



Website: <https://sungoldpower.com/>

# 130W Portable Foldable Solar Panel Suitcase



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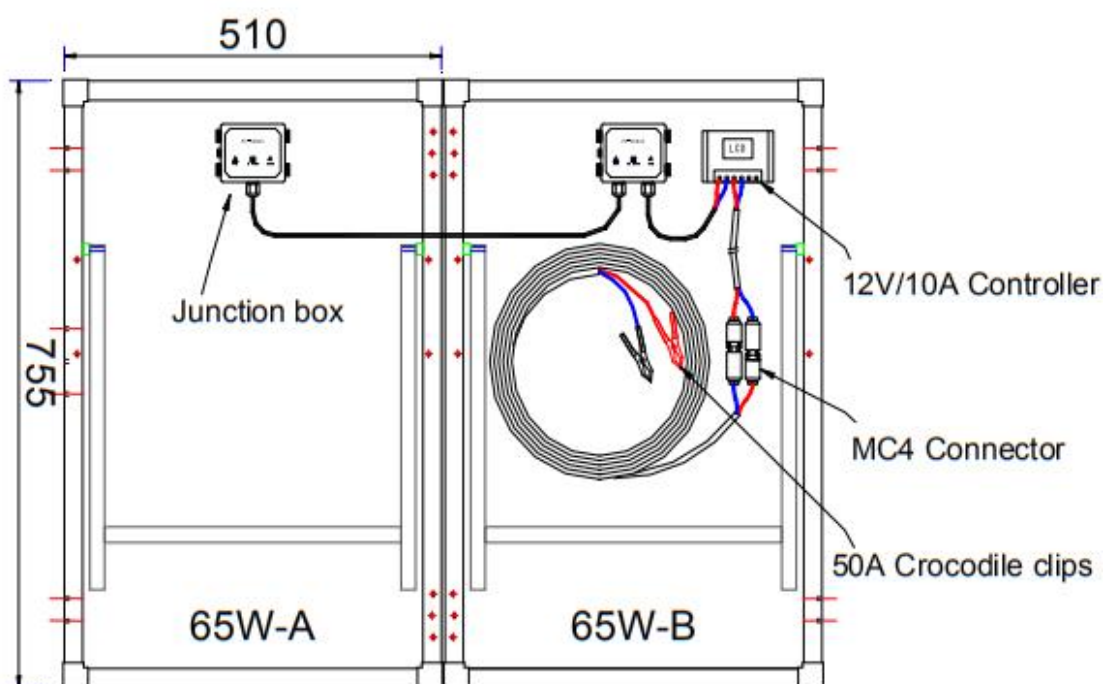
## 1. Introduction

The **Sungoldpower** Solar Suitcases combines 2 highly efficient 65W monocrystalline solar panels. It is a ready-to-use plug and play portable solar solution, you can use it to power up any 12V DC devices. The waterproof design ensures that the panel can be used in all weather conditions. With built-in tilting stands, these panels can be adjusted at different angles to maximize the power output throughout the seasons.

