

# PWM Solar Charge Controller

## L-SUN SN Series

The L-SUN SN controller is a common positive PWM charge controller with built in LCD display and USB port. The multiple load control modes enable it can be widely used on solar home system, traffic signal, solar street light, solar garden lamp, etc.



### Models:

- L-SUN1024SN, 10A, 12/24V auto work
- L-SUN2024SN, 20A, 12/24V auto work
- L-SUN3024SN, 30A, 12/24V auto work
- L-SUN4524SN, 45A, 12/24V auto work
- L-SUN6024SN, 60A, 12/24V auto work
- L-SUN3048SN, 30A, 12/24/36/48V auto work
- L-SUN4548SN, 45A, 12/24/36/48V auto work
- L-SUN6048SN, 60A, 12/24/36/48V auto work

### Features:

- PWM charging
- Battery type selectable: Sealed, Gel, and Flooded
- Informative black light LCD display
- Multiple load control modes
- Energy statistics function
- Double USB design, Max. output 2.4A
- Adopt high quality, high reliability components of ST, IR and Infineon
- Full power working at temperature range from -25 to 55°C
- UL and VDE certified Nickel plated copper terminals, to ensure safe and solid connection
- Battery temperature compensation function
- Extensive Electronic protection

### Electronic protections:

- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| ● PV reverse polarity protection    | ● Battery over discharge protection   |
| ● Load short circuit protection     | ● Battery over voltage protection     |
| ● Load overload protection          | ● Battery overheating protection      |
| ● Controller overheating protection | ● Battery reverse polarity protection |

## Technical specifications:

Model	L-SUN1024SN	L-SUN2024SN	L-SUN3024SN	L-SUN4524SN	L-SUN6024SN
			L-SUN3048SN	L-SUN4548SN	L-SUN6048SN
Nominal system voltage	L-SUN**24SN 12/24V auto work		L-SUN**48SN 12/24/36/48V auto work		
Battery input voltage range	L-SUN**24SN 9 ~ 32V / L-SUN**48SN 9V ~ 64V				
Rated charge/discharge current*	10A	20A	30A	45A	60A
Max. PV open circuit voltage	L-SUN**24SC 50V / L-SUN**48SC 96V				
Battery type	Sealed(Default) / Gel / Flooded				
Equalize charging voltage*	Sealed: 14.6V / Gel: No / Flooded: 14.8V				
Boost charging voltage*	Sealed:14.4V / Gel:14.2V / Flooded:14.6V				
Float charging voltage*	Sealed / Gel / Flooded: 13.8V				
Low voltage reconnect voltage*	Sealed / Gel / Flooded: 12.6V				
Low voltage disconnect voltage*	Sealed / Gel / Flooded:11.1V				
Self-consumption	≤10mA/12V; ≤18mA/24V; ≤14.5mA/36V; ≤17mA				
Temperature compensation coefficient	-3mV/℃/2V (25℃)				
Grounding	Common positive				
USB output	5VDC / 2.4A				
Terminals	12AWG(4mm2)	8AWG(10mm2)	6AWG(16mm2)	6AWG(16mm2)	3AWG(25mm2)
Enclosure	IP30				
Working environment tempe	-25℃～+55℃(Product can work continuously at full load)				
Humidity range	≤95% (N.C.)				

● Above the parameters are in 12V system at 25°C, twice in 24Vsystem, triple in 36V system and quadruple in 48V system.

● Rated charge/discharge current temp. range is -25 to 55°C



