

EGRETECH

Portable Power Station Sonic

SONIC 1500W

English Version

PRODUCT OPERATION GUIDE

Introduction

Before first unpacking

The service life of this product is 2 years, and its battery is able to support at least 3,500 deep charge and discharge. Before first using this product or if you need to store it for a long time, please fully charge this product. For more tips and tricks to keep your battery healthy, see Precautions for battery.

If you need to store this product for a long time, please fully charge it every 3 months and store it in a cool, dry place. If the above steps are not followed and the battery consequently is damaged, the product warranty will be invalid.

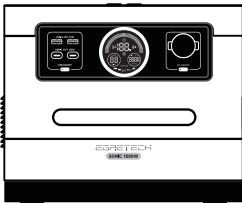
Safety use instructions

- 1·Never allow the product to contact any liquid, and do not immerse the product in water or wet it. Never use the machine in rain or humid environment, otherwise it may cause spontaneous combustion of the battery, or even cause explosion.
- 2·Use of unofficial parts is strictly prohibited. If replacement is needed, please contact the dealer for purchase. Any product incidents or malfunctions caused by the use of unofficial parts resulting in loss, will not be the responsibility of the manufacturer.
- 3·If the temperature is too high (above 60 °C), the battery may catch fire and even explode. If the temperature is too low (below -10 °C), performance of the product will be seriously degraded, or even the requirements of normal use may not be met. The product can be used normally after room temperature is restored.
- 4·Do not use the machine in the environment of strong static electricity or magnetic field, otherwise it may work abnormally. For example, some protective functions of the machine may fail, resulting in a serious failure of the machine.
- 5·Never disassemble or pierce the product with sharp objects in any way. Otherwise, it will cause product failure, fire or even explosion.
- 6·In order to ensure your personal safety, do not use the machine again after it is strongly dropped or is hit by external force.
- 7·If the product accidentally falls into water during use, place it in a safe open area and stay away from the product until it is completely dry. The dried product shall not be used again and shall be disposed of properly in accordance with local regulations. If a fire occurs in the product, it is recommended to use the fire extinguishing equipment as shown in the following order: sand, fire blanket, dry powder extinguishing agent, carbon dioxide extinguisher.
- 8·Do not place the machine in a microwave oven or pressure cooker.
- 9·Do not use wires or other metal objects to cause short circuit of the product.
- 10·Do not impact the machine, and do not place any heavy objects on the machine to cause deformation of the product.
- 11·If there is any dirt on socket of the machine, please use a piece of dry cloth to clean it. Otherwise, it will cause poor contact, resulting in energy loss or failure to charge.
- 12·The product shall be stored in a dry and ventilated place.

Safety use instructions

- 13·In humid environment (e.g. seaside and waterside environment, etc.), it is recommended to use it together with a moisture-proof bag to avoid it being soaked in water. If any water is found inside the product, do not use/turn on the product again, please take anti-electric shock measures before touching the product, immediately put it in a safe and waterproof open area, and immediately contact the local distributor and customer service for treatment.
- 14·It is not recommended to power personal safety-related medical emergency equipment by this product, including but not limited to hospital version CPAP (Continuous Positive Airway Pressure), ECMO (Extracorporeal Membrane Oxygenation), etc. In addition, a home version CPAP is intended for use in a home environment and can be used normally without continuous professional monitoring. Follow your doctor's advice and consult the manufacturer for restrictions on the use of the device. If it is used to power the general medical equipment, be sure to pay attention to the power condition to ensure that the power does not run out.
- 15·Power products will inevitably generate electromagnetic fields during use, which may affect the normal operation of implanted medical devices or personal medical devices, such as pacemaker, implanted cochlear, hearing-aid, defibrillator, etc. If any of these medical devices are used, please consult the manufacturer about the restrictions on their use to ensure that the product is working at a safe distance from implanted medical devices (such as pacemaker, implanted cochlear, hearing-aid, defibrillator, etc.)
- 16·The power source is connected to the load of the refrigerator in the conventional mode, which may automatically shut down the power source due to the fluctuating power properties of the refrigerator. When this power source is connected to the refrigerator used for storing drugs, vaccines or other high-value items, the user shall pay attention to the power on/off state and power loss.

