

Intelligent Wireless Dimming LED Solar Charge Controller

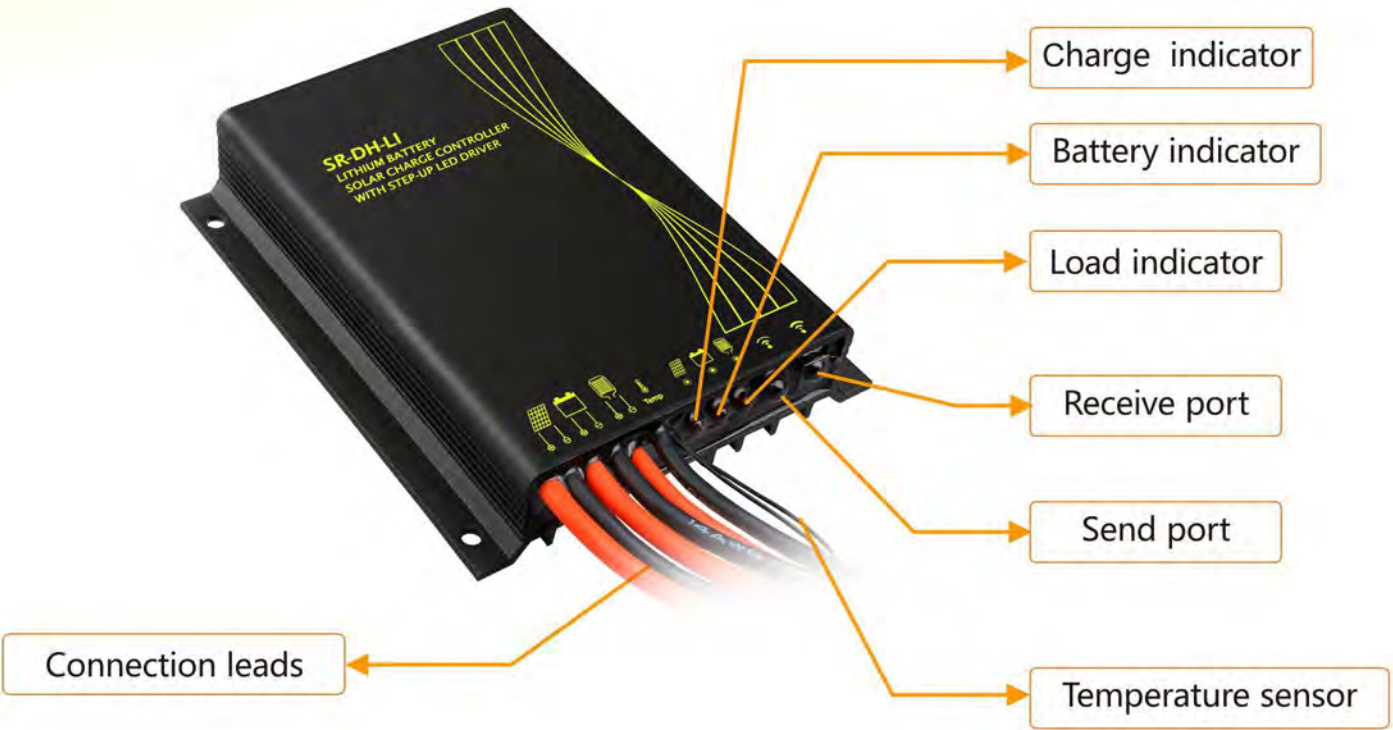
SR-DH100-LI/SR-DH50-LI/SR-DH20-LI



Main Features

- 1.Exclusive controller for Lithium Battery, which suit for ternary Lithium, Lithium iron battery, Lithium cobalt oxides battery, etc.
- 2.Unique Lithium battery which is automatically actuated.
- 3.Flexible charging mode, equalizing charge or PWM charge auto switch.
- 4.Lithium battery low temperature charging protection, when the ambient temperature is lower than 0°C, the controller will auto stop low temperature charging so as to protect the battery.
- 5.Digital high precision constant-current control, the maximum efficiency can reach 96%.
- 6.The working current can be adjusted from 0.15A to 3.3A, the regulating precision is 30mA.
- 7.High dynamic performances of load insure current output stability even though the battery voltage and load sudden change.
- 8.3 level time frame dimming function design, work time can be set range from 0 hour to 15 hours, power can be set range from 0% to 100%.
- 9.Intelligent power mode, the load power can be adjusted automatically according to the battery power, can extend the maximum working time of the battery.
- 10.Record the system status, can record at a max 7days and monitor the whole system.
- 11.The true constant current but not limited current, which can insure the current output stability thus decrease LED light failure and increase the LED service life.
- 12.Metal case, IP68 waterproof degree, can be used in all kinds of bad conditions.
- 13.Overheat protection function, when the controller reaches a certain temperature, it will decrease or close the load.
- 14.Varies system protection. Including the battery reverse connection, LED short circuit, open circuit protection and so on.

