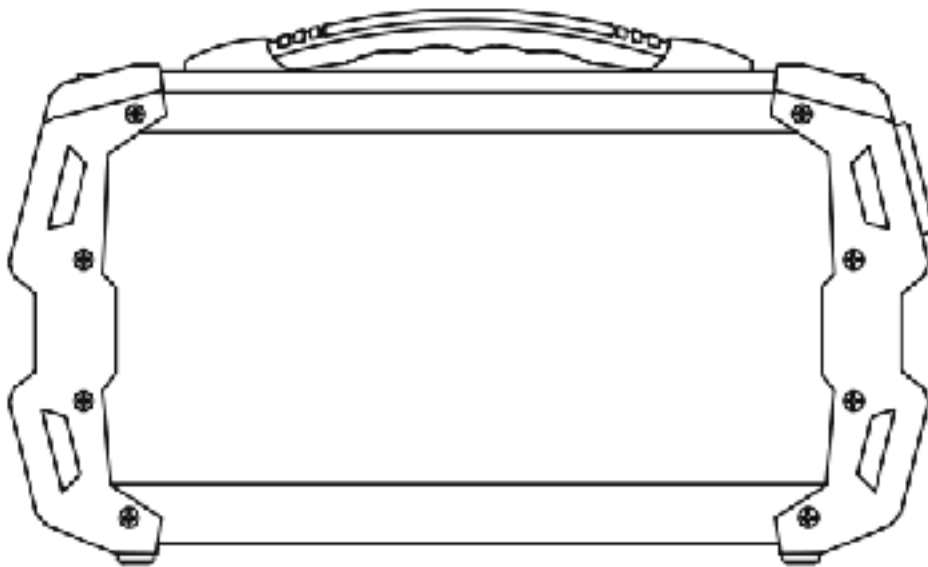


# ROCKSOLAR®

## PORTABLE POWER STATION User Instruction Manual Nomad (RS650)



## ABOUT THE UNIT

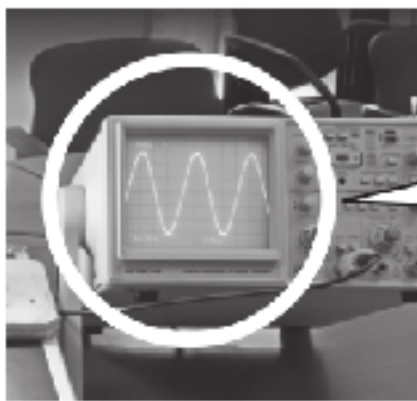
Congratulations on your purchase of a multi-function portable power station, we appreciate your support. Best in class, ROCKSOLAR Nomad is a Lithium-ion Polymere battery designed to provide more power, longer. This dependable power solution is great for larger jobs, longer trips and prepares you for longer power outages and emergencies. Great for RV's, mobile homes, boats, vanlife, and off-grid sustainability, this unit is a nomad's lifeline. Before using this unit, please read the user manual carefully and keep it handy for reference.

## ATTENTION!

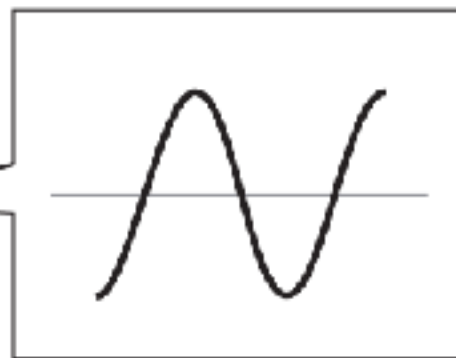
This manual is designed to help you use the product correctly; it does not include any hardware descriptions or software configuration details. If more product configuration information is required, please contact [services@rocksolars.com](mailto:services@rocksolars.com). Pictures in this manual are for reference only, and may not be an exact replica of the product itself.