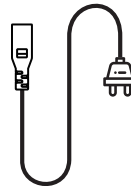
Packing list



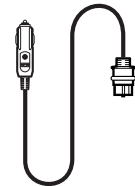
Outdoor main power unit *1



Instruction manual *1






AC charging cable *1 (input)







Car output port charging cable *1(input)

Port Input Description

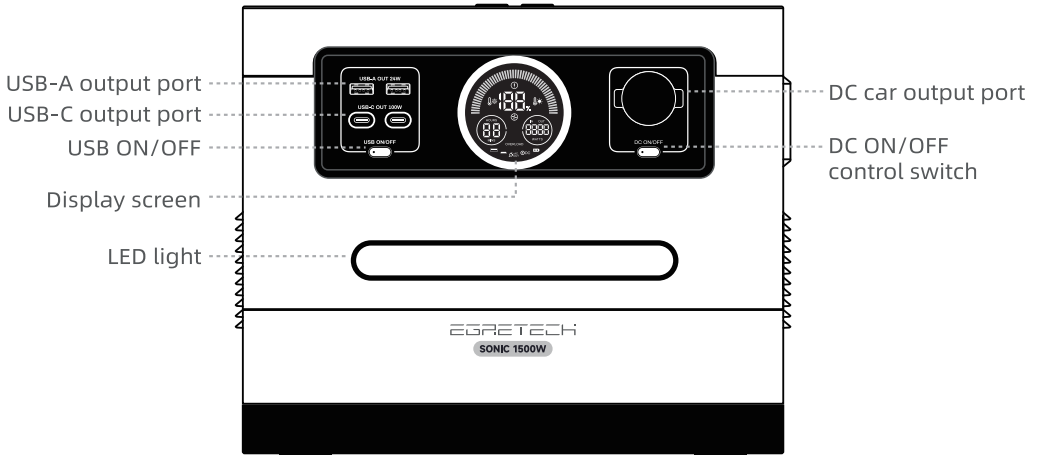
	<p>AC charging port: 100V single-phase input, L/N two-wire system AC input voltage: 100V-120V~/60 Hz Rated input power: 1200 W</p>
	<p>XT60 charging port: DC input Input voltage range: DC10-46V (rated: 36V) Input current range: 23A Max. (rated: 22A) Rated input power: Rated 800W</p>
	<p>Overload protection: When the electricity is overloaded or short-circuited, short press the overload reset button to restore the power supply</p>

Port Output Description

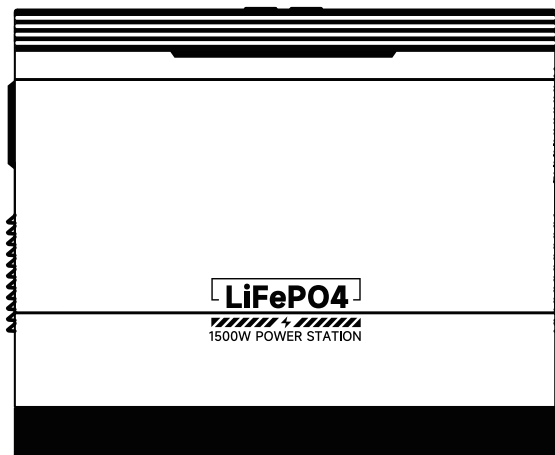
	<p>AC output port: 120V single-phase output, L/N two-wire system AC output voltage: 120V~/60 Hz Rated output power: Rated 1500W Output no-load test: After the output power is less than 5 W for 60 min, the AC output is turned off.</p>
	<p>Car charger output port: 12V DC output Output voltage range: 11.4V-13.8V (rated: 13.2 V) Max. DC current: 10 A Full-load output power: 132W</p>
	<p>Type A USB output port: 24W Max Output voltage range: 4.75V~5.25V/8.55V~9.45V/ 11.4V~12.6V Socket protocols supported: Apple 2.4A, QC2.0/3.0, FCP, AFC, DCP, SCP</p>
	<p>Type C USB output port: 100W Max (single port independent) Output voltage range: 4.75V~5.25V/ 8.55V~9.45V/ 11.4V~12.6V/14.25V~15.75V/19V~21V Socket protocols supported: Support Apple 2.4A, PPS/PD3.0/PD2.0; QC4+/QC4/QC3.0/QC2.0; AFC; FCP; low-voltage SCP/high-voltage SCP; PE2.0/PE1.1; SFPC</p>

