



Introduction

The emergency power bank included in the SPF 30 Plus, can be charged by the flexible CIGS solar pack or indoor AC power source. This solar pack can be used to not only power PC, GPS, Pad, digital camera, cell phone, Bluetooth headset, PSP, MP3/4 and other electronic devices, but also jump start vehicles.



CAUTION

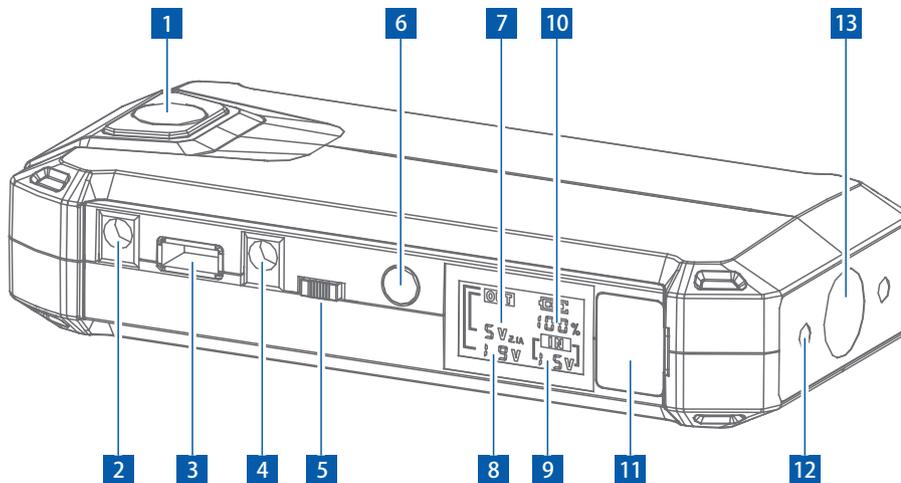
Instructions before use

Thanks for trusting our company and purchasing our products, your satisfaction is all what we wish. To ensure safe and reliable operations, please read this manual carefully. The manual includes how to install and operate the equipment, will help to gain elaborate use guides solar pack and relevant service warranty.

Functions and Features



- Includes a 30-W flexible CIGS solar charger;
- 12-V jump start vehicles;
- Power 5/12/16/19V mobile devices;
- Emergency tyre inflation;
- Built-in three light patterns (eg.LED lighting, flicker and SOS);
- Oil compass gives directions in outdoor;
- Built-in safe high-efficiency and high rate polymer lithium battery;
- Multifunctional LED panel displays charging, operating status and voltage value;
- Eight protective measures (Voltage, temperature, reverse connect, constant current, overcharge/discharge, short-circuit, magnetic field) providing safe and stable charging;
- Ultra-large capacity for stable power supply;
- The power bank will turn into sleep mode, after 20 seconds in standby;



- | | | |
|--|---|---|
| 1 Compass | 6 Key Switch | 11 12V---200A Vehicle Start Output |
| 2 12V---2A 、 16/19V---3.5A Output | 7 USB 5V---2 .1A Output Voltage Indication | 12 Red-blue Warning Light |
| 3 USB 5V ---2.1A Output | 8 12/16/19V Output Voltage Indication | 13 LED lighting |
| 4 15V ---1A Charging Input | 9 Charging Input Voltage | |
| 5 Main Switch | 10 Remaining Capacity Indication | |

Specifications



Solar Charging Pack

Maximum power	30W
Solar cell	CIGS
Open circuit voltage Voc	28V
Short circuit current Isc	1.9A
Voltage @ MPP Vmpp	20V
Current @ MPP Impp	1.5A
Folded size	243x183x50mm
Unfolded size	729x872mm
Weight	0.60 kg
Output port	SAE / (DC+USB)
Working temperature	-40~70°C



Multifunctional emergency power Supply

Battery capacity	3.7V/13200mAh
Output voltage	12V/2A,16V/3.5A,19V/3.5A
USB output	5V/2.1A
Charging mode	CC/CV 15V/1A
Starting current	>200A
Peak current	400A(<3S)
Cycle life	3000 times
Adaptive temperature	-10~85°C (14°F~185°F)

