

# 10W 12VDC Solar Power Supply System With 5600mAh Lithium Battery

## Package Include:

1 x 10W/18V polysilicon solar panel  
1 x 11.1V/3A solar charge controller  
1 x 12V/5600mAh lithium battery  
1 x Waterproof case with waterproof connector  
1 set of cable with waterproof connector

## Applications:

It is important electric parts for transferring the sun light power into electrical power for your application.

Suitable for all kinds of small power appliances (such as emergency lights, advertising lights, traffic lights, household lights, electric fans), solar water pumps, solar street lamps, wireless control devices.

It can be used as an alternative charger for any 12V lithium battery or lead acid battery.

With 12V lithium battery and Solar Charge Controller to form a solar panel kit that can be used as a power source for our transmitter or receiver.

## Solar Panel:

Max Power: 10W

Max Output Voltage: DC 18V

Max Output Current: 500MA

Open Circuit Voltage: DC 22V

Short Circuit Current: 600MA

Power Tolerance:  $\pm 5\%$

Operating temperature:  $-10^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Size: 340mm x 220mm x 3mm

Polycrystalline Silicon Material.

Lightweight design, 3mm thick.

Waterproof laminated panel construction.

Includes 20CM cable with water-tight connectors.

2 year warranty.

High conversion rate, high efficiency output.

100% power output - clear sky midday sun with the panel fully tilted toward the sun's position in the sky.

70-80% power output - clear sky midday sun but with the panel laid flat.

40-60% power output - thin cloud, or intermittent small clouds.

10-20% power output - midday overcast sky or rainy conditions.

## Solar Charge Controller:

Rated Voltage: 11.1V

Max Solar Panel Voltage: 30V DC

Discharge Cut-off Voltage: 9.6V

Charge Cut-off Voltage: 12.6V

Max Charging Current: 3A

Max Load Current: 3A

Static Current:  $\leq 3\text{mA}$

Charging Mode: PWM

Fully automatic operation

With charge LED indicator and power LED indicator

Three operating modes selectable: normally open mode, light control mode, light and timer control mode.

Comprehensive electronic protection: overcharge protection, over discharge protection, overload protection, short circuit protection, reverse polarity protection.

Over load protection: When the load current reaches 4.5A, the controller shuts down the load output after 5 minutes; when the load current reaches 9A or above, the controller shuts down the load output immediately.

Operating temperature:  $-30^{\circ}\text{C} \sim +55^{\circ}\text{C}$

Size: 54mm x 69mm x 22mm

## Lithium Battery:

Rated Voltage: 12V

Rated Capacity: 5600mAh

Cell Type: 18650

Cell Number: 6

Discharge Cut-off Voltage: 9V

Charge Cut-off Voltage: 12.6V

Maximum discharge current: 9A

Cycle Life: More than 500 times

Connector: DC 5.5\*2.1mm Male Plug and Female Plug

With over current, overcharge, over discharge, and short circuit protection

Size: 56mm x 40mm x 67mm

## Wiring Sequence:

1. Connect the lithium battery to the controller as shown.
  2. Connect the solar panel to the controller as shown.
  3. Connect the load to the controller as shown.
- Note: Disassembly sequence is reversed to wiring sequence.

**Solar Panel/Photovoltaic Panel**



**PWM Solar Charge Controller**



**12V lithium battery**



**DC 12V Equipments**