Description of product features

Front view

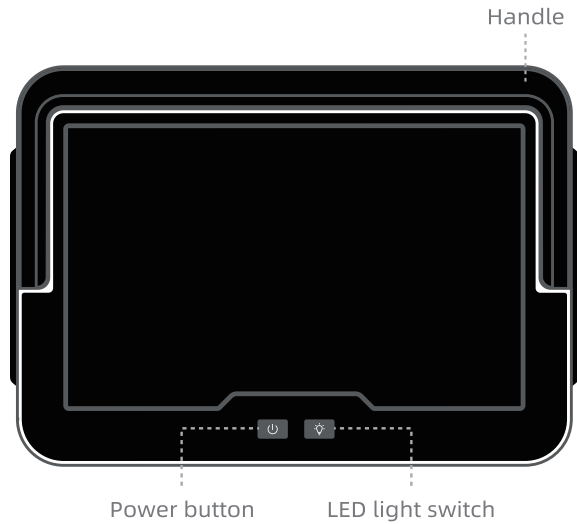


Rear view

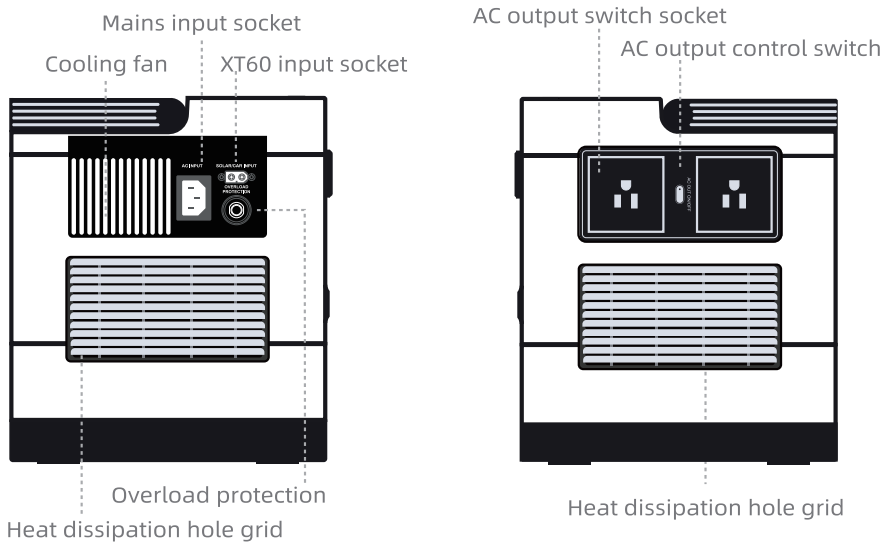


Description of product features

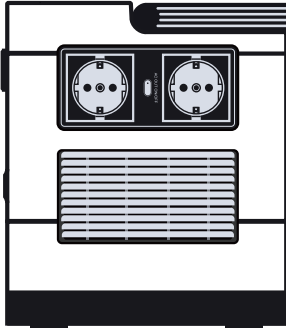
Top view



Side view



Socket specification description



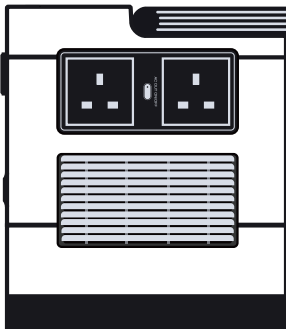
Europe

Suitable for use in most parts of Europe



Japan/United States

Suitable for use in Japan and the United States



United Kingdom

Suitable for use in the United Kingdom

Note: Please select the socket specifications applicable to your country and region when purchasing.

Key operation

1•Power on/off

When the switch is pressed and held for 3 s in power-off state, the device shall be turned on, the key indicator light shall be on, and the device shall enter the charging and discharging operation at this time.

When the switch is pressed and held for 3 s in power-on state, the device shall be turned off, the indicator light shall be off and discharging output shall be stopped.

Startup diagnosis (automatic operation)

Before this product operates, it will test itself on all links, digital circuits and logic software with preset phasor set, and preset state signals, so as to determine whether this product meets the operating conditions, if not, this product is not allowed to be put into operation.