### The unit provides Pure Sine Wave output

The unit has a built-in Pure Sine Wave inverter, which means it produces an output that is exactly the same as the power supplied by an AC wall plug. The Pure Sine Wave output allows the unit to safely power nearly all AC electric devices in your house under 300 watts that would normally plug into the wall. This product is intended for short-term and emergency use and cannot replace normal alternating current for long-term use. Number of device charges and run times will vary depending on the make, model and use of devices.



Oscilloscope display of sine wave



Sine wave graphic

## 【I】 PRODUCT PARAMETERS

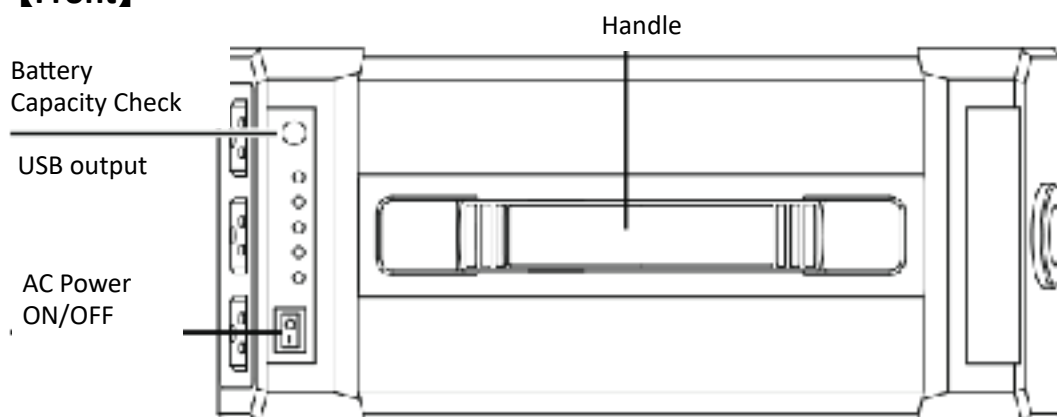
|                 |                       |
|-----------------|-----------------------|
| Capacity        | 444Wh/120000mAh, 3.7V |
| Dimensions(LWH) | 307 x 134 x 184mm     |
| Weight          | about 5Kg/11lbs       |

|                             |                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------|
| Built-in Battery            | High Quality Lithium ion Batteries                                                                   |
| Input Recharging            | 12.5-24V/6.0A Max                                                                                    |
| Fully Charged Time          | DC 15V/6A; about 7 hours                                                                             |
| Output                      | 3xUSB 5V-2.1A(Max)<br>2xDC 9-12.6V/10A(15A Max)<br>1x Cigarette Lighter 9-12.6V/10A(15A Max)         |
| AC Output                   | 110V/60Hz                                                                                            |
| AC Power                    | Pure Sine Wave<br>AC Continuous Power Output: 400W/ 600W Max                                         |
| Power Indicator             | LED Indicators                                                                                       |
| Operation temperature range | -10°C-40°C                                                                                           |
| Lifecycle                   | >500 times                                                                                           |
| Package include             | 1 x Portable Power Station<br>1 x 15V/6A Power Adapter<br>1 x Car Charger Adapter<br>1 x User Manual |

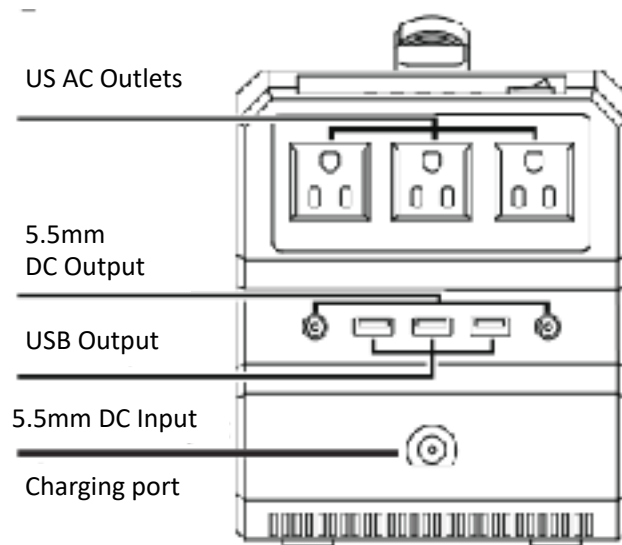
※There may be some differences on different spare parts. Please adhere to the actual product instead.

