

# PWM Solar charge controller

## LandStar series (LS1024,LS2024)



LandStar series solar charge controller that adopts the most advanced digital technique and operates fully automatically. The Pulse Width Modulation (PWM) battery charging can greatly increase the lifetime of battery.

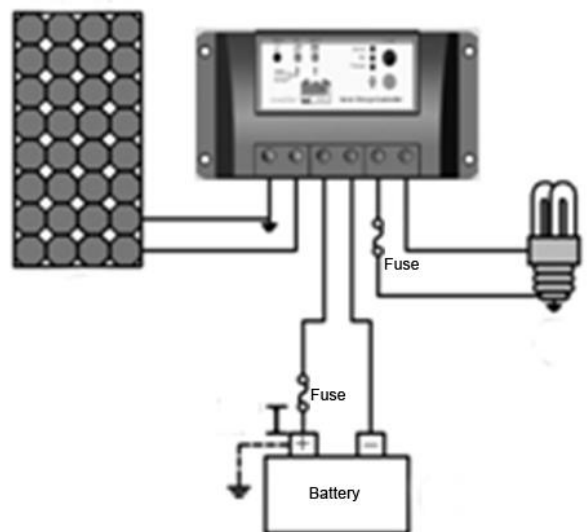
### Features:

- ◆ 12/24V auto work
- ◆ High efficient Series PWM charging
- ◆ Use MOSFET as electronic switch
- ◆ Gel, Sealed and Flooded battery type option
- ◆ Temperature compensation
- ◆ Electronic protection: over charging, over discharging, overload, short circuit , and overheating
- ◆ Reverse protection: any combination of solar module and battery

### Application:

Ideal for off-grid solar system that loads are normally on or controlled by manual.

- ◆ Solar traffic system
- ◆ Solar home system
- ◆ Unattended CCTV Equipment
- ◆ Wild automatic detection equipment



## Technical specifications

Electrical parameters	LS1024	LS2024
Nominal system voltage	12/24V auto work	
Rated battery current	10A	20A
Rated load current	10A	20A
Max. battery voltage	32V	
Charge circuit voltage drop	≤0.26V	
Discharge circuit voltage drop	≤0.15V	
Self-consumption	≤6mA	

Battery voltage parameters (temperature at 25 °C)			
Battery charging setting	Gel	Sealed	Flooded
Equalize charging voltage	—	14.6V;x2/24V	14.8V;x2/24V
Boost charging voltage	14.2V;x2/24V	14.4V;x2/24V	14.6V;x2/24V
Float charging voltage	13.8V;x2/24V	13.8V;x2/24V	13.8V;x2/24V
Low voltage reconnect voltage	12.6V;x2/24V	12.6V;x2/24V	12.6V;x2/24V
Low voltage disconnect voltage	11.1V;x2/24V	11.1V;x2/24V	11.1V;x2/24V
Equalize duration	—	2 hours	2 hours
Boost duration	2 hours	2 hours	2 hours

Environmental parameters		Mechanical parameters		
		LS1024	LS2024	
Working temperature	-35℃~+55℃	Overall dimension	140x65 34mm	144x75x45mm
Storage temperature	-35℃~+80℃	Mounting dimension	130x45mm	135x55mm
Humidity	10%-90% NC	Terminal	4mm <sup>2</sup>	10mm <sup>2</sup>
Enclosure	IP30	Net weight	0.15kg	0.25kg



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