The product is used to control Solar Panel and battery in Solar System automatically. Here is the Solar Panel Configuration list with different rated voltage (6V, 12V and 24V):

Voltage: □ 6V □ 12V □ 24V □ 6V/12V □ 12V/24V

Power (Voltage current): 6V/12V/24V
□ 05A: 30W/60W/120W □ 15A: 90W/180W/360W
□ 10A: 60W/120W/240W □ 20A: 120W/240W/480W
I. FUNCTION:

1. Over-load protection
2. Short circuit protection
3. Reverse discharging protection
4. Reverse-polarity protection
5. Protection from the lighting strike
6. Under-voltage protection
7. Over-charging protection

II. CONNECTION (AS INDICATED IN DIAGRAM):

Open the top cover of controller and connect the wire with terminals following the diagram on the top cover of it.

1. Connect the “+”, “-” Poles of the battery to the corresponding ports of the controller (the third and the fourth one from left).

*The subsequent operation can be processed only if load indicator (mark: load) flickers once and starts lighting after 30 seconds. Otherwise, the subsequent operation will damage the controller.
2. Connect the “+”, “-” poles of the solar panel to the corresponding ports of controller (the first and the second one from left).
3. Connect the “+”, “-” poles of the load to the corresponding ports of controller (the fifth and the sixth one from left).

III. LED INDICATOR

1. Charge LED is used to indicate the charging status of battery. Lighting is in-charging mode, flickering is floating charge mode. LED turn off means charging stopped.
2. There is output and load working if the Load LED is lighting. There isn't output and the load working if Load LED off.

Notice:

1. Please make sure the rated voltage of solar panels, batteries and the loads are same. All of them should be 6V or 12V or 24V.
2. The rated current of solar panels and load must be less than the rated current of controller.

The specifications: Error of 2%

<table>
<thead>
<tr>
<th>Rated voltage</th>
<th>6V/12V/24V</th>
<th>Voltage of stop power supply</th>
<th>*54V/10.8V/21.6V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated charging current</td>
<td>5A□ 10A□ 15A□ 20A□</td>
<td>Voltage of resume power supply</td>
<td>*6.3V/12.6V/25.2V</td>
</tr>
<tr>
<td>Rated load current</td>
<td>5A□ 10A□ 15A□ 20A□</td>
<td>Voltage of stop charging</td>
<td>*7.2V/14.4V/28.8V</td>
</tr>
<tr>
<td>Working temperature</td>
<td>-20℃~+60℃</td>
<td>Temperature coefficient of voltage stop charge</td>
<td>-3mV/C/cell</td>
</tr>
<tr>
<td>Dimension(L<em>W</em>H)</td>
<td>103 X95 X38mm</td>
<td>Net weight</td>
<td>110g~140g</td>
</tr>
</tbody>
</table>

Parameters may be customized by customers.

IV. METHOD TO SET SWITCH OFF THE LIGHT:

![Diagram of solar panel, battery, and light connection](image)