Test items are as follows:

Bus voltage, AC bias voltage, AC current sampling bias voltage, AC voltage effective value, AC current effective value, LLC temperature.

2•AC on/off

Short press once: AC output is enabled, and indicator light of this key is on.

Short press again: AC output is disabled, and indicator light of this key is off.

3•DC on/off

Short press once: DC car charger output port and indicator light of this key is on.

Short press again: DC car charger output port and indicator light of this key is off.

4•USB on/off

Short press once: USB port output is enabled, and indicator light of this key is on.

Short press again: USB port output is disabled, and indicator light of this key is off.

5•LED light(ON state of this product)

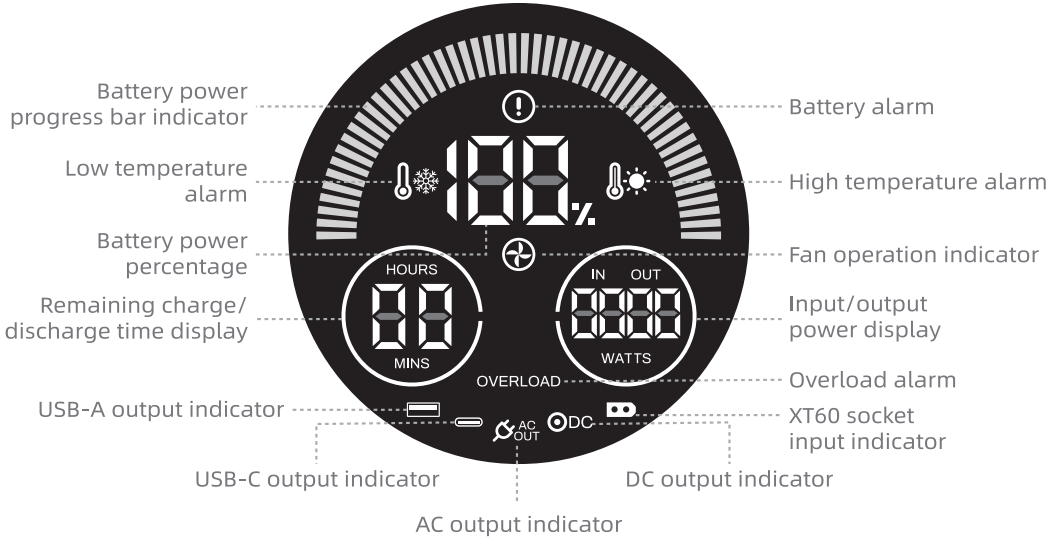
Short press once: The LED light is on.

When the LED light switch is pressed shortly, the LED light will work in an order of medium brightness - high brightness - SOS - flashing - off.

6•Overload protection switch

In UPS mode, when charging is overloaded or short-circuited, short press the overload reset button once to restore power supply.

Display function description



Energy-saving status description

Front panel display sleeping mechanism: If no operation is done within 3 min, the display will be turned off, and you can turn on it again by pressing any button.

AC sleeping mechanism: If the load is continuously below 5 W or no load is detected within 60 min, the load output will be automatically turned off.






DC sleeping mechanism: If the load is continuously below 2 W or no load is detected within 120 min, the load output will be automatically turned off.

USB sleeping mechanism: If the load is continuously below 2 W or no load is detected within 120 min, the load output will be automatically turned off.

General sleeping mechanism: After the outputs are not turned on again within 90 min after being turned off, the product will be automatically powered off.





Display function description

Port indicator description







	USB-A output indicator	This icon will be on when the USB output control switch is turned on.
	USB-C output indicator	This icon will be on when the USB output control switch is turned on.
	AC output indicator	This icon will be on when the AC output control switch is turned on.
	DC output indicator	This icon will be on when the DC/wireless output control switch is turned on.
	XT60 socket input indicator	This icon will be on when the solar panel or car output port is used for input.

* If no power output is detected after connection, check whether the port is improperly connected.

