

DH Series SR-DH120

Intelligent Wireless Dimming LED Solar Charge Controller



DH120



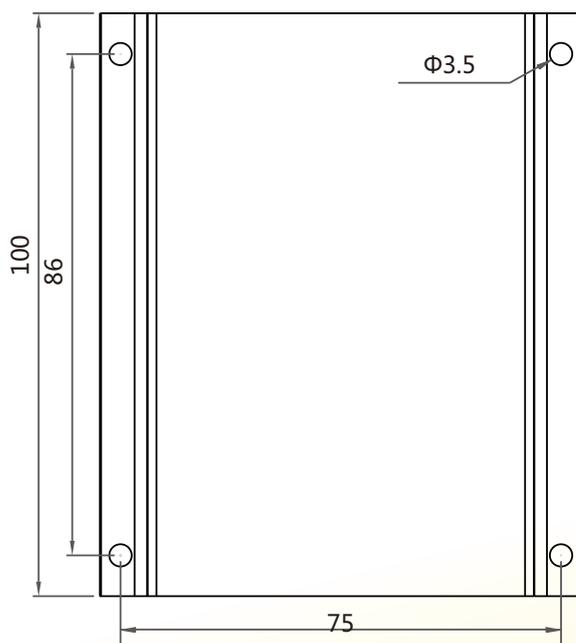
Main Features

1. New design of wireless remote-control can modify the controller parameter and read the system message according to the handheld device.
2. Digital high precision constant-current control, the maximum efficiency can reach 96%.
3. The working current can be adjusted from 0.15A to 3.96A, the regulating precision is 30mA.
4. High dynamic performances of load insure current output stability even though the battery voltage and load sudden change.
5. 3 section time frame dimming function design, work time can be set range from 0h to 15 hours, power can be set range from 0% to 100%.
6. Intelligent power mode, the load power can be adjust automatically according to the battery power, can extend the maximum working time of the battery.
7. Record the system status, can record at a max 7days and monitor the whole system.
8. The true constant current but not limited the current, insure the current output stability thus decrease LED light failure, increase the LED service life.
9. Metal case, IP68 waterproof degree, can suitable use in all kinds of bad conditions.
10. With modified calculation of charging, the charging efficiency is improved, which lengthen the using time of solar energy.
11. Overheat preventing function, above a certain temperature will decrease the load or close the load.
12. Varies system protection function. Including the battery reverse connection, LED short circuit, open circuit protection and so on.

Installation and Wiring

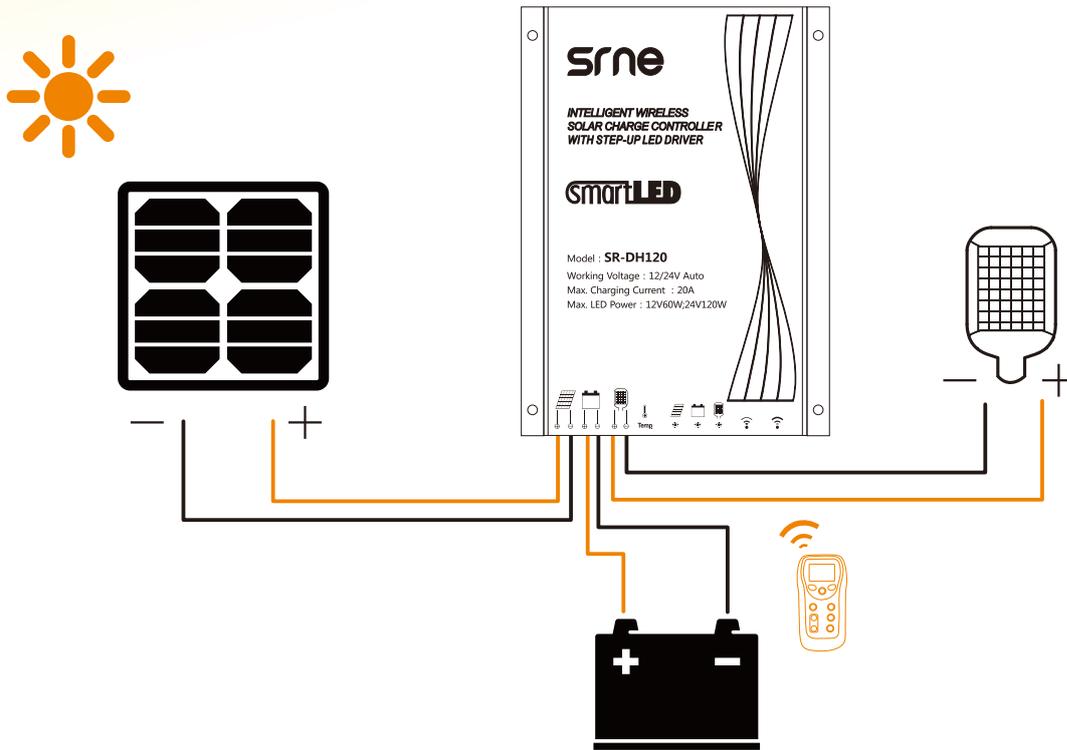


Installation



- 1.The size of DH120 is as follows :
Boundary dimension : 82×100×20(mm)
Installation dimension : 86×75(mm)
Installation aperture : 3.5(mm)

Demension



Status Indication

LED light	Indications	Status	Functions
	Charging indication	Long-term On	The solar panel voltage is higher than light control voltage
		Long-term Off	The solar panel voltage is lower than light control voltage
		Slow twinkling	charging
		Fast twinkling	System over voltage
	Battery indication	Long-term On	battery works normally
		Long-term Off	battery unconnected
		Fast twinkling	battery is excessively discharged
	Load indication	Long-term On	Load is on
		Slow twinkling	The load is open circuit.
		Fast twinkling	The load is short circuit.
		off	Load is off

The Parameters

Parameter name	Parameter value			Adjust-able	Default value
Model	DH120				
System voltage	12V/24V				
Output power	60W/12V 120W/24V				
Output current	0.15A~3.96A			√	330mA
No-load loss	9mA/12V;12mA/24V				
Charging current	20A				
Solar input voltage	<55V				
Efficiency of constant current	90%~96%				
Overvoltage protection	16.0V ; ×2/24V				
Charging limits voltage	15.5V ; ×2/24V				
Equal charging voltage	15.2V ; ×2/24V (25°C)				
Equal charging interval	30days				
Ascending charging voltage	14.2V~15.0V ; ×2/24V (25°C)			√	14.4V
Float charging voltage	13.2V~14.0V ; ×2/24V (25°C)			√	13.8V
over-discharging recover voltage	12.0V~13.0V ; ×2/24V			√	12.6V
over-discharging voltage	9.8V~11.8V ; ×2/24V			√	11.0V
Temperature compensation	-4.0mv/°C/2V ;				
Current precision	±3% (Load current> 300mA)				
Load output voltage	< 60V				
over-temperature protection	ambient temperature:80°C (load drop power)				
overheat protection	internal temperature:120°C(Load off)				
light control voltage	5V~11V			√	5V
light control delay	1min~50min			√	1min
Working temperature	-35°C~+65°C ;				
Protection level	IP68				
Weight	280g	170g	160g		
Dimension (mm)	100*82*20	58*82*20			