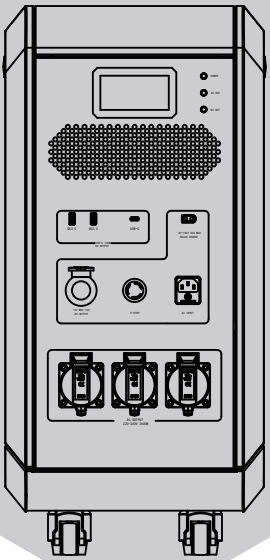


PT3650S

Portable Power Station

User manual

1/Introduction

1.Before using this product, please read the complete user manual to familiarize yourself with the features of this product. If improper operation leads to damage to the product or personal property, or even serious personal injury, We will not bear any legal responsibility.

2.Do not use incompatible components or alter the product in any way without following the instructions provided. Otherwise, you will not be able to receive after-sales service from under warranty.

3.Before assembling, installing, or using, all instructions and warnings in the user manual must be read and followed for proper operate products, avoid damage or serious injury.

4.This manual includes safety, operation, maintenance instructions, pictures and specifications for reference only, specific to the actual product.

2/Disclaimer

Note: To avoid fire, serious injury, or property damage, follow these safety precautions when using, charging, or storing power supplies:

1.Do not expose the power supply to a strong static or electromagnetic environment. Failure to do so may result in a malfunction of the battery management system, resulting in a serious accident occurred when using.

2.Do not disassemble or pierce the power supply in any way, otherwise, it may leak, catch fire or explode.

3.Do not allow the power supply to come into contact with any liquid, do not leave the power supply in the rain or near a damp place. Do not put the power on in water, if the internal battery of the product comes into contact with water, chemical decomposition may occur, which may cause the battery to catch fire, and maybe cause an explosion.

4.Do not heat the power supply, do not put this product in the microwave or pressurized container, do not expose to the sun, away from fire, do not place in a high temperature environment.

5.The use temperature of the battery should be between -10°C and 50°C, and it will be

serious when used in an environment above 50°C or below 10°C to reduce the performance of the product.

6.The normal working temperature should be restored before the power supply is used, and the air inlet and outlet of the cold air system should not be covered during use.

7.Please use the adapter and other accessories paired with the power supply correctly, otherwise it will cause damage to the power supply.

8.Never use a swollen, leaking or damaged battery. If your battery is not normal, please contact us in time to get it help further.

9.If accidentally dropped into the water during use, it should be taken out immediately and placed in a safe and open place. Keep a safe distance leave until it is completely dry. Never use it again and dispose of it properly.

10.It is forbidden to insert foreign objects such as other metal sheets into the machine casing, socket or each input/output interface, the metal sheet may make the product A short circuit, causing the battery to overheat, explode, or catch fire.

11.Do not place heavy objects on the machine, avoid using during collisions or heavy bumps.

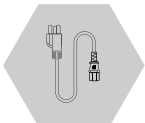
12.If there is dirt on the surface of the AC socket or output/input connector, clean it with a dry cloth. Failure to do so can cause wear and tear, resulting in energy loss or inability to charge.

13.If the product catches fire, it is recommended to use the fire extinguishing equipment in the following order: water or water mist, sand, fire blanket, dry powder, carbon dioxide fire extinguisher.

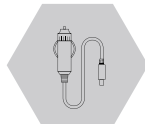
14.If it has not been used for a long time, please charge the product once in three months.

15.Please dispose or recycle the batteries according to the relevant local regulations.

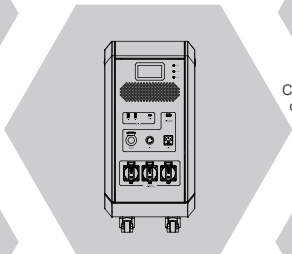
3/Product Packaging



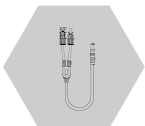
Power Charging Cable X1



Cigarette lighter car charging cableX1



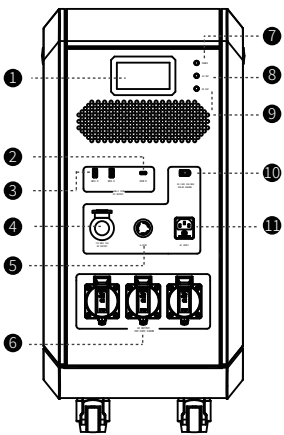
Emergency energy storage power stationX1



MC4 photovoltaic lineX1

User ManualX1

4/The name of each part



1. LCD display
2. USB-C output port
3. USB output port
4. DC car charging output port
5. Emergency stop switch button
6. AC output socket
7. Power switch button
8. AC output On/Off Button
9. DC Output Button
10. XT60 input port
11. AC input socket

5/Using methods

1.Three modes of opening

1.Long press the power main switch button to turn on in seconds.