Digital indicator function description

	Battery power progress bar indicator	The battery power progress bar is indicated by a total of 50 segments, each of which indicates 2% of the battery capacity. The progress bar will light up from the first segment to the last segment when charging, and cycle repeatedly; the last segment of the battery power progress bar will flash when discharging.
	Battery power percentage	Percentage of remaining power during charging or discharging.
	Remaining charge/discharge time display	The time required to fully charge during charging, and the service time of remaining power during discharging. When HOURS is on, it indicates the remaining hours. When MINS is on, it indicates that the remaining time is less than 1 hour.
	Input/output power display (power meter)	The current input/output power of the device is displayed. Input state: IN above the digits will blink. Output state: OUT above the digits will be always on. Pass-through charging state: When the input voltage is higher than the output voltage, the letters "IN" will light up; When the output voltage is higher than the input voltage, the letters "OUT" will light up. The power display shows the larger value between the current input and output.

Protection prompt description

	Battery alarm	When the battery alarm icon blinks, it indicates that the battery is seriously faulty and buzzes. Do not charge or discharge the device again.
	Low temperature alarm	When the low temperature alarm icon blinks, please check whether the ambient temperature is lower than -10 °C and use the device in an environment ranging from -10 °C to 40 °C.
	High temperature alarm	When the high temperature alarm icon blinks, please check whether the ambient temperature exceeds 40 °C and use the device in an environment ranging from -10 °C to 40 °C. In addition, check whether air outlet of the product is blocked by dust or the cooling system is faulty.
	Fan operation indicator	When the fan icon blinks, the heat dissipation system of the device is starting.
OVERLOAD	Overload alarm	When the overload icon is on, please check whether the power of the powered device exceeds the max. rated power of this product.
	Fault code (power meter)	If the power meter displays fault codes E01 to E99, the device fails to protect itself or start up. Please restart it again.
	UPS mode	When the device is being charged by AC and the AC output is turned on, the UPS mode will be activated, and the load power will be supplied by the grid provided directly.

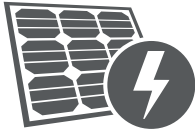
* If you still encounter other problems that you cannot solve during use, please contact your local dealer or our customer service. Please do not repair without permission or perform any operation that may void the warranty service.

Precautions

- 1·Please notice the displayed output power when using this product to charge other devices. To ensure the product normal operation during prolonged high power output in extreme temperatures, the AC output power will be limited to 1000W.
- 2·When powering a high-power device (such as a microwave oven), the battery power will drop very quickly and may not be able to support output. Although this product is equipped with a high-efficiency inverter, there is still some energy lost in inversion, and therefore the battery fails to get the full rated capacity.
- 3·If this product fails to power other devices, you may need to check the power requirements of other devices, see the following Frequently Asked Questions for details.

Operating diagram

Charging mode for the product



About 2-3 hours to be fully charged with solar panels



About 14 hours to be fully charged with car charger-cigarette lighter



1 hour to be 80% charged and about 1.67 hours to be fully charged with the mains supply

Support to charge the devices in the following scenarios

Mobile phone 12Wh ≈121.4 times	Mac book 60Wh ≈24.3 times	Switch 15.9Wh ≈91.6 times	ipad 30Wh ≈48.6 times

Digital accessories

Refrigerator 120W ≈12.1h	TV 110W ≈13.2h	iMac 143W ≈10.2h	Bracker fan 45W ≈32.4h

Power outage emergency

Electric rice cooker 280W ≈5.2h	Car refrigerator 40W ≈36.4h	LED light 5W ≈291.4h	Saucepan 200W ≈7.3h

Self-driving travel

Home ventilator 40W ≈36.4h	Blood pressure gauge 30W ≈48.6h	oxygenator 150W ≈9.7h	Atomizer 20W ≈72.9h

Medical Service

Projector 180W ≈8.1h	Camping lamp 10W ≈145.7h	Electric blanket 60W ≈24.3h

Outdoor camping

Drone 40Wh ≈36.4 times	Digital camera 16Wh ≈91.1 times	SLR camera 23Wh ≈63.4 times

Photography & aerial photography

Hand-held hammering drill 1,000W ≈1.5h	Cutting machine 1,100W ≈1.3h	Inflation pump 40W ≈36.4h	Water suction pump 480W ≈3h

Engineering operation

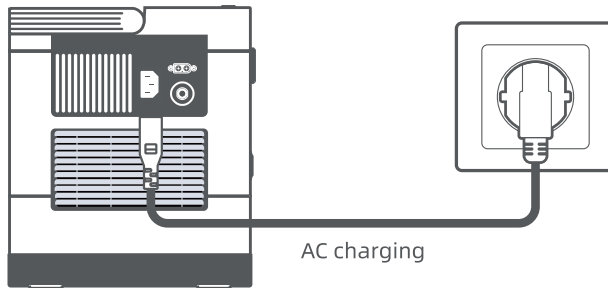
Note: The above data is sourced from the laboratory. Different results or errors may be obtained from the test under different environments, and the actual use shall prevail.