### Feature:

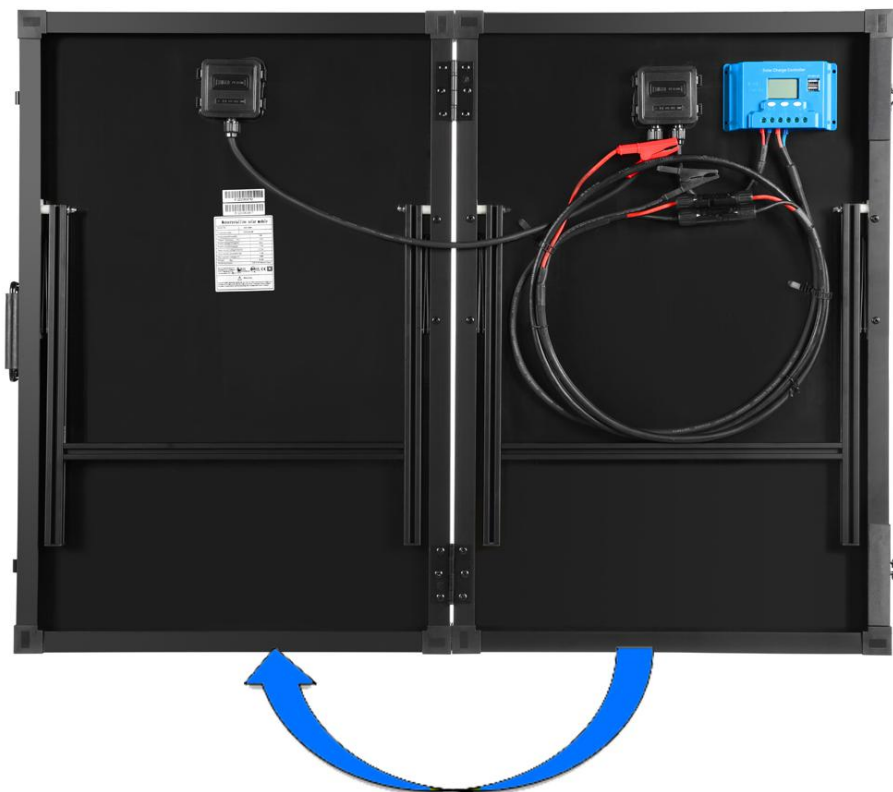
- ◆ High quality crystalline silicon solar panels.
- ◆ Environmental protection.
- ◆ No running costs and make full use of solar energy.
- ◆ Anodization aluminum frame with anticorrosion ensures that solar module can work under extremely and badly outdoors environment.
- ◆ Tilting stand for maximum solar generating potential.
- ◆ Convenient storage case for easy transportation.
- ◆ PWM Waterproof Charge Controller with LCD display

