

Solar Power Intelligent Charging Controller

SR-LM10A/SR-LM2420/SR-LM2430

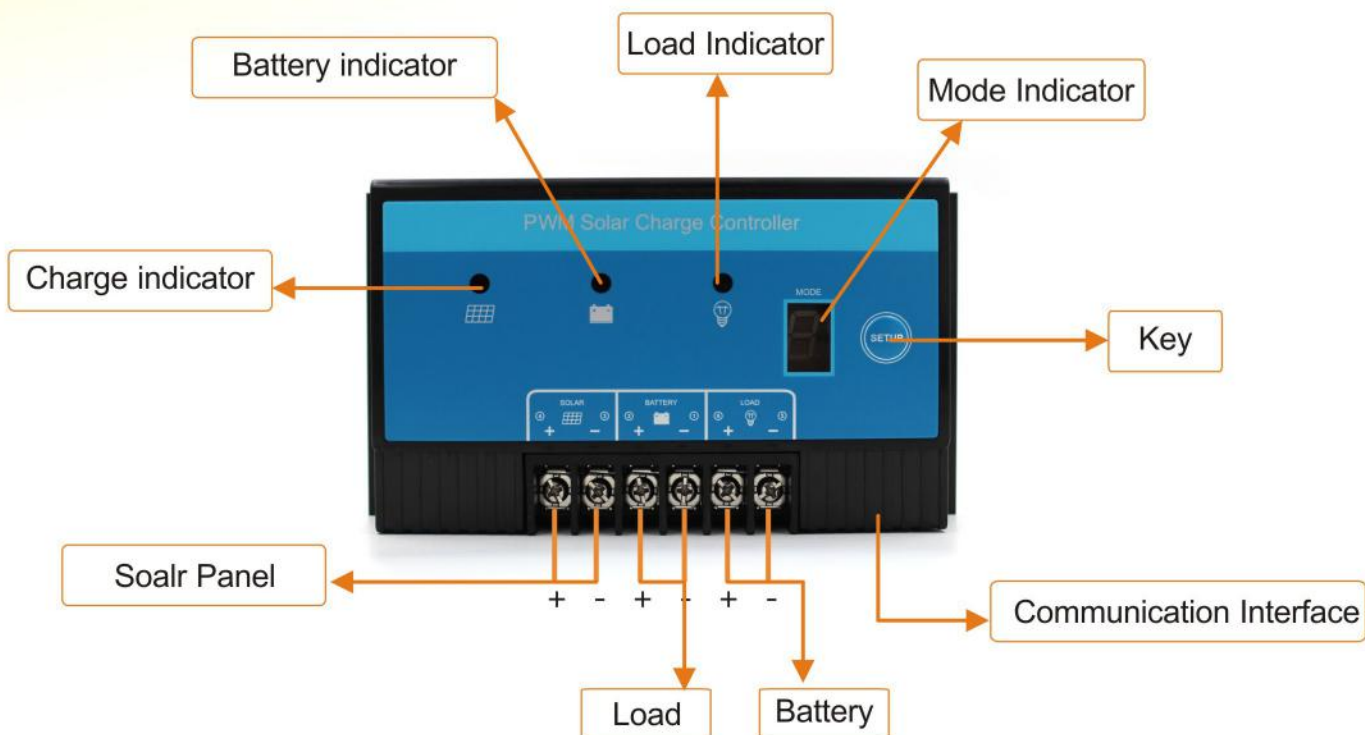


Features

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)



