximum output efficiency	96%		
Output current control accuracy	≤30mA		
Communication distance of IR	≤6m		
Self-consumption	≤9.1mA(12V);≤7.0mA(24V)		
Temp. compensation coefficient	-3mV/℃/2V		
Working temperature	-35℃~+55℃		
Enclosure	IP68 (1.5m,72h)		
Overall dimension	107x68	3x20mm	108.5x88x25.6 mm
Power cable		AWG(2.5mm²) WG(1.0mm²)	PV/BAT:14AWG(2.5mm²) LOAD: 18AWG(1.0mm²)
Net weight	0.2	25kg	0.39kg

<sup>\*</sup> Technical data for 12V system at 25  $^{\circ}$ C, twice in 24V system rate.



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