## 2. Identification of Parts

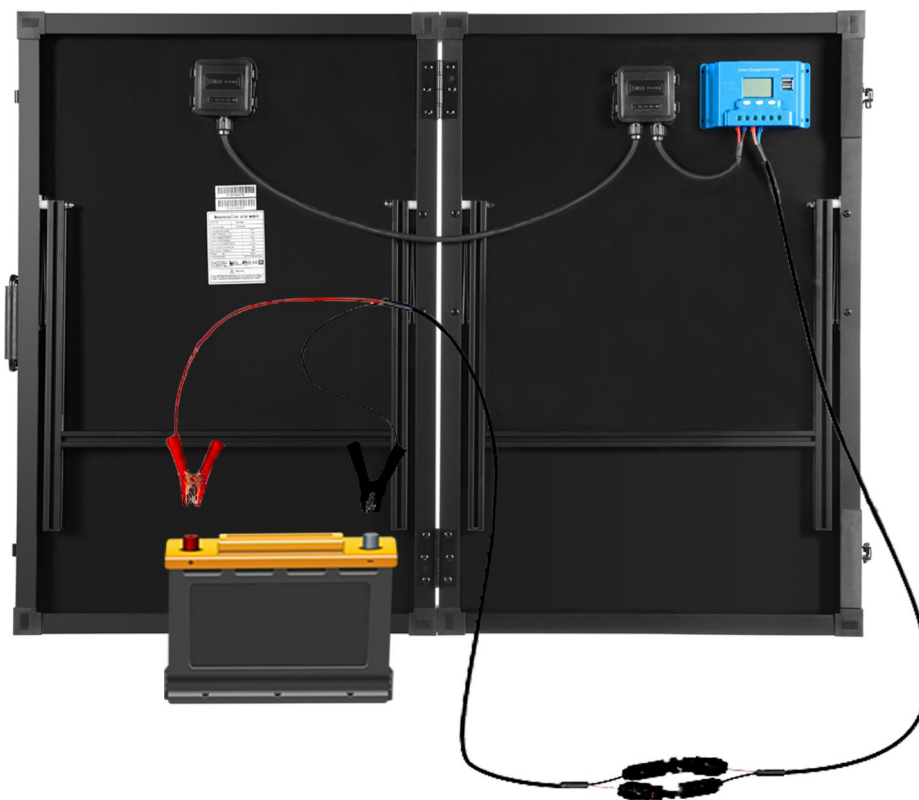


### 3. Installation

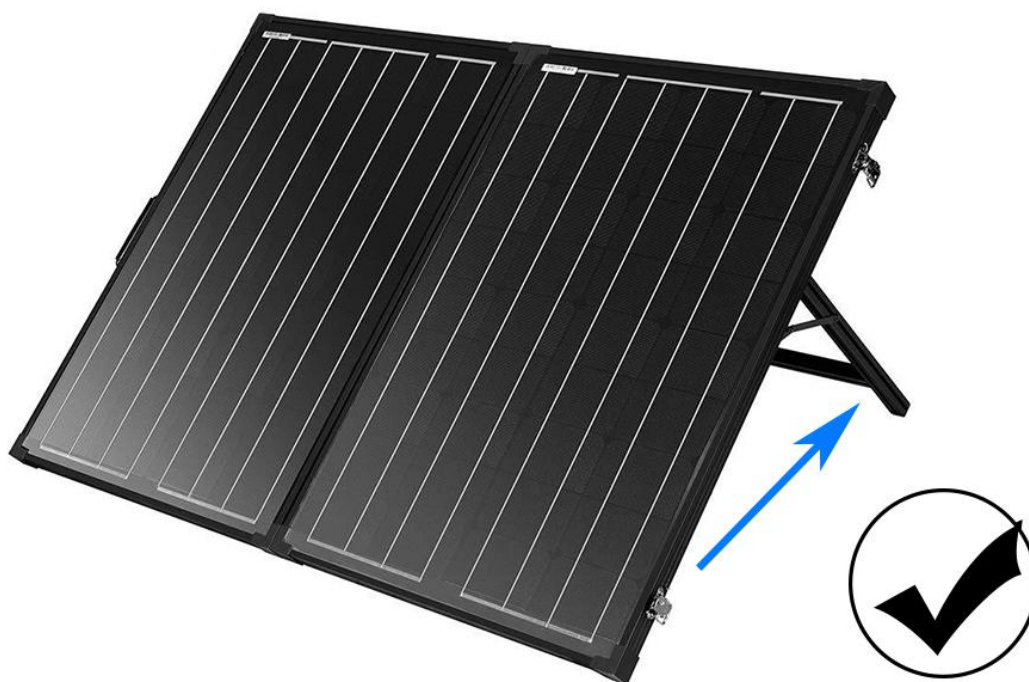
#### A. Unlatch and unfold unit



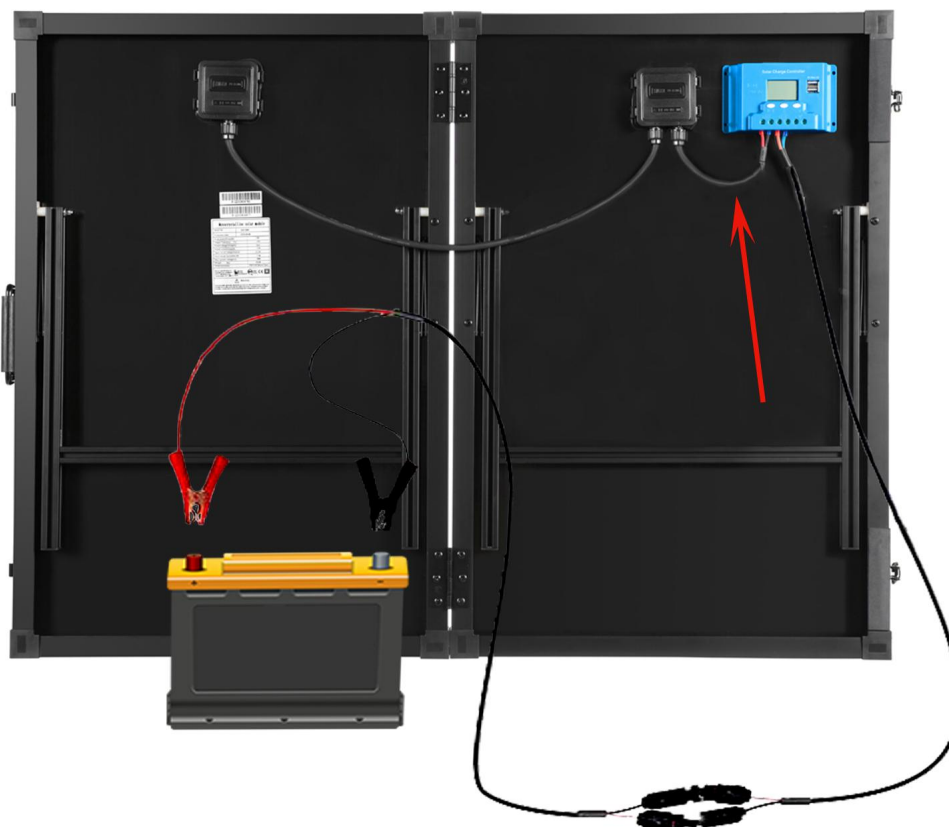
#### B. Connect Battery Alligator Clips to 12V Battery