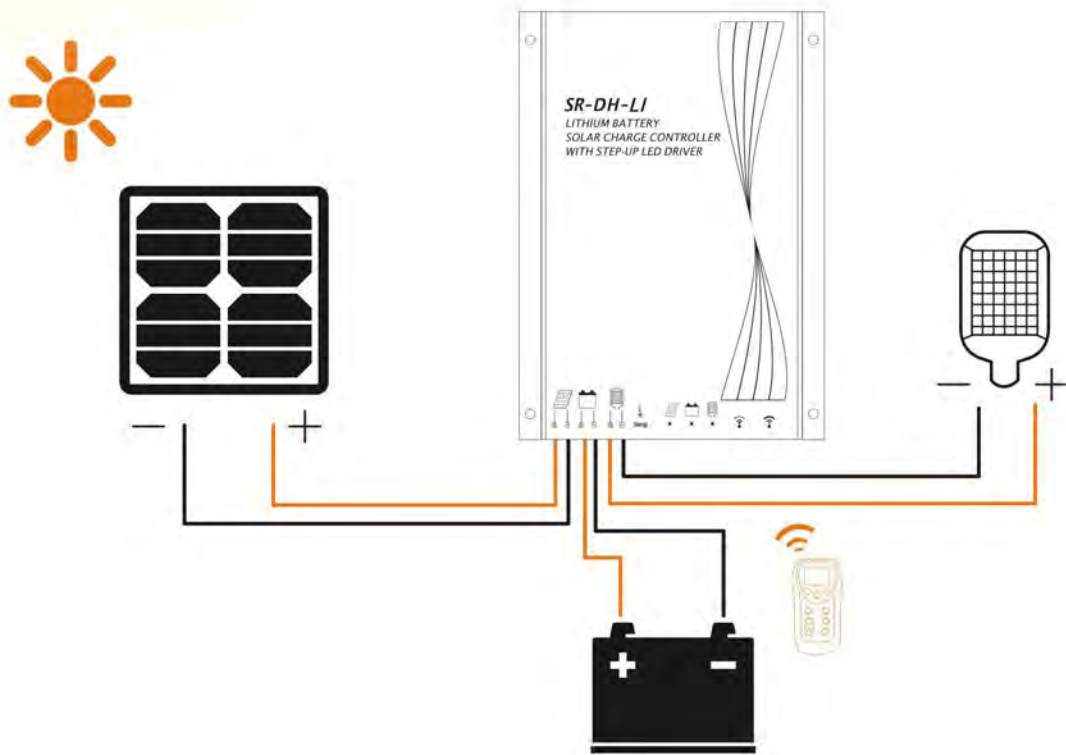
Appearance picture is as below






Product Detail



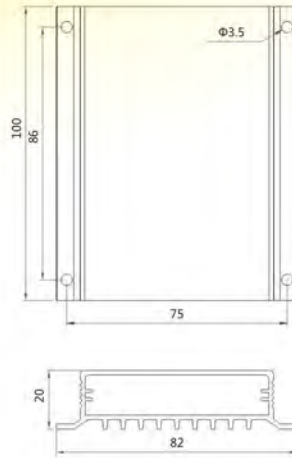
Wiring diagram is as below



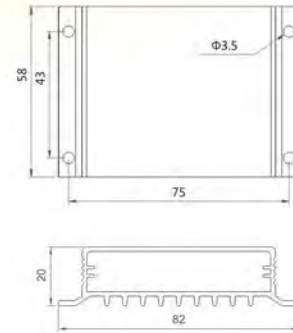
Status Indication

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	on charging
	Battery indication	Fast twinkling	Overvoltage of the system
		Long-term On	Storage battery works normally
		Long-term Off	Storage battery is unconnected
	Load indication	Fast twinkling	Storage battery is over discharge
		Long-term On	Load is on
		Slow twinkling	The load is open circuit
		Fast twinkling	The load is short circuit
		off	Load is off

Installation Dimension



The size of SR-DH-LI100 is as follows :
Boundary dimension : 82×100×20(mm)
Installation dimension : 86×75(mm)
Installation aperture : 3.5(mm)



The size of SR-DH-LI50 and SR-DH-LI20 :
Boundary dimension : 82×58×20(mm)
Installation dimension : 43×75(mm)
Installation aperture : 3.5(mm)

The Parameters

Parameter Name	Parameter Value			Adjustable	Default Value
Model	SR-DH100-LI	SR-DH50-LI	SR-DH20-LI		
System voltage	12V/24V	12V/24V	12V		
Output power	50W/12V;100W/24V	25W/12V;50W/24V	20W		
Output current	0.15A~3.3A	0.15A~1.98A	0.15A~1.67A	✓	330mA
No-load loss	9mA/12V; 12mA / 24V		9mA /12V		
Charging current	15A	8A	5A		
Solar input voltage	<55V		<30V		
Efficiency of constant current	90% ~ 96%				
Overvoltage protection	Over charging voltage+2V ; ×2/24V				16.6V
Charging limits voltage	Over charging voltage +1V ; ×2/24V				15.6V
Overcharge voltage	9.0V~ 17.0V ; ×2/24V			✓	14.6V
Overcharge return voltage	9.0V~ 17.0V ; ×2/24V			✓	13.6V
Over discharge voltage	9.0V ~ 17.0V ; ×2/24V			✓	10.0V
Over discharge return voltage	9.0V ~ 17.0V ; ×2/24V			✓	12.V
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			✓	5min
Working temperature	-35°C ~ +65°C ;				
Protection level	IP68				
Weight	280g	170g	160g		
Dimension (mm)	100*82*20(mm)	58*82*20(mm)			