

# SES Intelligent Wireless Dimming LED Solar Charge Controller



SR-SES60-IR



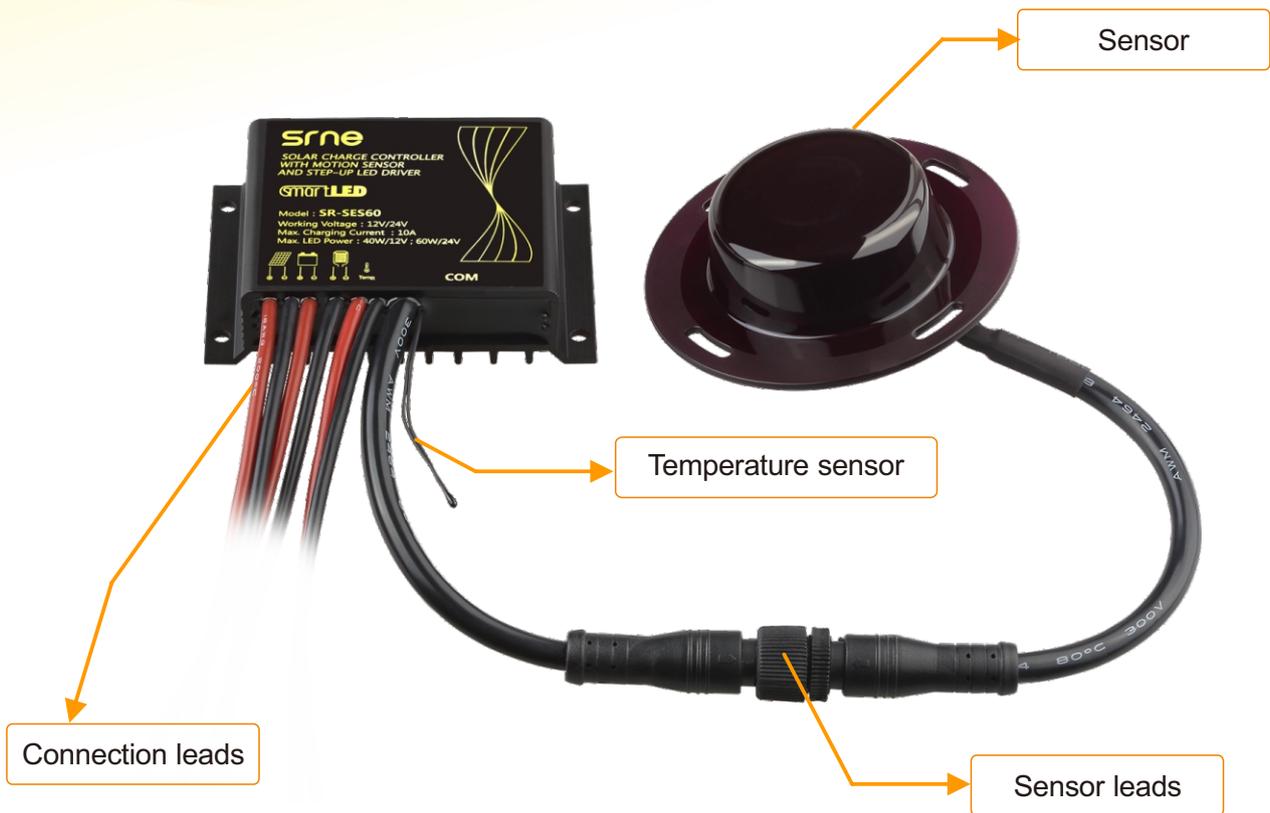
SR-SES60-WB



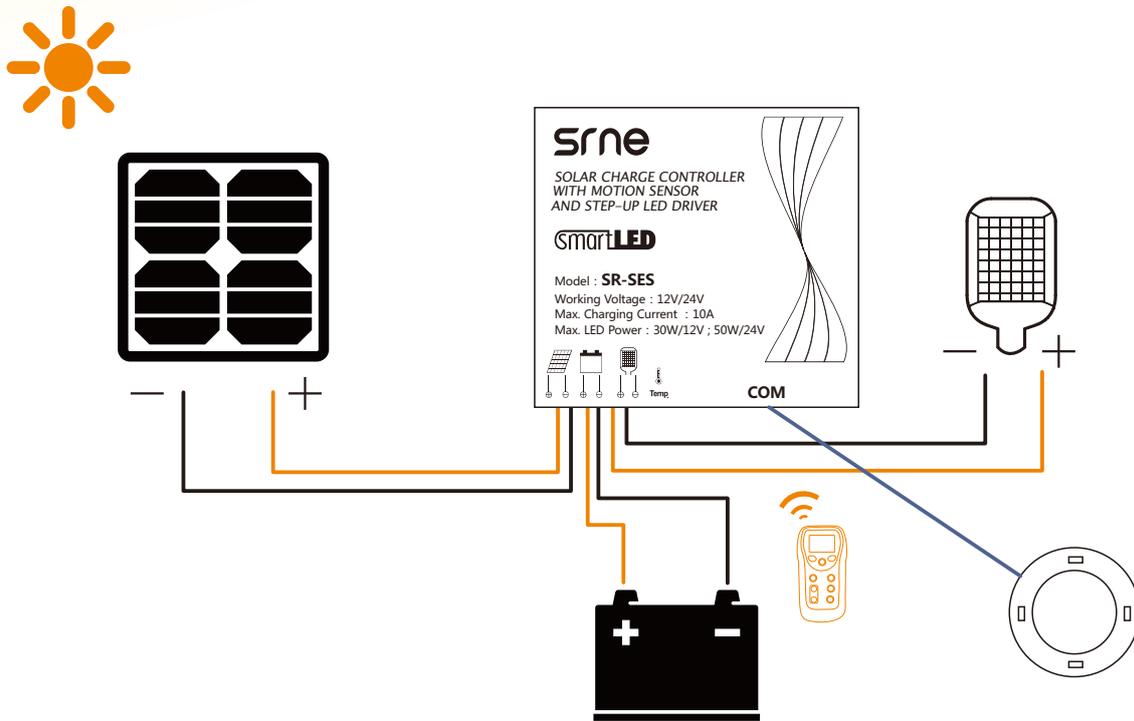
## Feature

- 1.Exclusive controller for Lithium Battery, which suit for ternary Lithium, Lithium iron battery, Lithium cobalt oxides battery, etc.
- 2.Normal working+Sensitive+Morninglight mode design and working time can be set range from 0h to 15hours,power range from 0~100%.
- 3.Human infrared induction or microwave induction function.
- 4.Sensitive time delay can be set range from 0s~150s.
- 5.Unique Lithium battery which is automatically actuated.
- 6.Flexible charging mode, equalizing charge or PWM charge auto switch.
- 7.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.
- 8.Intelligent power mode, the load power can be adjusted automatically according to the battery power, can extend the maximum working time of the battery.