**C. Adjusted at a suitable angle to maximize the power**



If your battery has a built in controller, please remove the wire from the controller (as the picture shown) and connect the wire to your battery built in controller, then your battery can be charged normally.



## 4. Recommended Wiring

① Battery  $\longrightarrow$  ② PV  $\longrightarrow$  ③ Loads

### ① Battery Cable Connection

Connect battery Positive and Negative to the controller first to power on the controller. Make sure correct polarity of terminals. The controller has protection of reverse polarity, so even not connect correctly for positive and negative, the controller will not be burned.

### ② PV Cable Connection

Connect the solar panel to the controller terminals, be careful of Positive and Negative. When the sun is available in the daytime, the PV LED indicator will be green color, otherwise NOT, then you need to check the connection is correctly or NOT.

### ③ Load Cable Connection

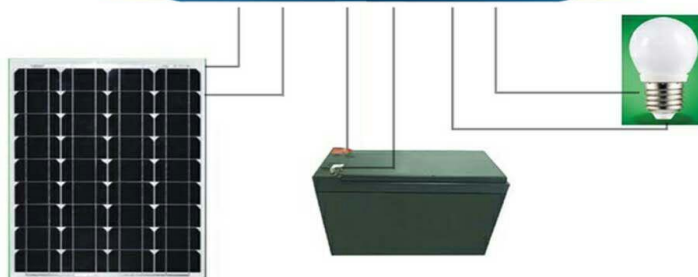
After connected with battery and PV, then connected the Load cable, also be careful of Positive and Negative, if not connect correctly, it is easily to burn down the electrical appliances.