Parts List



Emergency power bank



30W Solar Charger



Tyre pump



Power adapter



Multi-output USB Cable



DC cable &
Laptop Adapters



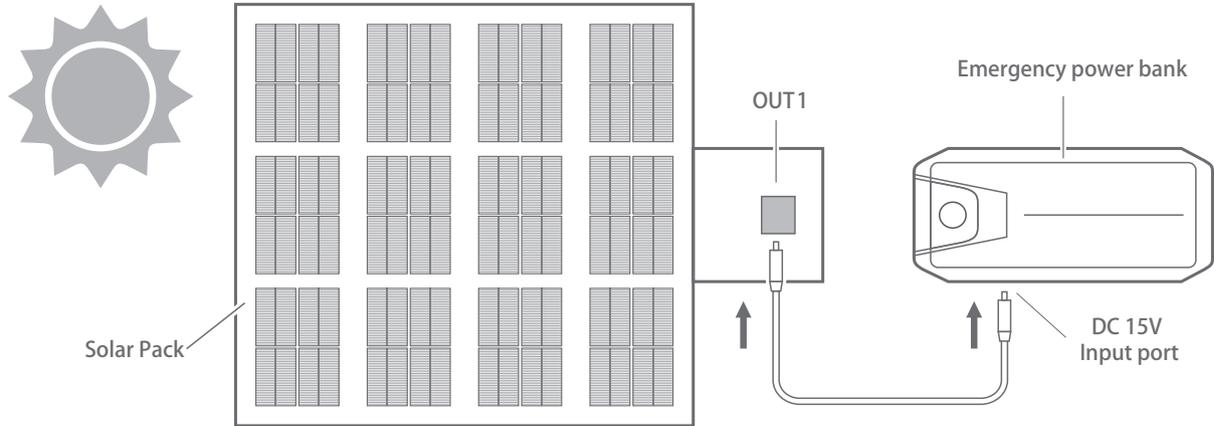
Jumper Cable



Car Charger

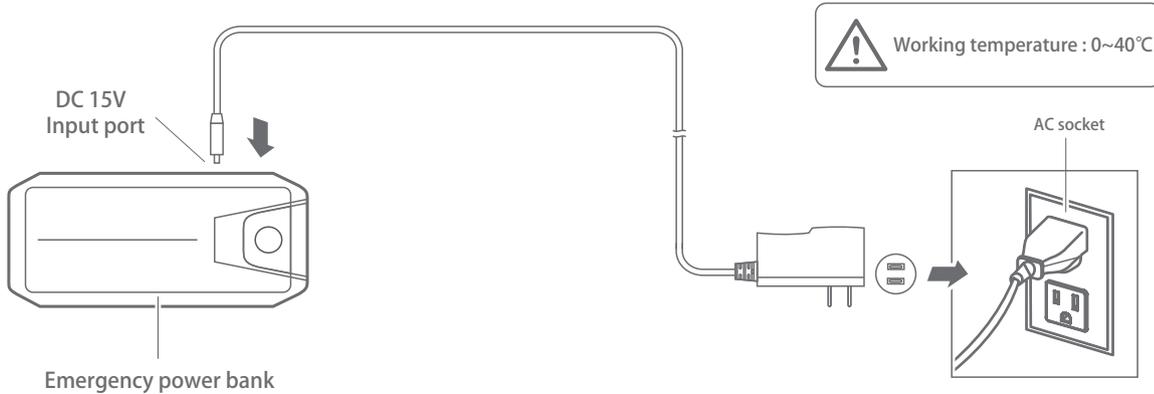
*Pictures are used for reference only.
Subject to change for available products.

