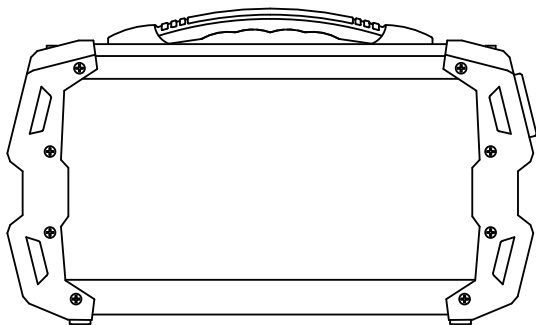




## PORTABLE POWER STATION

### User Instruction Manual

### RS650



#### ABOUT THE UNIT

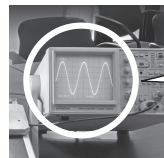
Thank you for applying our multi-function portable power station. In case of power failure or you need to charge on a travel, you can temporarily charge your electrical or digital devices with this unit. This unit can provide USB, DC and AC output. You can keep laptops, appliances, lights and more going for hours longer. Before using this unit, please read the user manual carefully and properly keep it for reference.

#### ATTENTION!

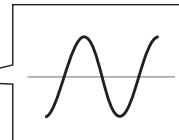
This manual is to help you use the product correctly; it does not represent any description on the hardware and software configuration of the product. About the product configuration, please refer to the contract related to this product (if there is), or consult to the seller that sells the product. Pictures in this manual is for reference only, if there are individual pictures do not match the actual, please prevail in actual products.

#### The unit provides Pure Sine Wave output

The unit is built-in pure-sine wave inverter, which means it produces an output that is exactly the same as supplied by an AC wall plug in your house. It produces power output that makes it compatible with almost all AC electric devices in your house. The pure-sine wave inverter allows unit to safely power almost everything under 400 watts in your house that you would normally plug into the wall. **This product is only used for emergency, it cannot replace the normal alternating current for long-term use.**



▲  
Oscilloscope display of sine wave



▲  
Sine wave graphic

#### 【 I 】 PRODUCT PARAMETERS

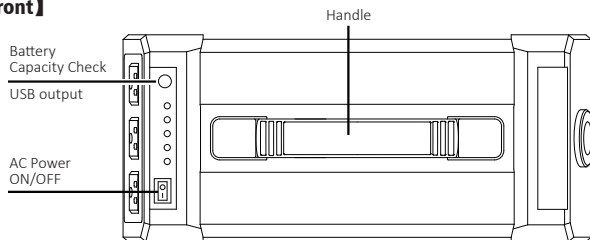
Capacity	444Wh/12000mAh,3.7V
Dimensions(LWH)	307x134x184mm
Weight	about 5Kg

Built-in Battery	High Quality Lithium Polymer Batteries
Input Recharging	12.5-24V, Up to 6.0A Max input charge
Fully Charged Time	DC 15V/6A: about 7 hours
Output	3xUSB 5V-2.1A(Max); 2xDC 9-12.6V/10A(15A Max); 1x Cigarette Lighter 9-12.6V/10A(15A Max);
AC Output	110V/60Hz
AC Power	AC Continuous Power Output: 400W
Power Indicator	LED Indicators
Operation temperature range	-10℃ — 40℃
Lifecycle	>500 times
Package include	1 x Portable Power Station 1 x Power Adapter 1 x Car Charger Adapter 1 x User manual

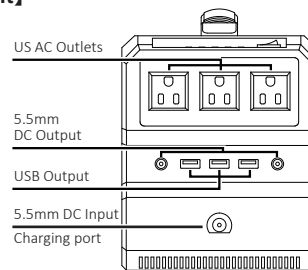
※ There may be some differences on different spare parts. Please adhere to the actual product instead.

