

# PWM Solar charge controller

## LandStar series (LS1024R,LS2024R)



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.

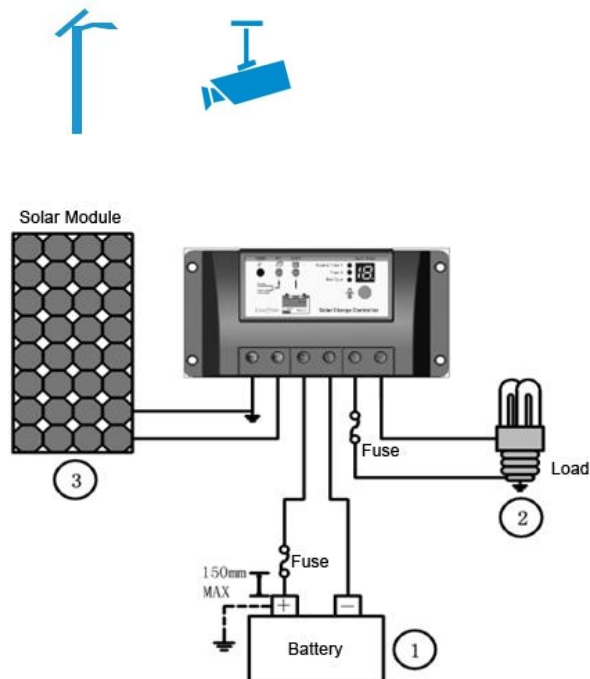
### Application:

Ideal for off-grid solar lighting system that needs light and timer control

- ◆ Solar street lights
- ◆ Solar garden lights
- ◆ Solar detection equipment at night

### Features:

- ◆ 12/24V auto work
- ◆ High efficient Series PWM charging
- ◆ Gel, Sealed and Flooded battery type option
- ◆ Widely used, automatically recognize day/night
- ◆ Intelligent timer function with 1-15 hours option
- ◆ Digital LED menu with simple setting and easy using
- ◆ Use MOSFET as electronic switch
- ◆ Temperature compensation
- ◆ Electronic protection: over charging, over discharging, overload, short circuit , and overheating
- ◆ Reverse protection: any combination of solar module and battery



## Technical specifications

Electrical parameters	LS1024R	LS2024R	LS2024R
Nominal system voltage	12 / 24VDC auto work		
Rated battery current	10A	15A	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℃)			
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		
		LS1024R	LS2024R	
Working temperature	-35℃ to +55℃	Overall dimension	140 x 65 x 34mm	144x 75x 45mm
Storage temperature	-35℃ to +80℃	Mounting dimension	130 x 45mm	135 x 55mm
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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