

Depressurization LED Solar Charge Controller with Constant Current Source

SR-DL100/SR-DL50



SR-DL100



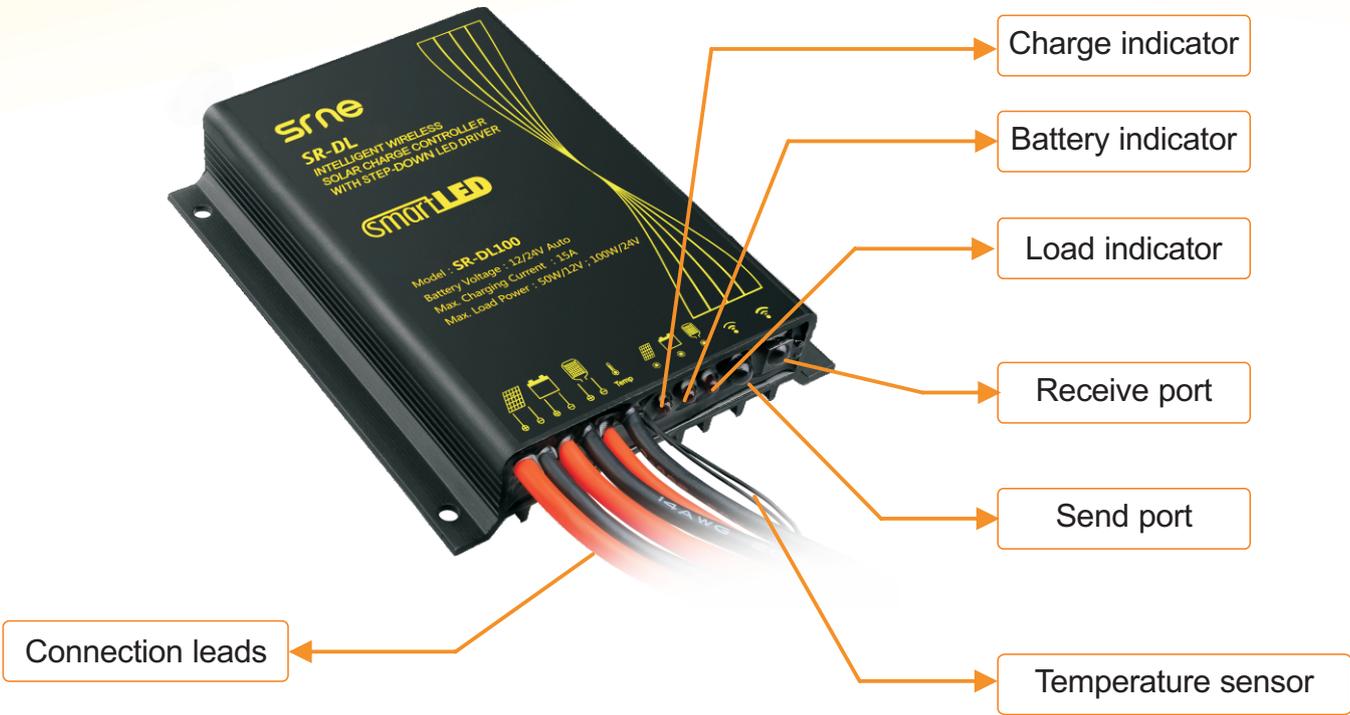
SR-DL50



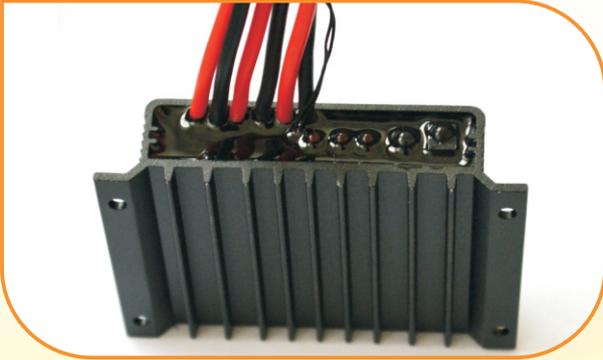
Features

1. New design of wireless remote-control can modify the controller parameter and read the system message according to the handheld device.
2. The data communication adapted multiple handshake protocol and data compression, it makes data transmission exact and fast.
3. Fast dynamic response of the load, the load stabilization time is very short.
4. 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%.
5. High efficiency constant current source, the Max. Efficiency can reach 97%.
6. Intelligent power mode, it can automatically adjust the load power according to battery electric quantity, which can extend battery' s service life.
7. The true constant current but not limited the current, insure the current output stability thus decrease LED light failure, increase the LED service life.
8. Metal case, IP68 waterproof degree, can suitable use in all kinds of bad conditions.
9. With modified calculation of charging, the charging efficiency is improved, which lengthen the using time of solar energy.
10. Overheat preventing function, above a certain temperature will decrease the load or close the load.
11. Varies system protection function. Including the battery reverse connection, LED short circuit, open circuit protection and so on.