Solar Charging



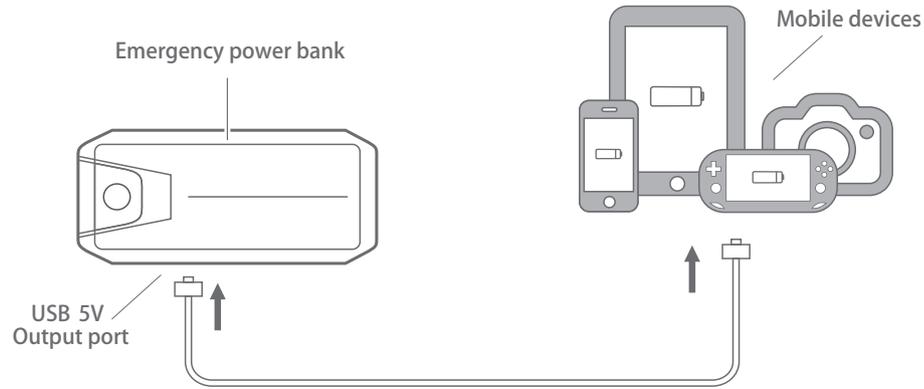
- 1** Unfold solar charger in good sunlight condition;
- 2** Set the solar panel face to direct sunlight illumination to get optimized solar conversion efficiency.
- 3** Plug one port of matched cable connector into the input port of the emergency power bank, the other connected to the 30W solar pack; When the battery remaining capacity indicator light periodically flash , the product starts to charge the power bank. It may take 3 hours to fully charge the power bank from totally discharged condition at STC light condition.

Use AC to charge power bank



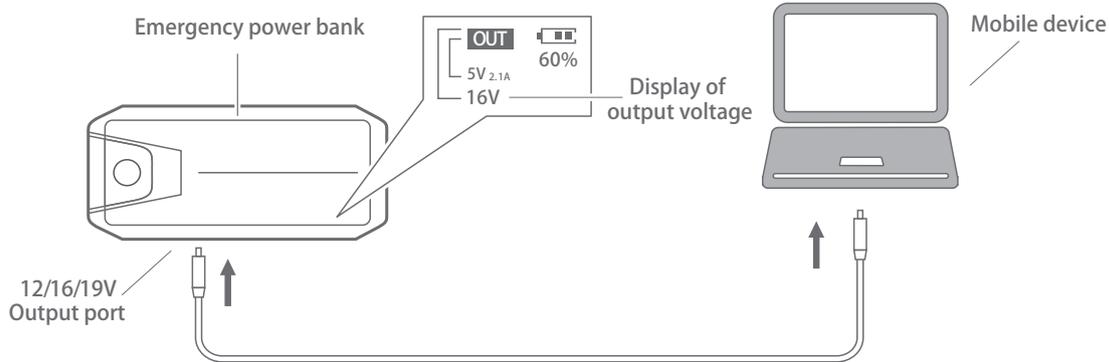
- 1 Connect AC charger to DC port of power bank, another end needs to be plugged into an AC socket.
- 2 Indicator light flashes after a proper connection. It may take 3 hours to fully charge the power bank.

Use power bank to charge USB mobile devices



- 1** Chose matched charge connector and connect your device;
- 2** Plug the connector of USB converting cable into the 5V USB output port of power bank;
- 3** Turn on the main switch, press the function key; One may start to charge your device while the USB LED indicator is on.

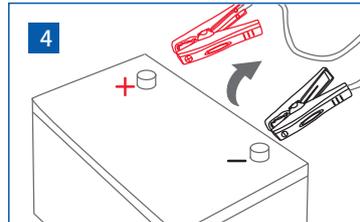
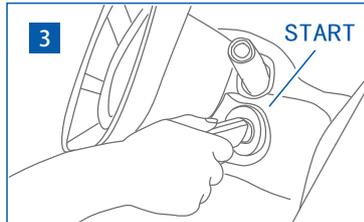
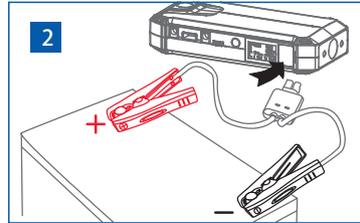
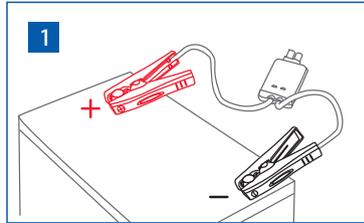
Power mobile devices through 12/16/19V output port



The power bank can provide various output voltage. Please double check the voltage of your device and select the matched output from the bank.