## 【 II 】 PRODUCT DESCRIPTION

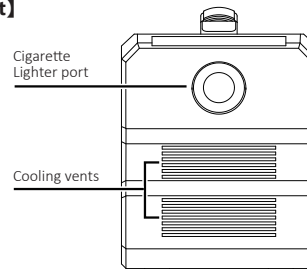
### 【Front】



### 【Right】



### 【Left】



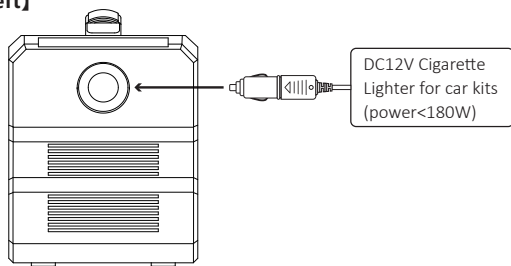
## 【 III 】 PRODUCT INSTRUCTION

### 1) How to provide power for DC12V appliances(such as head lamp, fan) with this product?

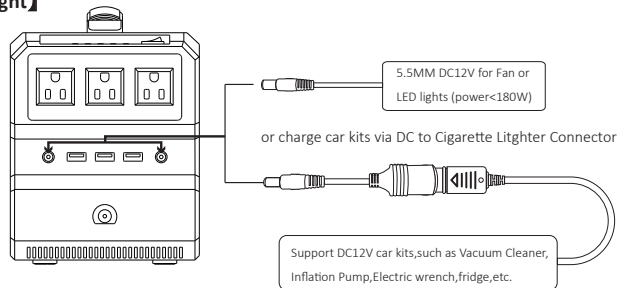
The 5.5mm 12V DC output is plug and play. Plug your appliances to the DC output port to gain power.

**Notices:** Please confirm whether your DC12V appliance support charging with 5.5mm DC header interface (The diameter of the DC Port of the Product is: 5.5mm), otherwise it is unable to connect with the DC output, you can consult the electrical manufacturer, buy the corresponding adapter and connect with it.

**[Left]**



**[Right]**



#### Protection Mode:

**Shortcircuit/Overpower Protection:** If the DC output is shortcircuited or overpowered(-Load(s) power>180W), the unit will shutdown to protect itself. Please clear the problem and recharge the unit to recover from protection mode.

※ **Note:** The 12V DC output voltage is range between 9V~12.6V, maximum output current is 15A. DC output voltage drops while battery capacity drops due to chemical characteristics of the battery. If your appliance is not built-in input voltage stabilizing function, it may shutdown when input voltage is too low, please unplug your device from the unit in time. And please charge the unit in time.

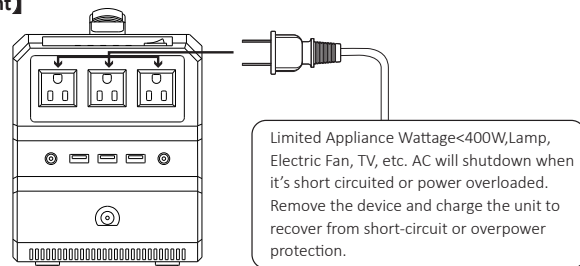
#### 2) How to provide power for AC appliances with this product?

Connect the power cable plug of the electrical appliance to the AC outlet of the product, switch on the power button and the unit will start providing power to your appliances.

**WARNING! The AC outlets, AC voltage and frequency are different according to different countries ; please carefully check whether the product specifications are consistent with the appliance specifications before use, otherwise it can lead to dangerous situations.**

※ **When the AC port is not in use, turn it off to conserve power.**

**[Right]**



#### Protection Mode:

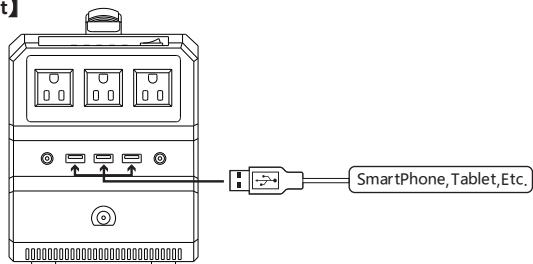
**Shortcircuit/Overpower Protection:** If the AC output is shortcircuited or overpowered(-Load(s) power>400W), the unit will shutdown AC output to protect itself. Please clear the problem and re-press the AC button for AC output.

※ Some devices, such as refrigerator, ice maker or a laser printer may require a peak power to start or work during a very time period, the peak power could exceed 400W or even higher, this could cause overpower protection with this unit. Please remove the devices and consult with the device manufacturers for more information. please clear the problem and re-press the AC button for AC output.

#### 3) How to provide power for USB digital appliances with this product?

Connect the standard USB cable of digital appliance to the USB output of the unit to gain power. USB output is plug and play. But if the unit fail to supply power to the USB appliances automatically, press the "Batt.Check /USB Out" button or press the AC power output button to switch on manually. Please switch off the AC power output button to save power when USB digital appliances are fully charged.