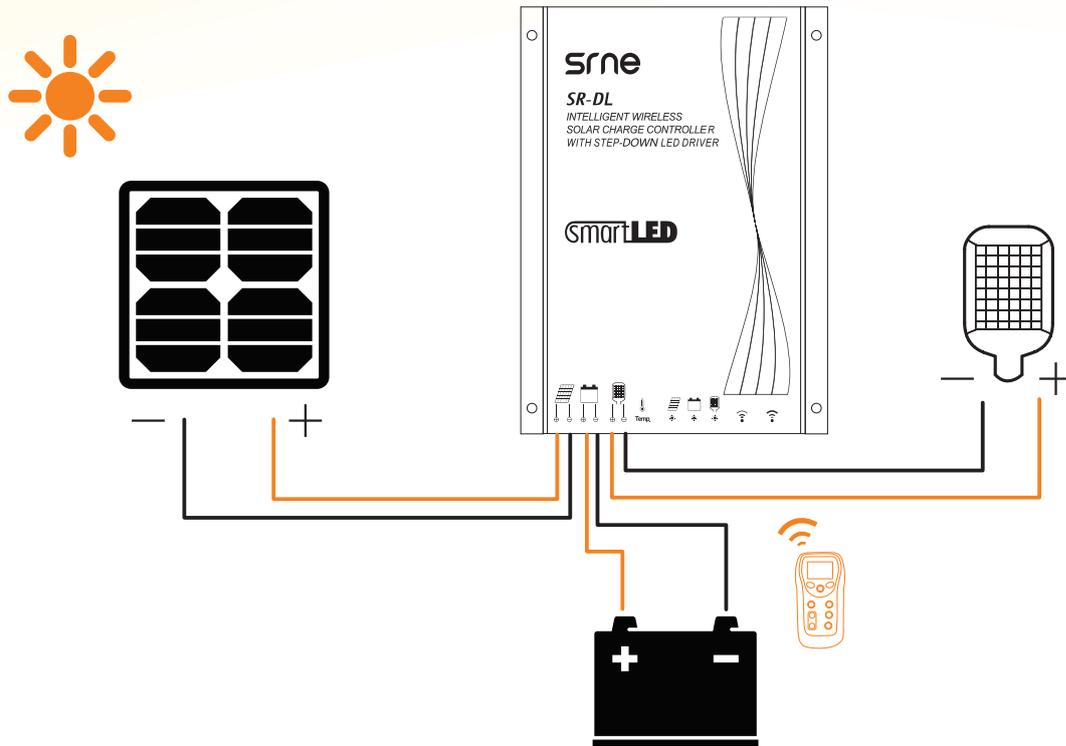
Appearance picture is as below



Picture Detail



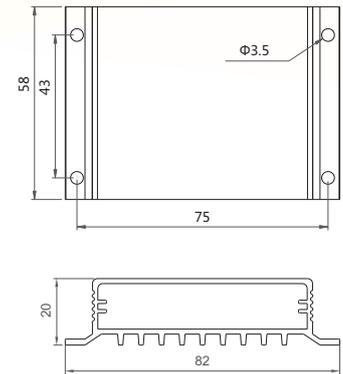
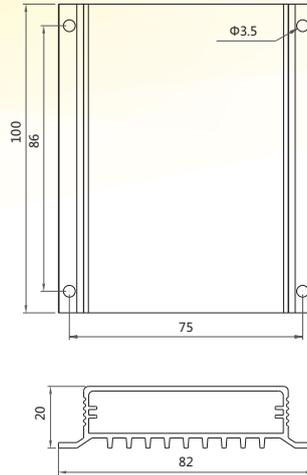
Wiring diagram is as below



Status Indication

LED light	Inducations	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	Be on charging
		Fast twinkling	Overpressure of system
	Battery indication	Long-term On	Storage battery works normally
		Long-term Off	Storage battery is not connected
		Fast twinkling	Storage battery is excessively discharged
	Load indication	Long-term On	Load is on
		Long-term Off	LED load is in short circuit or open circuit status.
		off	Load is off

Installation Dimension



The Dimension of DL100 is as follows:
 Boundary Dimension: 82×100×20(mm)
 Installation Dimension: 86×75(mm)
 Installation Aperture: 3.5(mm)

The Dimension of DL50 is as follows:
 Boundary Dimension: 82×58×20(mm)
 Installation Dimension: 43×75(mm)
 Installation Aperture: 3.5(mm)

Parameters

Parameter Name	Parameter Value		Parameter can be setting or not	Default Values
	SR-DL100	SR-DL50		
Model	SR-DL100	SR-DL50		
System voltage	12V/24V Auto			
Output power	50W/12V;100W/24V40W/12V;50W/24V		✓	990mA
No-load loss	12mA / 12V;17mA / 24V			
Charging current	15A	10A		
Solar input voltage	< 55V			
Output current	150mA ~ 5000mA			
Efficiency of constant current	90% ~ 97%			
Overtoltage 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	< Battery voltage-0.6V			
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 ~ +70°C;			
Protection level	IP68			
Weight	300g			
Lead' s dimensions	Solar panel and battery: 2.5mm ² ,Load: 1.5mm ²			
Dimensions	82×100×20(mm) (L×W×H)			