Charging the product

AC charging

- 1·When charging with the charging cable in the accessories, current battery power is indicated by the battery power progress bar, the flashing battery segments indicate that the battery is being charged, and the power meter displays the charging power.
- 2·When fully charged, all the progress bar battery segments will be always on.

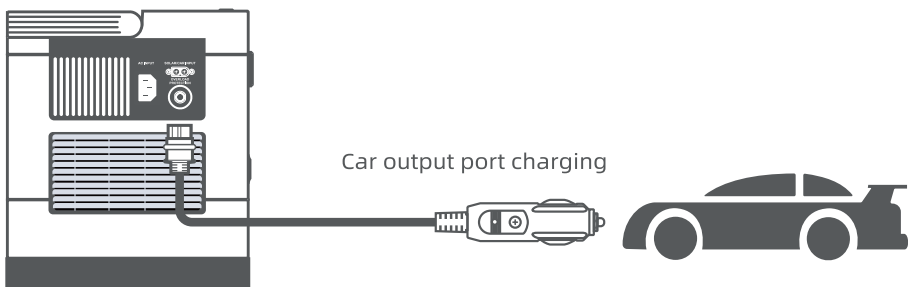
***Important:** When AC charging, this product does not support AC output.



Car charger charging

The port on the product that connects the car output is an XT60 port (for SOLAR/CAR INPUT).

- 1·When charging with the car output port charging cable in the accessories, current battery power is indicated by the battery power progress bar, the flashing battery segments indicate that the battery is being charged, and the power meter displays the charging power.
- 2·When fully charged, all the progress bar battery segments will be always on.



Charging port: XT60 port

Charging power: rated 120 W (the actual application is affected by on-board output)

Charging the product

PV charging



Warning

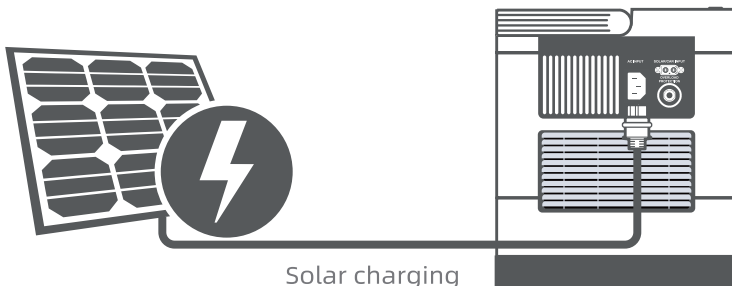
When using solar panels to charge this product, please note that the output voltage in the solar panel specifications is 10-46V DC and the total output power is within 800 W. Charging this product with solar panels that do not meet specifications may cause serious damage to it.

The port on the product that connects the solar output is an XT60 port (for SOLAR/CAR INPUT).

- 1·When charging, please expose solar panels to more direct sunlight.
- 2·During charging, the battery power progress bar on the display screen displays the current battery power, and the blinking battery segments indicate that the battery is being charged. When fully charged, all battery segments remain on.
- 3·If necessary, low-power solar panels can be connected in series and parallel to charge this product provided that the voltage and total power shall be within right specification ranges.

