

LandStar GPLI series

MPPT Solar Charge Controller

Overview

LandStar GPLI 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. Full waterproof and IR communication design, it has the feature of high efficiency, high control accuracy and dimmer function. The product is dedicated in LED indoor and outdoor lighting application condition, such as road lighting, landscape lighting and billboard lighting etc.



Features

- Maximum output efficiency of 96%
- Without any button, parameter setting via Mobile APP and RC-01 with IR function
- Flexible dimmer function, $0\sim$ 100% can be adjusted
- Multiple load control modes, LED rated current and current percentage can be set.
- Load test function for detecting the system, the controller power on, the load is ON
- Aluminum housing for better cooling
- Fully encapsulated PCB, IP68 protection (1.5 meters, 72h)
- Long lifespan design

Electronic protections

- PV Reverse Polarity
- Battery Reverse Polarity
- Battery Over Voltage
- Battery Over Discharge
- Battery Overheating
- Load Short Circuit
 (5 times reconnect load)













Technical Specifications

Model	LS102480GPLI	LS2024100GPLI
Nominal system voltage	12/24VDC Auto	
Rated charge current	10A	20A
Max. PV open circuit voltage	50V	
Battery input voltage range	8V ~ 32V	
Max. output power	40W/12V,80W/24V	50W/12V,100W/24V
Max. output current	4A/12V,24V	5A/12V,24V
Max. output voltage	Min. VBAT -0.5V	Min. VBAT -1V
Max. output efficiency	96%	
Output current control accuracy	≤50mA	
Battery Type	Sealed / Gel / Flooded / User	
Communication	IR	
Communication distance	≤6m	
Communication angle	≤15°	
Self-consumption	≤16mA(12V); ≤20mA (24V)	
Charge Circuit Voltage Drop	≤0.16V	
Temperature compensation coefficient	-3mV/℃/2V	
Working environment temperature	-35℃ ~ +55℃	
Enclosure	IP68(1.5m, 72h)	
Overall dimension	107×68×20mm	108.5×88×25.6mm
Mounting dimension	100mm	100.5mm
Mounting hole size mm	Ф4	Ф5
Power cable AWG/mm ²	PV/BAT: 14AWG(2.5mm ²) LOAD: 18AWG(1.0mm ²)	PV/BAT:12AWG(4.0mm ²) LOAD: 18AWG(1.0mm ²)
Net weight	0.25kg	0.39kg