

SES Intelligent Wireless Dimming LED Solar Charge Controller



SR-SES60



SR-SES60-IR



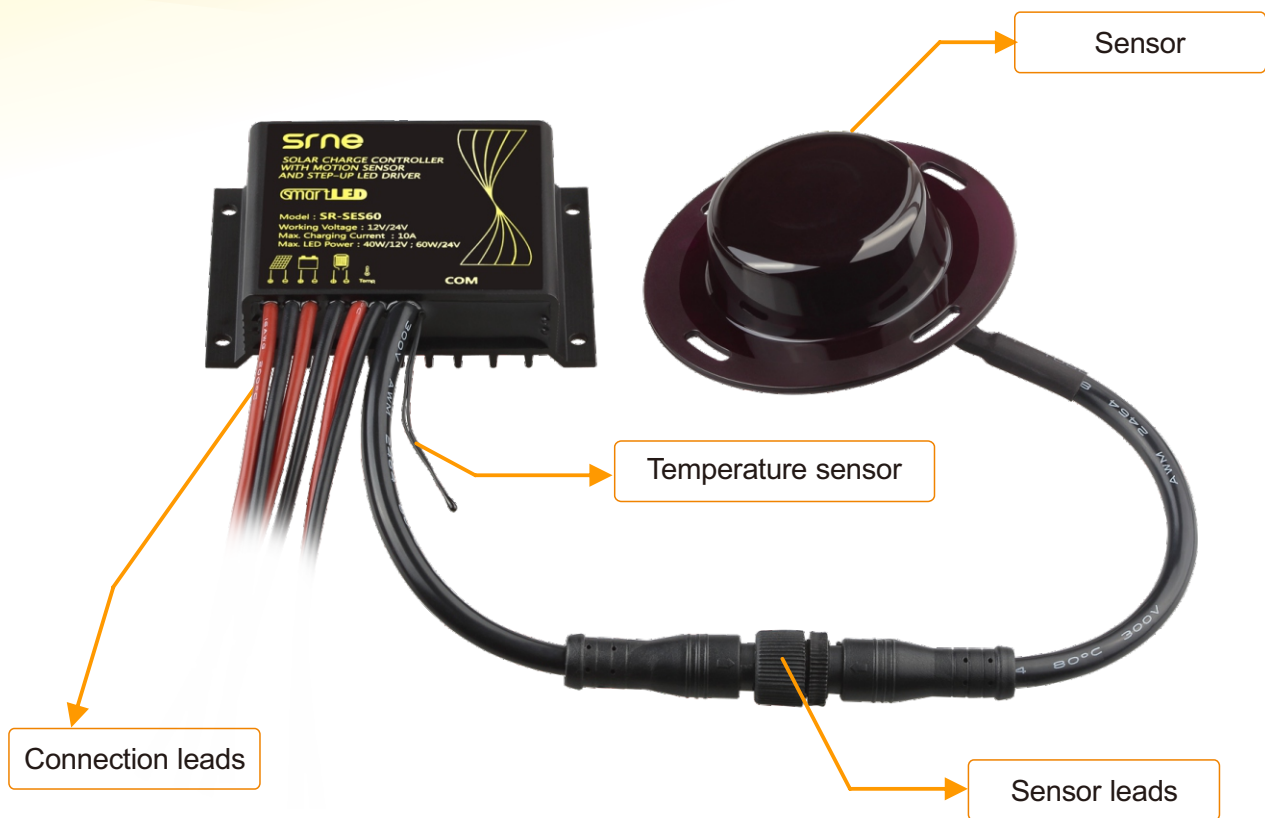
SR-SES60-WB



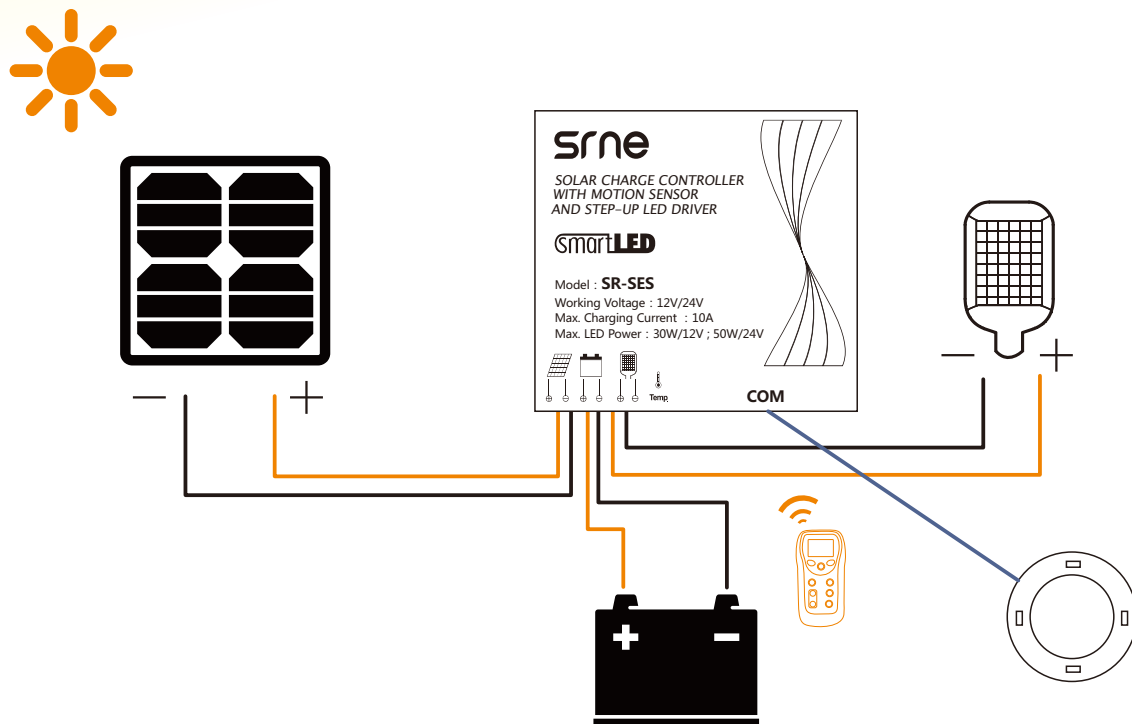
Feature

- 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



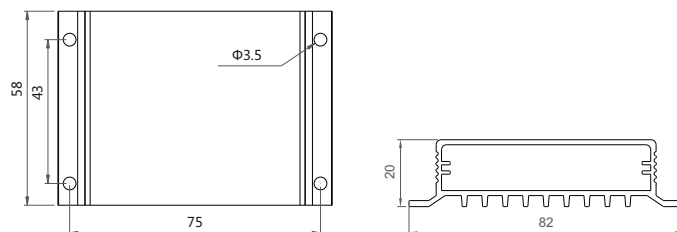
Status Indication

| 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.

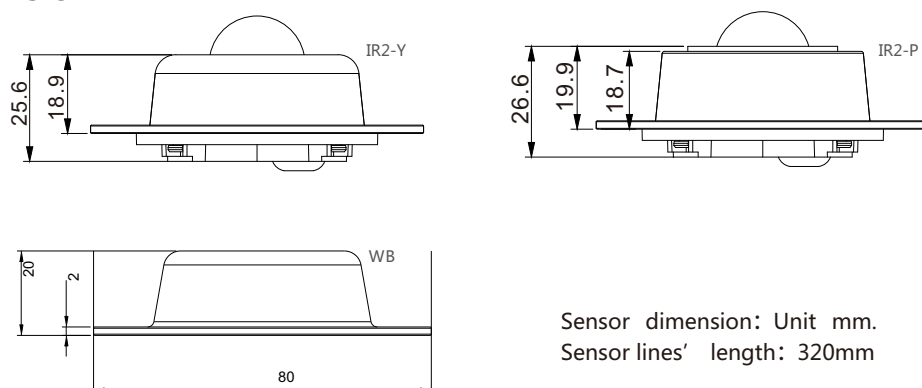
Dimension and in stallation Instruction