Notes for PV charging

- 1·Solar panel does not store solar energy, but collects solar energy. That is, solar panels collect solar energy and store it in this product, powering your powered devices anytime and anywhere. When the PV charging is under way, powered devices can be used at the same time, that is, supporting discharging while charging.
- 2·PV charging time varies. Most solar panel manufacturers calculate the PV charging time with the following formula: $\text{device Wh} / \text{solar panel watts} = \text{solar charging time}$. Theoretically, a 800-watt solar panel can fully charge a 1619 Wh outdoor power source in 2 hours ($1619/800 \approx 2$), and the said data can be found in the solar panel instructions manual. In order to standardize the PV charging time from all manufacturers, these tests are done in a laboratory environment. However, only about 50-75% of rated solar panel power can be collected on a sunny day, which is how engineers calculate the PV charging time of this product.
- 3·The solar panel can be charged even on cloudy days. The solar panel uses the infrared and ultraviolet rays emitted by the sun and visible light that penetrates the clouds. Therefore, this product can still be charged by the sun but with reduced efficiency.
- 4·Solar panels should not be screened by window glasses. When your solar panel is completely exposed to the sun, it will collect more energy. Windows can also reduce efficiency. So put these panels outside and in the sun. The optimal arrangement is to directly face solar panels toward the sun, thereby dramatically improving solar efficiency.

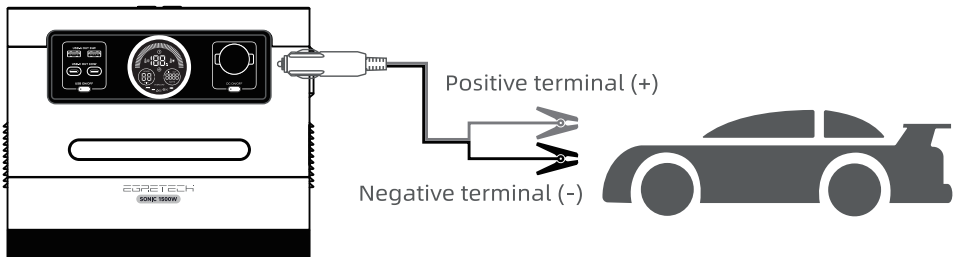


Solar charging

Car Emergency Charging Operation

Car emergency start procedure

- 1·Clip the red clip to the positive terminal (+) of the car battery and the black clip to the negative terminal (-).
- 2·Plug the other end of the emergency start cord to the car output port of this product and charge for about 10 min.
- 3·Before starting the car, unplug the emergency start cord and remove the red and black clips.
- 4·Start the car engine as usual.



* This emergency start connection cable needs to be purchased separately.

Precautions

- 1·Before the car starts, please ensure that the red and black clips are tightly connected to the car battery terminals to prevent them from shaking and falling off after the car is started.
- 2·Keep a safe distance between the red and black clips to prevent short circuit.
- 3·Before the car starts, please disconnect this product from the car to prevent damage to this product and any possible accidents.
- 4·When the car starts, stay away from the engine to avoid possible injuries.
- 5·Before using this function, please ensure that the dump power of this product is greater than 60%.
- 6·People unfamiliar with this function are not allowed to use function, especially minors.

UPS model

1. This product supports UPS mode, when you plug into the grid through the AC charging cable, you can use the AC output on the product An outlet that provides power to electrical equipment (in this case, the AC power comes from the grid, not the product);
2. Using UPS mode, in the event of a sudden power failure, the product can automatically switch to battery power supply mode within 20ms (do not connect to Any device that requires 0ms UPS);
3. Before using UPS mode, please confirm its load power, the maximum output power in UPS mode is 1350W, avoid overload protection.

Frequently Asked Questions

Q.What type of battery is used in this product?

A.This product adopts customized lithium ion battery. Here are some general facts about the lithium-ion battery: Lithium-ion battery is able to store and release large quantity of energy in a short period of time. Equipped with a battery protection panel, it can control current to safely reach each output port through advanced battery management and protection systems.

Q.How do I check the current battery power of this product?

A.You can press any key to light up the display screen and find the battery icon. The number of battery segments in the icon indicates the current battery power. This product can be used even if it is not fully charged.

Q.Can I carry this product on the plane?

A.No, you can't.

Q.How do I know if it is compatible with my electrical device?

A.Firstly, you need to determine the rated power of your electrical device. This may require you to read the instruction manual of the electrical device. Second, you need to check the max. rated power of output ports in this product. For example, 1500W power supply is available for the port of this product under the control of inverter.

Basic description of battery

Precautions for battery

This product uses the latest battery technology, covering various needs in your daily life. We have prepared some useful tips to keep the battery in the best working condition.