## 【II】 PRODUCT DESCRIPTION

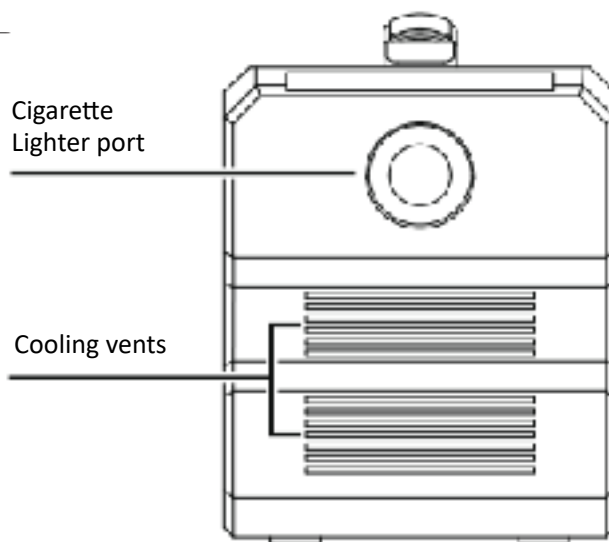
### 【Front】



### 【Right】



### 【Left】



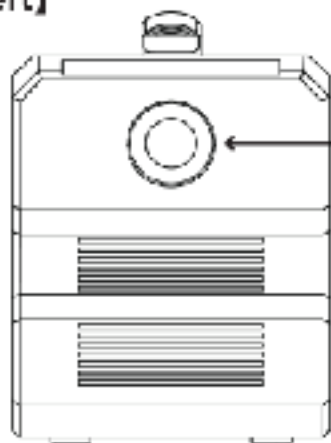
## 【III】 PRODUCT INSTRUCTION

### 1) How to power for DC12V appliances (head lamp, fan, etc.) with this product:

Plug your devices into the DC output port to and press the power button to gain power.

Note: Confirm that your DC12V appliance supports charging with 5.5mm/2.1mm DC header interface (the diameter of the DC Port of the Product is: 5.5mm/2.1mm). If not, an adapter may be necessary to connect with the DC output correctly. Please consult the electrical manufacturer to purchase the necessary adapter if needed.

【Left】



Charge 12V kits through  
DC-Cigarette  
Lighter Adapter (<150W)



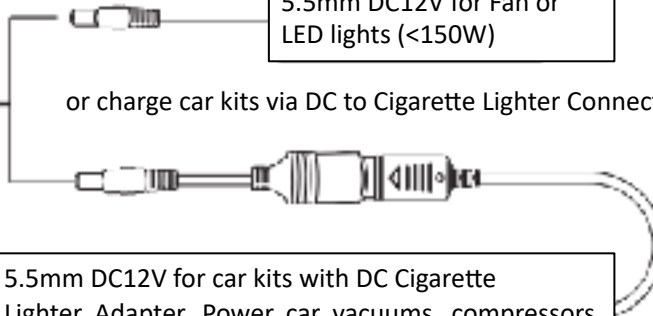
【Right】



5.5mm DC12V for Fan or  
LED lights (<150W)

or charge car kits via DC to Cigarette Lighter Connector

5.5mm DC12V for car kits with DC Cigarette  
Lighter Adapter. Power car vacuums, compressors,  
pumps, electric wrenches, and more!



### Protection Mode:

Short-circuit/Overpower Protection: If the DC output is short-circuited or over powered (Load(s) surge current>15A, or surge power>150W), the unit will shutdown to protect itself. Please clear the problem and charge the unit to recover from protection mode.

