

MPPT Solar Charge Controller

L-SUN M Series

L-SUN M series adopts common positive design and advanced MPPT control algorithm. The products can track the MPP point fast and accurately in any situation which will improve energy efficiency and obtain the maximum solar energy.



Models:

- L-SUN1210M, 10A, 12/24V auto work
- L-SUN2210M, 20A, 12/24V auto work
- L-SUN3210M, 30A, 12/24V auto work
- L-SUN4210M, 40A, 12/24V auto work

Features:

- Advanced MPPT technology
- Peak conversion efficiency of 98%
- High tracking efficiency no less than 99.5%
- Accurately recognizing and tracking of multiple power point
- User programmable for battery types, load control etc
- Ultra-fast tracking speed
- 3-Stage charge with PWM output
- Multi-function LCD displays system information intuitively
- RS485 port with industrial standard MODBUS open architecture
- Fully programmable function via PC software or remote meter
- Common positive grounding design

Electronic protections:

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

Load Set:

There are two methods that can modify load mode and control parameter through infrared interface:

1. Remote meter, MT50
2. Super Parameter Programmer, SPP-02

This method can realize one-key setting operation which is suitable for bulk quantity products setting or applied in the projects.

3. PC monitoring setting software "Solar Station Monitor"

Technical specifications:

MODEL	L-SUN1210M	L-SUN2210M	L-SUN3210M	L-SUN4210M
Nominal system voltage	12/24VDC auto work			
Battery input voltage range	8 ~ 32V			
Rated charge current	10A	20A	30A	40A
Rated discharge current	10A	20A	30A	40A
Max. PV open circuit voltage	100V(at minimum operating environment temperature) 92V(at 25℃ environment temperature)			
MPP voltage range	VBAT+2V ~ 72V			
Max. PV input power	130W(12V) 260W(24V)	2600W(12V) 520W(24V)	390W(12V) 780W(24V)	520W(12V) 1040W(24V)
Equalize charging voltage	Sealed: 14.6V , Flooded: 14.8V			
Boost charging voltage	/Gel:14.2V , Sealed:14.6V , Flooded:14.8V			
Float charging voltage	13.8V			
Low voltage reconnect voltage	12.6V			
Low voltage disconnect voltage	11.1V			
Self-consumption	≤20mA/12V; ≤16mA/24V			
Temperature compensation coefficient	-3mV/℃/2V (25℃)			
Power Terminals	12AWG(4mm ²)	6AWG(16mm ²)	6AWG(16mm ²)	6AWG(16mm ²)
Enclosure	IP30			