- 1 Turn on the main switch;
- 2 Press the function key to switch into matched output voltage;
- 3 Connect the power pack to your charging device and start to charge.

Jump start a 12 Volt Vehicle

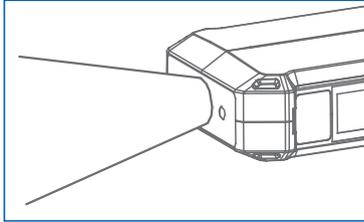


- 1 Ensure the battery remaining capacity of power bank is above 20%. Connect red clamp to the positive (+) terminal, and black clamp to the negative(-) terminal.
- 2 Connect the jumper cable to the proper socket of the power bank.
- 3 Turn on the key switch to start car.
- 4 Disconnect your jumper cable after the engine is started.



- This product only applies to 12-V car batteries;
- Under the condition of low temperature ($< -10^{\circ}\text{C}$ / 14°F), the performance of lithium batteries will be seriously affected;
- Please wait for at least 30 seconds to try again, if your car engine is not started at the first time. ; If the car can not start for four times, stop trying and seek for other help.

LED Lighting



- 1 Turn on the main power switch;
- 2 Press the function key for 3 seconds to turn on flashlight. Flashing and SOS modes will be initiated if one clicks the FUNC button once and twice.
- 3 Long press the function key can shut down the emergency lighting.

Tyre Inflation



- 1 Screw the connector of the air pump on the valve core of tyre; be sure to be sealed;
- 2 Connect the DC cable of pump with the jumper start output port of power bank;
- 3 Press the power switch to start inflating;
- 4 While the inflation air pressure reaches the needed value (normally 200~220kPa), turn off the power switch and disconnect the gas tube.

 Avoid over inflation your tires.

F&Q

Q What are the main characteristics of the emergency power bank?

The bank can be used to jump start your car, power various electronics, and be used as flashlights etc.

Q How long will it take to make cell phones fully charged?

Only 2-3 hours under an optimized light illumination.

Q Will it lead to Security incidents if connect the wrong terminals on the car battery with clamps?

No. We have a built-in protection for wrong connections.

Q What if it doesn't jump start the vehicle?

If the power bank fails to jump start your car. You may wait for at least 30 second to try again. The car batteries are usually to be replaced every 2 to 3 years.

Q How long will it take to fully charge the emergency power bank?

The bank can be fully charged up to 3 hours. The charging time depends on the left energy level.

Q How many times can the emergency power bank jump start a vehicle?

More than 20 times with an over 60% charged battery. But the times may vary for different battery situations.

Cautions



WARNING

- Children under the age of 12 should only use this product under adult supervision;
- Never disassemble or attempt to open this unit;
- Avoid clamps coming into contact with each other or the vehicle body;
- It is normal that the product will become warm while using;
- Stop using the product as well as find the battery inflated, leaking or smelly;
- Do not expose the product to fire, direct sunlight or excessive heat;
- If the car can not start for fourth times , stop trying and seek for other help;
- Clean only with a dry cloth; Avoid cleaning with abrasive substances or chemicals.
- Place the product in fully charged status while not using; it's recommended to charge the battery once per 3-months;

Toxic and Harmful Substances

Composition & Contents

Pb	Hg	Cd	Cr (VI)	PBB
○	○	○	○	○

○: Indicates all homogeneous materials' hazardous substances content are below the MCV specified in the Standard 2002/95/EC(RoHs).

Product warranty

Warranty period: One-year*

* Product warranty period starts from the market purchase date .