※**Note:** The 5.5mm DC output and the car port output voltage ranges between 9V~12.6V. 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. **If your 12V devices cannot work due to high input voltage, please read the device manual or consult the device manufacturer to get the input voltage range of your device.**

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

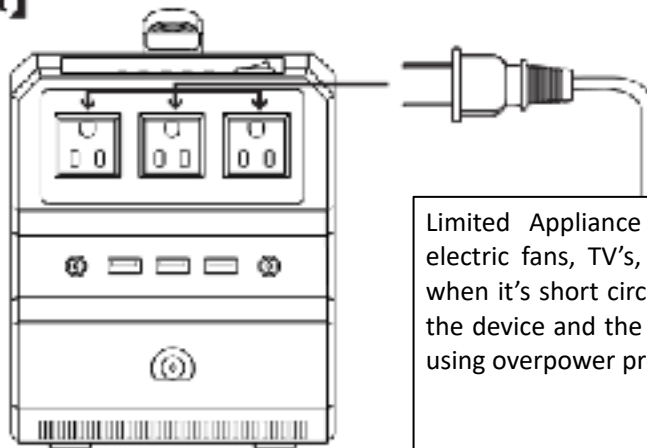
Connect the power cable plug of the electrical appliance to the AC outlet of the product, switch on the power button and the unit will start providing power to your appliances.

### **WARNING!**

AC outlets, voltage and frequency are different in different countries. Please carefully check whether the product specifications are consistent with the appliance specifications before use to avoid malfunction.

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

**【Right】**



Limited Appliance Wattage <400W for lamps, electric fans, TV's, and more! AC will shutdown when it's short circuited or is overloaded. Unplug the device and the unit will recover automatically using overpower protection in just a few seconds.

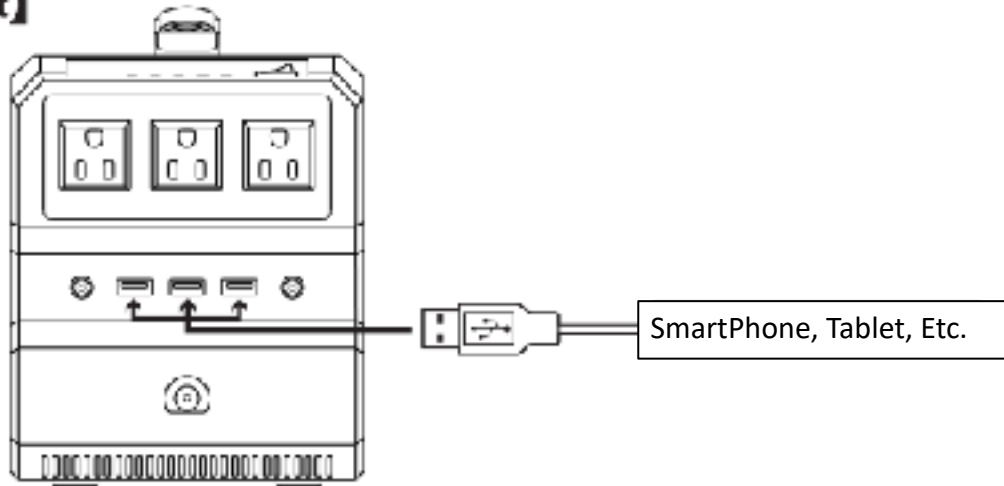
### **Protection Mode:**

**Short-circuit/Overpower Protection:** If the AC output is short-circuited or overpowered (load(s) power>600W), the unit will shutdown AC output to protect itself. Please unplug the device and the AC output will recover automatically. Some devices, such as refrigerator, ice maker or a laser printer may require a surge protector, as the power surge could exceed 600W or even higher, or even higher causing strain on the overpower protection of 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. If the unit fails to supply power to the USB devices 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 devices are fully charged.