【Right】

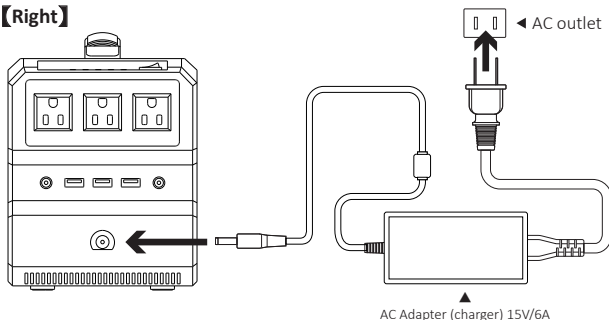


#### 4) How to charge the unit?

##### a. Charge through AC Wall Charger

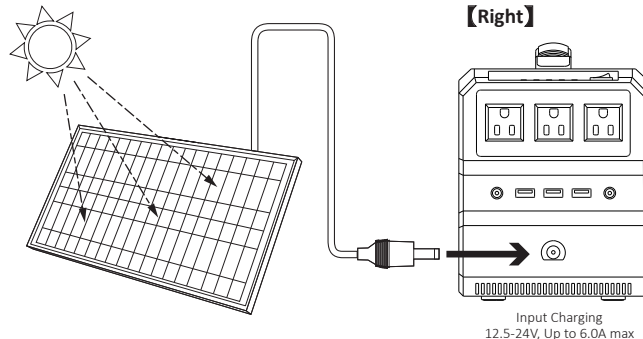
Using the included AC Wall Charger, plug the unit into any wall outlet to charge the unit. You will know the unit is charging when the blue LED battery indicators are blinking. The unit is fully charged when all battery indicators stop blinking and remain solid. After the unit is fully charged, please remove the AC wall charger in time.

【Right】



##### b. Charge from Solar panel

1. Place your solar panel where it will get as much direct sunlight as possible.
2. Plug the output of the solar panel into the input of the unit to start charging. You will know the unit is charging when the blue LED Battery Indicator lights up and blinks. The unit is fully charged when all battery indicators stop blinking and remain solid.



【Right】

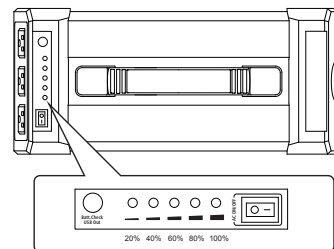
##### c. Charge from your car with a 12V cigarette lighter.

Using the included car charger, plug the unit into a 12V cigarette lighter (car port) of your car. You will know the unit is charging when the blue LED Battery Indicator lights up and blinks. The unit is fully charged when all battery indicators stop blinking and remain solid.

**Attention: To avoid car battery power loss. Charging this unit through your car cigarette lighter is only available when your car engine is started.**

#### 【 IV 】 LED light indicator instruction

【Front】



The Battery indicators indicate the charge level of the unit. There are 5 indicators to the battery, approximating 20%- 40%- 60%- 80%-100% capacity. As you use the unit, indicators will be on, indicating the remaining capacity. When charging the unit you will notice a battery indicator blinking at about 1 second interval. This indicates the current charge status. Once the unit is fully charged, all battery segments will be lit and remain solid.

**【 v 】 SECURITY AND MAINTENCE**

- a) Do not short-circuit the unit. To avoid short-circuiting, keep the unit away from all metal objects (e.g. coins, hair-pins, keys, etc.).
- b) Do not heat the unit, or dispose of it in fire, water or other liquids. Keep away from high temperatures. Do not expose the unit to direct sunlight.
- c) Keep away from high humidity, dusty places.
- d) Do not disassemble or reassemble this unit.
- e) Do not drop, place heavy objects on, or allow strong impact to this unit.
- f) This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- g) Children should be supervised to ensure that they do not play with the appliance.
- h) Do not cover the device with towels, clothing and other item.
- i) The unit may become hot when charging. This is normal. Use caution when handling.
- j) Do not charge the unit over the required time.
- k) Disconnect the unit when fully charged.
- l) Use the unit properly to avoid electronic shock.
- m) Please deal with scrap products in accordance with the regulations, do not treat the built-in battery as a household garbage, so as not to cause the explosion and pollution.
- n) The product is only used for emergency situations, it cannot replace the standard DC or AC power of household appliances or digital products.

