

Technical specification

PWM Solar charge controller

LS-E series



[PRODUCT WEBPAGE](#)



PWM Solar charge controller

LS-E economic solar controller is new member of LandStar family and ideal for small solar system especially home system. It has the beautiful appearance, and simple operation. And the industrial grade design ensures its reliability.



MODEL OVERVIEW

LS0512E 5A, 12V
LS1012E 10A, 12V
LS1024E 10A, 12/24V
LS2024E 20A, 12/24V

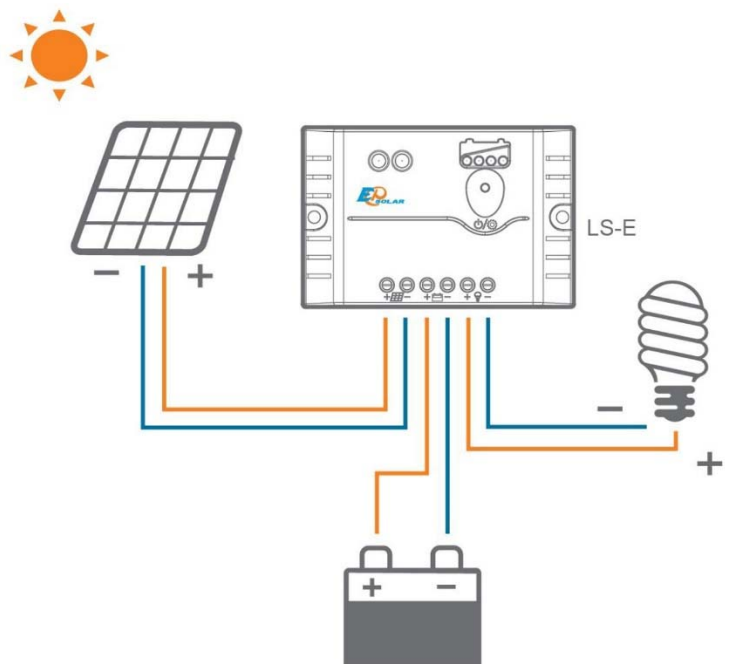


FEATURES:

- High efficient Series PWM charging, increase battery lifetime and improve solar system performance
- Use MOSFET as electronic switch, without any mechanical switch
- Intuitive LED indicators showing battery voltage status
- Gel, Sealed, and Flooded battery type optional
- Manual control the output of the load
- Temperature compensation, correct charging and discharging parameters automatically
- Humanized Key, more comfortable and convenient
- Industrial grade design

ELECTRONIC PROTECTIONS:

- Load overload protection
- Battery over discharge protection
- Load short circuit protection
- Battery reverse polarity protection



TECHNICAL SPECIFICATIONS:

Model	LS0512E	LS1012E	LS1024E	LS2024E
Nominal system voltage	12VDC	12VDC	12/24VDC	12/24VDC
Rated battery current	5A	10A	10A	20A
Max. battery voltage	16V	16V	32V	32V
Max. PV open circuit voltage	30V	30V	50V	50V
Equalize charging voltage	Gel: ----, Sealed: 14.6V, Flooded: 14.8V			
Boost charging voltage	Gel: 14.2V, Sealed: 14.4V, Flooded: 14.6V			
Float charging voltage	Gel / Sealed / Flooded: 13.8V			
Low voltage reconnect voltage	Gel / Sealed / Flooded: 12.6V			
Low voltage disconnect voltage	Gel / Sealed / Flooded: 11.1V			
Charge circuit voltage drop	≤ 0.26V	≤ 0.26V	≤ 0.26V	≤ 0.26V
Discharge circuit voltage drop	≤ 0.15V	≤ 0.15V	≤ 0.15V	≤ 0.15V
Self-consumption	≤ 6 mA	≤ 6 mA	≤ 6 mA	≤ 6 mA
Temp. compensation	-5 m V/°C /2V (ref)	-5 m V/°C /2V (ref)	-5 m V/°C /2V (ref)	-5 m V/°C /2V (ref)
Overall dimension (mm)	92.8 x 65x 20.2	101.2 x 67 x 21.8	101.2 x 67 x 21.8	128 x 85.6 x 34.8
Mounting dimension	84.4 mm	92.7 mm	92.7 mm	118 mm
Mounting hole size	Φ 4.5	Φ 4.5	Φ 4.5	Φ 4.5
Terminal	2.5 mm ²	4 mm ²	4 mm ²	6 mm ²
Weight	74 g	82.5 g	82 g	151.6 g
Working temperature	-35°C ~ +55°C	-35°C ~ +55°C	-35°C ~ +55°C	-35°C ~ +55°C
Storage temperature	-35°C ~ +80°C	-35°C ~ +80°C	-35°C ~ +80°C	-35°C ~ +80°C
Humidity	≤ 95% N.C.	≤ 95% N.C.	≤ 95% N.C.	≤ 95% N.C.
Enclosure	IP30	IP30	IP30	IP30





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