- 9.Digital high precision constant-current control, the maximum efficiency can reach 96%.
- 10.ecord the system status, can record at a max 7days and monitor the whole system.
- 11.Metal case, IP68 waterproof degree, can be used in all kinds of bad conditions.
- 12.Overheat protection function, when the controller reaches a certain temperature, it will decrease or close the load.
- 13.Varies system protection. Including the battery reverse connection, LED short circuit, open circuit protection and so on.

# Appearance picture is as below



## Wiring diagram is as below



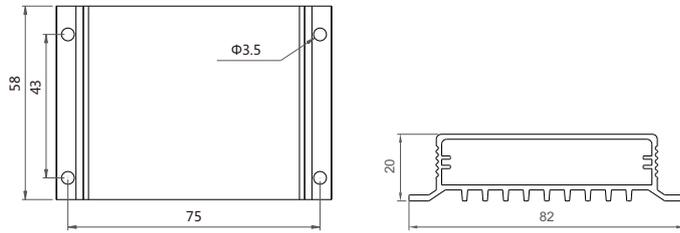
## Status Indication

LED indicator status	Function
Always on	Battery working normal
Off	Battery not connect
Twinkle slow	In charging
Twinkle fast	System failure

Tips: System failure including battery over-discharge, system over-voltage, open circuit.

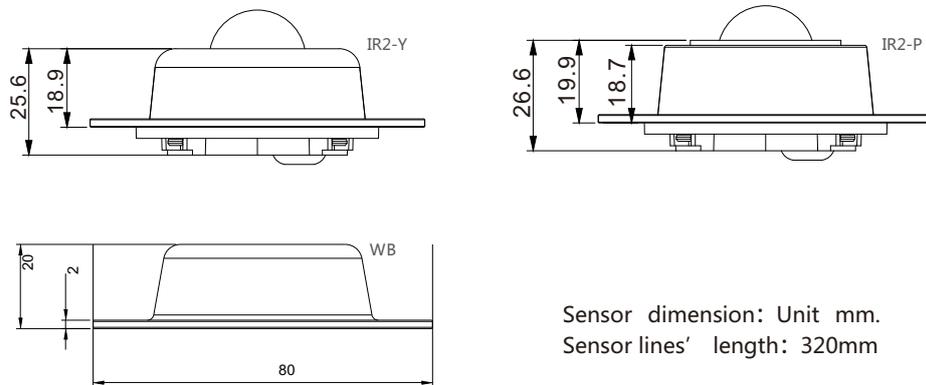
# Dimension and in stallation Instruction