1、Controller dimension



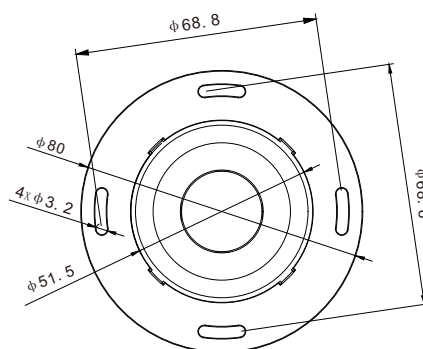
SES60 dimension as below:
Dimension: 82×58×20(mm)
Installation aperture: 3.5(mm)

2、Sensor dimension



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

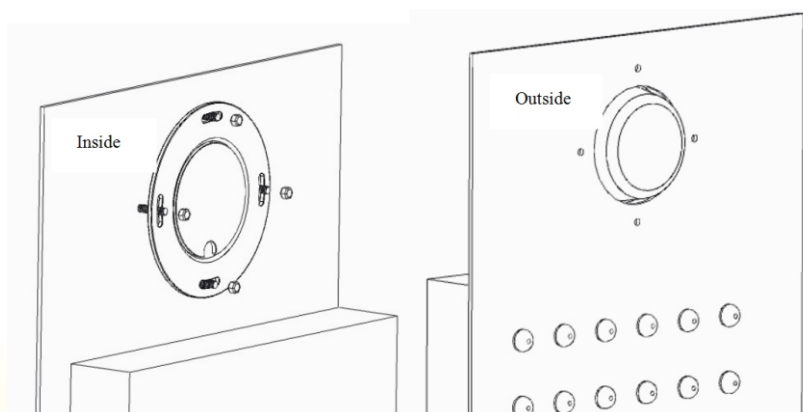
3、IR /Microwave sensor installation dimension



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 | SES60-WB | SES60-IR | | |
| 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