**【Right】**

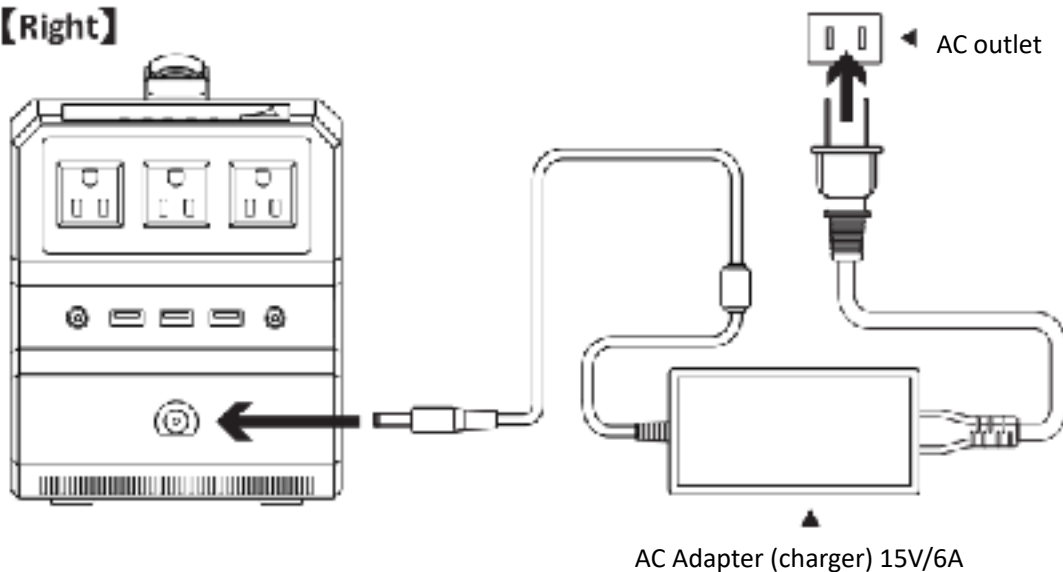


**4) How to charge the unit:**

**a. Charge through AC Wall Charger**

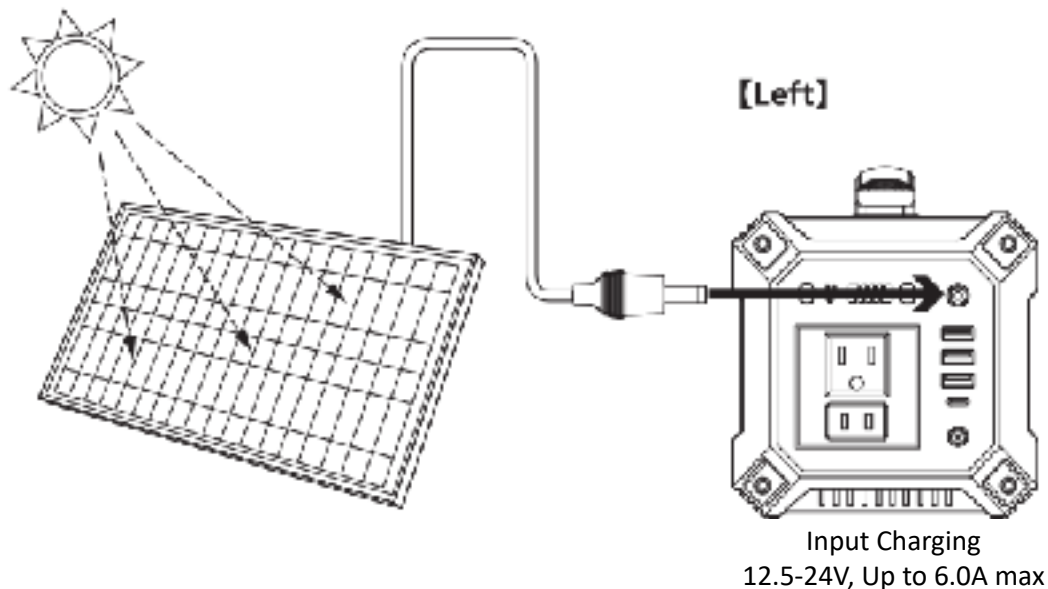
Using the included AC Wall Charger, plug the unit into any wall outlet to charge the unit. You will know the unit is charging when the blue LED battery indicators are blinking. The unit is fully charged when all battery indicators stop blinking and remain solid. After the unit is fully charged, please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