## 1、 Controller dimension



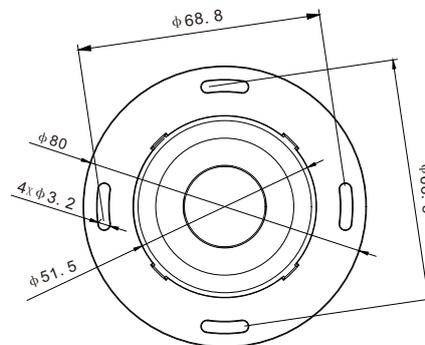
SES60 dimension as below:  
Dimension: 82×58×20(mm)  
Installation aperture: 3.5(mm)

## 2、 Sensor dimension



Sensor dimension: Unit mm.  
Sensor lines' length: 320mm

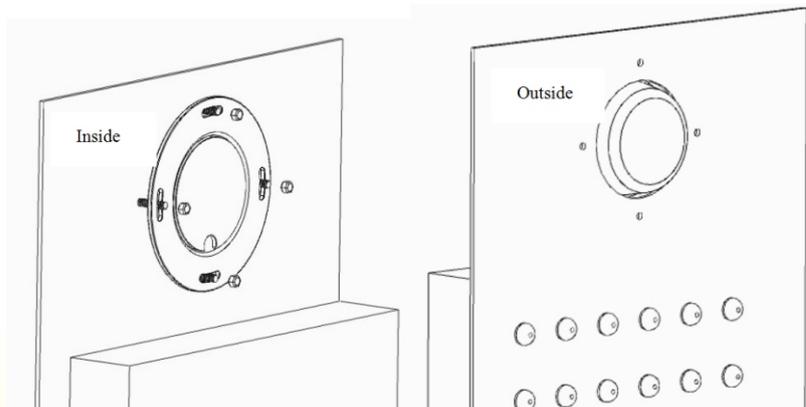
## 3、 IR /Microwave sensor installation dimension



product size :  $\phi 80 \times 26.6\text{mm}$   
install size :  $\phi 68.8 \times \phi 3.2$  ;  
Hole Diameter :  $\phi 52\text{mm}$

Hole Diameter  $\phi 52\text{mm}$

## 4、 Installation Instruction



# Parameter

Name	Value		Parameter adjustable	Default
Model	<b>SES60-WB</b>	<b>SES60-IR</b>		
System voltage	12V/24V			
Output power	40W/12V; 60W/24V			
Output current	0.15A ~ 1.98A		✓	330mA
No load loss	12V:14mA; 24V:25mA	12V:11mA; 24V:21mA		
Charging current	10A			
PV input voltage	< 55V			
LED driver efficiency	90% ~ 96%			
Over-voltage protection	Over-charging voltage+2V ; ×2/24V			14.6V
Charging limited voltage	Over-charging voltage+1V ; ×2/24V			13.6V
Over-charging voltage	9.0V ~ 17.0V ; ×2/24V		✓	12.6V
Over-charging recovery voltage	9.0V ~ 17.0V ; ×2/24V		✓	11.6V
Over discharge voltage	8.0V ~ 17.0V ; ×2/24V		✓	9.0V
Discharging recovery voltage	9.0V ~ 17.0V ; ×2/24V		✓	10.0V
Current precision	±3% ( Load current > 300mA )			
Load output voltage	< 60V			
Over-temperature protection (environment)	Environment temperature: 80°C (Load power decreased)			
Over-temperature protection (Inner)	Inner temperature: 120°C(Load closed)			
Light- control voltage	5V ~ 11V		✓	5V
Light-control delayed time	0min ~ 50min		✓	0min
Induction delayed time	0S ~ 150S		✓	10S
Working temperature	-35°C ~ +65°C ;			
Induction range	Vertical: 8M, horizontal: 10M	Vertical: 6M, horizontal: 7M		
Waterproof degree	IP68			
Weight	210g			
Dimension(mm)	58*82*20			
The probe lead length(mm)	440			

**Remark:** Parameter setting: over-charging voltage > over-charging recovery voltage > over-discharging recovery voltage > over-discharging voltage