

# **Solar Power Intelligent Charging Controller**

















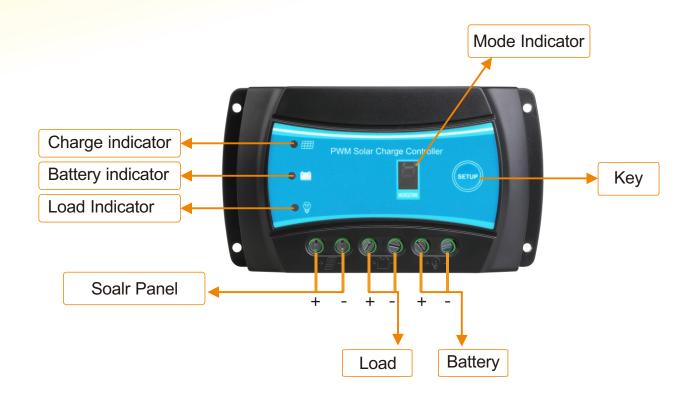


#### **Features**

## SR-LM series PWM controller outstands for making solar charging & battery loading management easier and simpler, with features as follows:

- 12V / 24V auto recognition
- LED indicators for displaying the solar charging & battery loading status.
- Adopts the latest solar charge algorithm for battery, of which service life can be extended by protecting the battery from vulcanization, through auto equalization charge once a week.
- Four working modes available for different loading and working circumstance.
- Working status and parameter would be auto recorded if power failure happens, no need to re-set the controller, it's easy to operate.
- Various kinds of electronics protection for solar panel, loading and controller.

### Appearance picture is as below



#### **Product Detail**

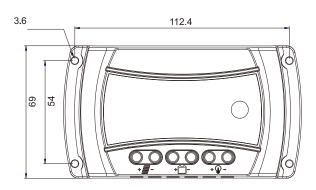


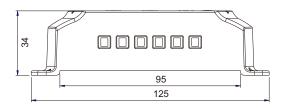
SR-LM10A Dimension as below Overall dimension: 124.7×69.4×34(mm) Installation dimension: 112×54(mm) Installation hole diameter: 3.5(mm)

### **Installation and wiring**

1. Installation of controller should be stable and dimensions are as follows:

Overall dimension: 124.7×69.4×34.0(mm); Installation dimension: 112.4×54(mm); Installation hole diameter:3.6(mm)





#### **Status Indication**

LED Display	Mode	LED Display	Mode
0	Purely light-operated	9	Light-operated + time-controlled for 9hours
1	Light-operated + time-controlled for 1 hour	0 · (0point)	Light-operated + time-controlled for 10hours
2	Light-operated + time-controlled for 2hour	1 · (1point)	Light-operated + time-controlled for 11hours
3	Light-operated + time-controlled for 3 hour	2 · (2point)	Light-operated + time-controlled for 12hours
4	Light-operated + time-controlled for 4hour	3 · (3point)	Light-operated + time-controlled for 13hours
5	Light-operated + time-controlled for 5hour	4 · (4point)	Light-operated + time-controlled for 14hours
6	Light-operated + time-controlled for 6 hour	5 · (5point)	Manual mode
7	Light-operated + time-controlled for 7 hour	6 · (6point)	Debug mode (the default)
8	Light-operated + time-controlled for 8 hour	7 · (7point)	Long-term On mode

#### **Parameters**

Item	Value			
MODEL	SR-LM10A			
System voltage	12V/24V Auto			
System current	10A			
No-load loss	< 10mA/12V; < 13mA/24V			
Solar energy input voltage	< 55V			
Overvoltage protection	17.0V ; ×2/24V			
Equal charging voltage	14.6V;×2/24V(25°C),duration:1h			
Ascending charging voltage	14.4V;×2/24V(25℃),duration:2h			
Float charging voltage	13.8V; ×2/24V (25℃)			
Return voltage during charging	13.2V ; ×2/24V ( 25℃ )			
Return voltage for over-discharging	12.6V ; ×2/24V			
Over-discharging voltage	11.1V ; ×2/24V			
Temperature compensation	-4.0mv/°C/2V ;			
Light-control voltage	Light-control open 5V; light-control close 6V			
Light-control judgment time	10min			
Working temperature	-35℃ to +65℃;			
Protection level	IP30			
Weight	106g			
Circuit protection	Reverse connection of the storage battery, reverse connection of the solar panel, counter-attack filling at the night. (Notice 1) Load overload、short circuit (Notice 2)			
Dimensions	124.7×69.4×34.0(mm) (L×W×H )			

Notice1: If reverse connection of the storage battery, the controller would not be damage, but there is the negative voltage output from the load will lead to the load damage.

Notice2: Time delay function when overload, the protection time is related to the ambient temperature. When overload, the overload protection will running auto. The first time is 5 seconds , the second time is 10 seconds, the third time is 15 seconds, the fourth time is 30 seconds and the fifth time is 4 hours or the second day it will recovery.