**【 VI 】 PRODUCT APPLICATION SKILLS**

- a) This product is built in high quality original lithium ion battery, it has no memory effect but high-capacity, and it is durable. However, we still recommend you to apply in the range of 10 ℃ ~30 ℃ , so as to obtain the optimal charging capacity.
- b) When charging, in order to avoid interference, please stay away from TV, radio and other equipment.
- c) If the device has not been used for a long time, please disconnect the cable and store.
- d) Some portable devices may need to be set in charge mode to charge, see the corresponding equipment use manual for more information.
- e) In order to extend the life of product (lithium battery), it is best to charge within 3 months, and charge at least once within 6 months.

**Cold Weather Usage**

Cold temperatures (below freezing) can affect the unit’s battery capacity due to chemical characteristics of the battery. If you’ll be living off-grid in sub-zero conditions, we recommend you keep your unit in an insulated cooler, and connected to a power source (solar panels). The natural heat generated by the unit contained in an insulated cooler will keep battery capacity at its highest.

**Recycle**

Always return your used electronic products, batteries, and packaging materials to dedicated collection points. This way you help prevent uncontrolled waste disposal and promote the recycling of materials.

**Battery information**

Your device has an internal, non-removable, rechargeable battery. Do not attempt to remove the battery, as you may damage the device.  
The battery can be charged and discharged over 500 times, but it will eventually wear out.

**Statement**

All rights reserved. Reproduction in whole or in part without written permission is prohibited. All other trademarks are trademarks of their respective owners. Features and specifications are subject to change without notice.

## Limited Warranty

Rocksolar LLC. provides a non-transferable warranty to the purchaser of Rocksolar product purchased from an authorized Rocksolar reseller. Rocksolar LLC. warrants to the original consumer purchaser that the Rocksolar product will be free from defects in workmanship and material under normal consumer use during the applicable warranty period identified in the "Warranty Period" section below, subject to the exclusions set forth below. This warranty statement sets forth Rocksolar's total and exclusive warranty obligation. We will not assume, nor authorize any person to assume for us, any other liability in connection with the sale of our products.

## Warranty Period

The warranty period is 12 months. In each case, the warranty period is measured starting on the date of purchase by the original consumer purchaser. The sales receipt from the first consumer purchase, or other reasonable documentary proof, is required in order to establish the start date of the warranty period.

## Remedy

ROCKSOLAR's entire liability and your exclusive remedy for any ROCKSOLAR product that is not operating in accordance with its published technical specifications is at ROCKSOLAR's discretion: replace the product at ROCKSOLAR's expense. This warranty obligation is conditioned upon the hardware being returned to the original place of purchase, or another place as directed by ROCKSOLAR, with the original sales receipt attached. You may be required to pay shipping and handling charges, as well as any applicable tariffs, duties, taxes, or other fees. ROCKSOLAR may, at its discretion, provide new or refurbished products.

## Limited to Original Consumer Buyer

The warranty on Rocksolar's product is limited to the original consumer purchaser and to any subsequent owner.

## LIMITATION OF LIABILITY

ROCKSOLAR SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, REVENUE, OR DATA (WHETHER DIRECT OR INDIRECT) OR COMMERCIAL LOSS FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON YOUR PRODUCT EVEN IF ROCKSOLAR HAS BEEN ADVISED PREVIOUSLY OF THE POSSIBILITY OF SUCH DAMAGES. Some local laws do not allow the exclusion or limitation of special, indirect, incidental or consequential damages, so this limitation or exclusion may not apply in your jurisdiction.

## Exclusions

The warranty does not cover failures result from incorrect handling, product modifications, installation, conversion or additions, supplements, operation, natural elements (weather), excessive or deficient energy supply, chemicals, the effect of solid bodies or deliberate damage. If the Warrantor determines that the problem with the Rocksolar product(s) is not due to a manufacturing defect in the Warrantor's workmanship or materials, or otherwise does not qualify for warranty repair, then the Purchaser will be responsible for all costs incurred by the Warrantor necessary to repair, replace and transport the Rocksolar product(s). Rocksolar's warranty does not apply to the battery cell unless the battery cell is fully charged by you within seven days after you purchase the product and at least every 3 months thereafter.

## How to Receive Service

To obtain warranty service, contact our customer service team at [service@rocopower.com](mailto:service@rocopower.com)

## Contact us

ROCKSOLAR TECHNOLOGY LLC.

Address: 500 DELAWARE AVE, STE 1 #1960 WILMINGTON, DE, US, 19899

Email: [services@rocopower.com](mailto:services@rocopower.com)

Website: [www.rocopower.com](http://www.rocopower.com)