**【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.



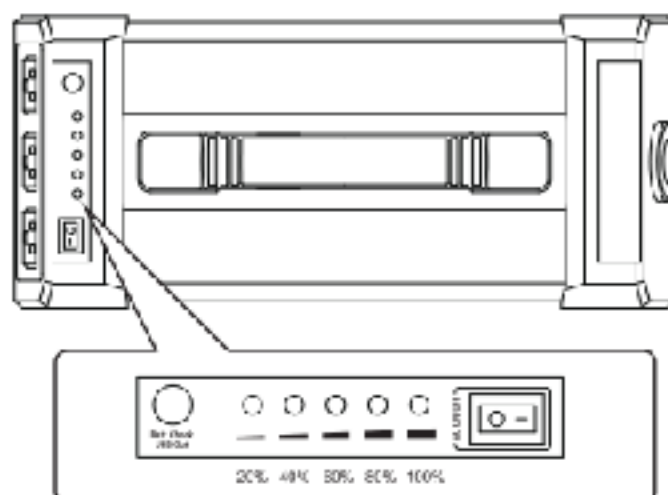
#### **c. Charge from your car with a 12V cigarette lighter adapter**

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.

**Note:** To avoid car battery power loss, charging this unit through your car cigarette lighter is only available when your car engine is on.

### **【IV】 LED light indicator instruction**

#### **【Front】**



The Battery Indicators show 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 MAINTENANCE**

- 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) In order to extend the life of this lithium battery product, it is best to charge within the first 3 months of purchase and then charge at least every 6 months.
- f) Do not drop, place heavy objects on, or allow strong impact to this unit.
- g) This device is not intended for use by children or those with reduced physical, sensory or developmental capabilities. Those who lack experience with technology should only operate with supervision or instruction by a capable person who claims responsibility for their safety. This device is not a toy. 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, but do not worry, 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 discard scrap products in accordance with e-waste regulations. Do not treat the built-in battery as a household garbage.
- n) The product is only intended for temporary use and emergency situations. It cannot replace the standard DC or AC power of household appliances or electronic devices.

## **【VI】 PRODUCT APPLICATION SKILLS**

- a) This product contains high quality original lithium ion battery. It has no memory storage but is a high-capacity, durable product.
- b) Use within the temperature range of 10°C~30°C, to obtain the optimal charging capacity.
- c) Avoid interference when charging, please keep this device away from TV, radio and other equipment.
- d) If the device has not been used for a long time, please disconnect the cable and place in dust-free storage.
- e) Some portable devices may need to be set in charge mode to charge. Refer to the product device manual for more information.
- f) In order to extend the life of this lithium battery product, it is best to charge within the first 3 months of purchase and then charge at least every 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 e-waste collection points. This will 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 products purchased from an authorized 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. ROCKSOLAR 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 24 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. Purchasers can register their devices at [rocksolars.com](http://rocksolars.com).

## **Troubleshooting**

ROCKSOLAR's troubleshooting solution for any ROCKSOLAR product that is not operating in accordance with its published technical specifications is at ROCKSOLAR's discretion, but its policy is to replace the product at ROCKSOLAR's expense. This warranty obligation is conditioned upon the hardware being returned to the original place of purchase, or return 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 not to any subsequent owner.

## **LIMITATION OF LIABILITY**

ROCKSOLAR SHALL NOT BE LIABLE FOR ANY UNUSUAL, 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 resulting from incorrect handling, product modifications, installation, conversion or additions, supplemental use, incorrect 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 6 months thereafter.

## How to Receive Service

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

## Contact us

ROCKSOLAR TECHNOLOGY LLC.

Address: 6585 Arville Ave, STE A, Las Vegas, NV 89118, USA

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

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



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