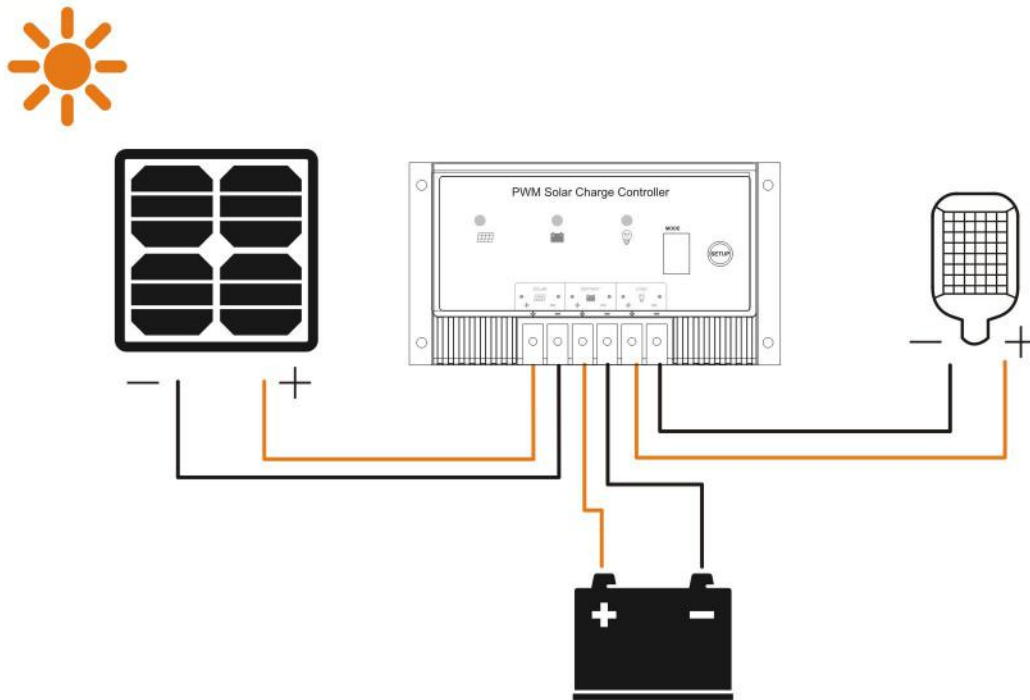
SR-LM2420 Dimension as below
 Overall dimension : 154×72×32.7(mm)
 Installation dimension : 144×50(mm)
 Installation hole diameter : 4.5(mm)



SR-LM2430 Dimension as below
 Overall dimension : 165×90×39.4(mm)
 Installation dimension : 145×70(mm)
 Installation hole diameter : 4.5(mm)



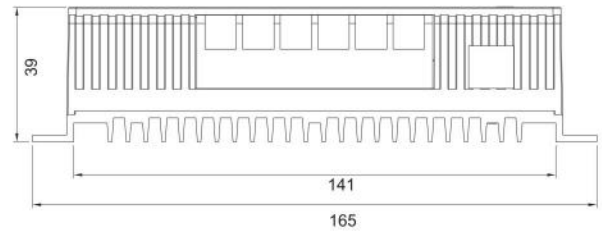
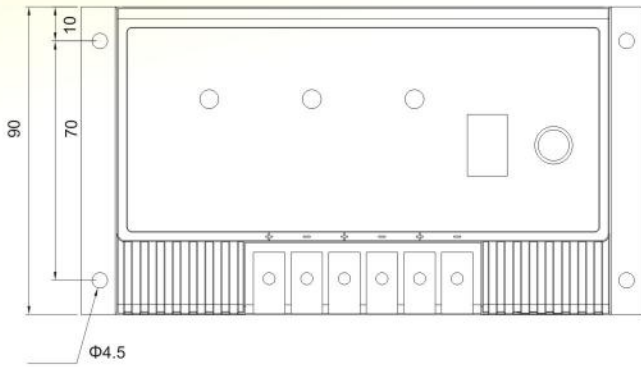
Wiring diagram is as below



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

Installation and wiring



Overall dimension: 165.0×90.0×39.4(mm)

Installation dimension: 154.0×70.0 (mm)

Installation hole diameter: 4.5(mm)

Parameters

Item	Value		
MODEL	SR-LM10A	SR-LM2420	SR-LM2430
System voltage	12V/24V Auto		
System current	10A	20A	30A
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°C) , duration : 2h		
Float charging voltage	13.8V ; ×2/24V (25°C)		
Return voltage during charging	13.2V ; ×2/24V (25°C)		
Return voltage for over-discharging	12.6V ; ×2/24V	12.5V ; ×2/24V	
Over-discharging voltage	11.1V ; ×2/24V	11.0V ; ×2/24V	
Temperature compensation	-4.0mv/°C/2V ;	-3.0mV/°C/2V	
Light-control voltage	Light-control open 5V; light-control close 6V		
Light-control judgment time	10min		
Working temperature	-35°C to +65°C ;		
Protection level	IP30		
Weight	106g	218g	350g
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)	154.0×72.0×32.7(mm) (L×W×H)	165.0×90.0×39.4 (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 15seconds, the fourth time is 30seconds and the fifth time is 4hours or the second day it will recovery.