## PWM Solar Charge Controller



### Note:

1. Please use the reverse order when uninstalling!
2. Improper sequence will damage the controller!



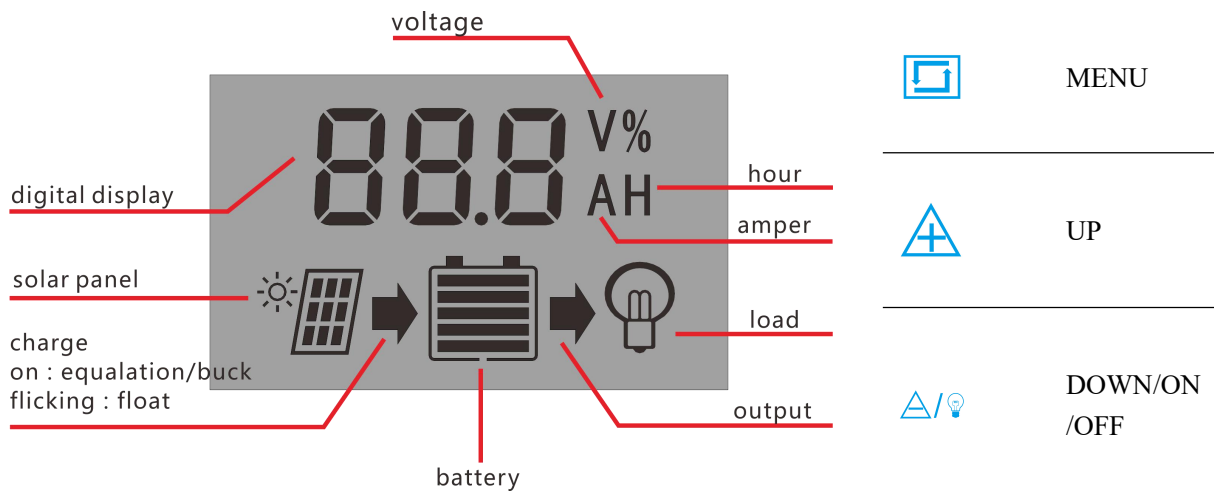
## 5. Operation

### 5.1 Safety Instruction

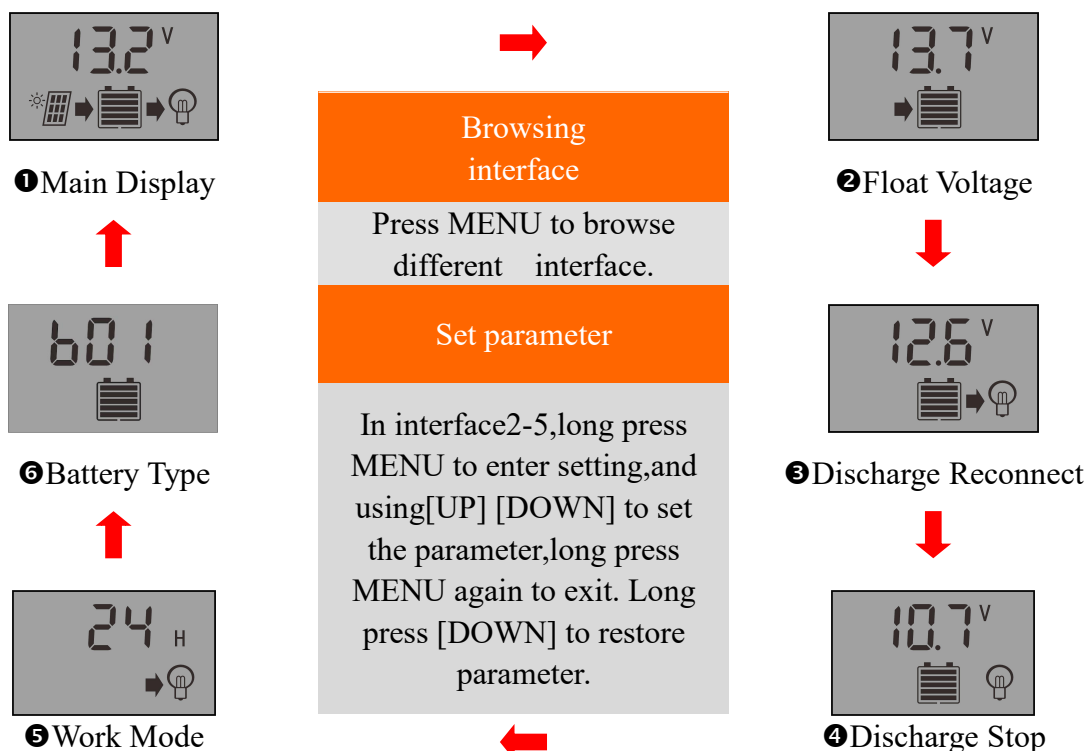
1. Make sure your battery has enough voltage for the controller to recognize the battery type before first installation.

2. The battery cable should be as short as possible to minimize loss.
3. The regulator is only suitable for lead acid batteries: OPEN,AGM, GEL it is not suited for nickel metal hydride, lithium ions or other batteries.
4. The charge regulator is only suitable for regulating solar modules. Never connect another charging source to the charge regulator.