1·Batteries need to be used frequently

Any battery needs to be used frequently. Do not store and not use the battery for a long time. But if you plan to store it, make sure it is fully charged. Although this product will sound an alarm when the battery power is less than 3%, do not store the battery for a long time in the state of power loss, and in case that this product can not be charged, charge it once every 3 months during long-term storage, or you will go to the local after-sales service dealer for maintenance service.

2·The saying of "battery memory"

For Ni-Cd battery, you need to drain your battery before recharging it, the so-called "deep cycle". However, typical batteries in most devices today, including the advanced lithium battery used in this product, such discharge is no longer required. Actually, you should avoid deep cycle of your battery, which has more harm than good in most cases.

3·"Stadium effect"

The stadium effect occurs when you charge your battery. You'll notice that the battery charging process is fast at first, but slows down noticeably as you try to charge the last few percent. Just like how quickly a stadium is filled up when it first opens - there are hundreds of open seats, so it's easy to get one. When there are only a few empty seats here and there, people have to move around to get one, and it takes longer to fill up those seats hence. The same theory applies to charging the battery. Similarly, power easily flows in and occupies empty space at the beginning. As time goes by, less and less space is available, and it takes longer for power to fill left space.

4·Reading this instructions manual.

It will take some time to read the manual, but there are precautions for battery of this product. Following use methods stipulated in this manual will extend the service life of the battery.

Warranty Card

Warranty Period

The warranty period of this product is 24 months, which is calculated from the date of purchase. And in order to determine the start date of the warranty period, consumers are required to provide purchase receipt.

Warranty Policy

We will provide warranty service for performance failures of products used normally by consumers within the warranty period. If the product is damaged due to improper use by consumers, the maintenance fee shall be properly charged.

Non-warranty regulations

1. The product exceeds the warranty period specified by the Company.
2. Damage caused by unauthorized repair and unauthorized modification.
3. The original serial number label of the product is altered or forged.
4. Performance damage caused by improper storage, such as product being exposed to abnormal humidity and temperature for a long time.
5. Damage caused by artificial abuse and misuse without following the operation manual.
6. Exterior damage caused by abnormal use, damage due to man-made collision, damage caused by force majeure.

How to obtain warranty service

If our customers determine to need further help, please contact the local distributor where the product was purchased. who will give you a Return Material Authorizations ("RMA") number and a prepaid return label that you can use to mail your product. You must package the product correctly with clear RMA number on the package, as well as proof of the date you purchased the product. We will handle your returned product and send you the repaired or a new one at our expense. For products purchased or shipped outside of North America, please contact the local dealer for details.

FCC Warning



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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

Declaration of toxic and hazardous substances in electronic information products

Part name	Hazardous substance or element					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
PCB	X	O	O	O	O	O
Electrode	O	O	O	O	O	O
Battery	X	O	O	O	O	O
Enclosure	O	O	O	O	O	O


This form is prepared in accordance with the ROHS certification standard.

O: Indicate that the amount of the toxic and hazardous substance in all homogeneous materials of the part is below the limit specified in EN 62321:2012.

X: Indicate that the amount of the toxic or hazardous substance in at least one homogeneous material of the part exceeds the limit specified in EN 62321:2012.



This device shall not be disposed of together with ordinary wastes, but must be recycled. This symbol indicates that this product shall not be treated as household waste, but must be handed over to the corresponding waste recycling station for recycling of electronic and electrical devices.



Warning

Please strictly follow the operation instructions and precautions, otherwise it may cause fire, electric shock, damage or other injuries

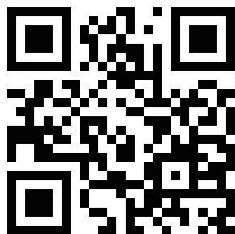
Product qualification certificate



Product qualification certificate:

This certificate indicates that the product has passed the inspection.

Return Registration Form



EGRETECH

Product model: _____

Consumer name: _____

Order No.: _____

Product name: _____

Contact details: _____

Reason for return: _____

Manufacturer: G-YOUTH TECHNOLOGIES (SHENZHEN) CO., LTD
Address : 6th Floor, Block A, Haina Baichuan Building, No.6 Baoxing Road, Haibin Community, Xin'an Street, Bao'an District, Shenzhen City, Guangdong Province, China

 www.egretech.com



MADE IN CHINA