### 5.2 Charger Controller LCD Display



### 5.3 Display/Setting



#### Attention:

1. Press the [Down] button to ON/OFF load manually at main display.
2. The work mode is working as below:  
 [24H] Load output 24hours  
 [1-23H] Load on after sunset and closed after setting hours

[0H] Dusk to dawn

## 6. Trouble Shooting

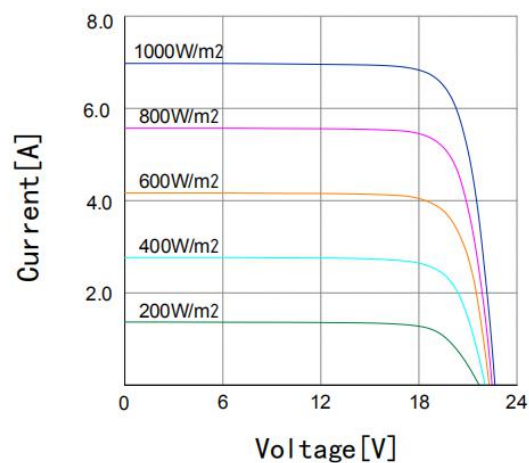
Situation	Probable Cause	Solution
Charge icon not on when sunny	Solar panel opened or reversed	Reconnect
Load icon off	Mode setting wrong	Set again
	Battery low	Recharge
Load icon slow flashing	Over load	Reduce load watt
Load icon slow flashing	Short circuit protection	Auto reconnect
Power off	Battery too low/reverse	Check battery/connection

## 7. Technical Specifications

### 7.1 Solar Panel Parameters

Model No.	SW130M
Maximum Power (Pmax)	130W
Max-power Voltage (Vmp)	18.50V
Max-power Current (Imp)	7.04A
Open-circuit Voltage (Voc)	22.54V
Short-circuit Current (Isc)	7.46A
Module Efficiency	17.65%
Operating Temperature	-40°C~+85°C
Maximum System Voltage	1000Vdc
Maximum Series Fuse Rating	10A
Power Tolerance	±3%
Dimensions	755*510*30mm*2PCS
Weight	10.06kg
Junction Box	IP65 rated

I-V Curve



\*STC condition: 1000 W/m<sup>2</sup>,1.5AM and 25°C cell temperature.



**7.2 Temperature Parameters**

NMOT	46°C±2°C
Temperature Co-efficient of Pmax	-0.398%/°C
Temperature Co-efficient of Voc	-0.340%/°C
Temperature Co-efficient of Isc	0.0576%/°C

**7.3 Charger Controller Parameters**

Batt voltage	12V/24V Auto		
Charge current	10A	20A	
Discharge current	10A	20A	
Max Solar input	<50V		
Equalization	B01 sealed	B02 Gel	B03 flood
	14.4V	14.2V	14.6V
Float charge	13.7V(default,adjustable) x2/24v		
Discharge stop	10.7V(default,adjustable) x2/24v		
Discharge reconnect	12.6V(default,adjustable) x2/24v		
USB output	5V/3A		
Self-consume	<10mA		
Operating temperature	-35~+60 °C		
Size/Weight	150*78*35mm /150g		

**8. Frequently Asked Questions**

Q1. Can this kit charge a 24V battery?

A. No, because this kit is designed to charge a 12V battery.

Q2. Can the kit charge two or more 12V batteries connected in parallel?

A. Yes, if the batteries have the same type and capacity and are wired in parallel as a single 12V battery bank, the solar panel can work for it.

Q3. What type of batteries can be used with this kit?

A. It is only suitable for 12v lead acid batteries: OPEN, AGM, GEL, it is not suited for nickel metal hydride, lithium ions or other batteries.

Q4. What is the warranty?

A. 25 Years transferable power output for solar panel and 1 year for accessories.

Q5. Do I need to clean the solar panels?

A. Yes, dust, bird droppings and other debris can lower the efficiency of a solar panel. With a view to keep your solar panels performing well, it is essential to clean them thoroughly.