2.AC charging automatic power on.

3.MPPT charging automatically turns on. The boot full screen self-test displays seconds (LCD lights up directly after self-test), then and finally enters the normal working state. In normal working conditions, various icons display update times from to seconds.

2.Two modes of turning off

1.Long press the power main switch button one second shutdown

2. Emergency switch: If the client's electrical equipment is abnormal, press the emergency switch to shut down and disconnect the output to prevent the equipment from being dangerous (smoke or fire).

3.Charge

Support AC and MPPT charging separately or simultaneously. When AC charging, the screen shows the AC charging icon; When the MPPT is charging, the screen displays the solar charging icon. When AC and MPPT are charged at the same time, the screen shows the total charging power, solar charging icon and the mains charging icon light up at the same time.

4.AC output

Mainboard on, inverter does not automatically turn on the output, you need to press the AC key to turn on the AC output, mainboard off, AC shuts off the output .

6/APP Operation Guide

Download the APP

1.China: download “ZHINENGSHENGHUO” APP,Or scan the China QR code; Other regions: download “Smart Life” APP,Or scan the QR code for other regions.

China QR code
中国大陆地区

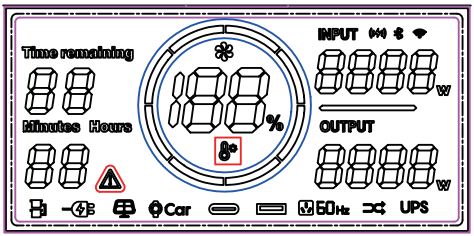
QR code for other regions
全球地区

2.Turn on the bluetooth of the phone and connect the phone to WIFI, then turn on the APP to search and add the Outdoor Power-X, click “ ⊕ ” to add. (Note: Connecting the power station for the first time needs to connect working WIFI to the app.)

3.After connecting successfully, Outdoor Power-X will show in the APP. When press the power button to turn on the power station, the APP will display that Outdoor Power-X is online, click it to enter the app operation interface.

4.Note: Press AC+DC at the same time for 3S to enter WiFi reset state

7/LCD Display



1.Temperature Alarm Indicator

This icon is on: Temperature alarm + fault code.
Please cool down the PT3650S before using.

2.Remaining Charge/Discharge Time

60Hz

3.AC Output Indicator

This icon and the output frequency are displayed when the AC button is turned on; blinks + fault code when the AC output is abnormal

4.USB Output Indicator

This icon is on when the USB button is turned on

5.blinks when the QC3.0 output is abnormal

6.blinks when the USB-C output is abnormal

7.DC Output Indicator

This icon is on when the DC button is turned on; blinks when the DC output is abnormal

8.Battery Percentage

9.Current Input Power

Shows the current input power of PT3650S in watts.

10.Current Output Power

Shows the current output power of PT3650S in watts. When all ports are closed, the current output power should be 0W.

11.WiFi Indicator

The icon is on when the WiFi connection successfully and blinks during the WiFi connection.

12.Fan Indicator

The icon is on when the fan is running, the icon is off when the fan stops running.

13.PV Charging Indicator

The icon is on when PV charging status, blinks when PV charging is abnormal.

14.AC Charging Indicator

The icon is on when AC charging status , and the battery power is low, this icon flashes to remind the need to charge.

15.Alarm + Fault Codes Indicator

Button Operation

(1)Long press the power button to power on the product, the LCD display will be lit and the main power indicator icon will appear on the LCD display. If do not turn on the output, this product will be turned off automatically 1 minute later. When the product is started, short press AC power button, DC power button or USB power button to turn on output. Long press to turn off.

8/Troubleshooting

Trouble	Description	Measures
Unable to recharge	(1)The AC power adapter and the product are not well connected with the mains supply. The charging indicator is not illuminated as well.	Please check whether the AC power adapter and the product are in good connection with the mains supply.
	(2)The AC power adapter and the product are well connected with the mains supply while the charging indicator is not illuminated.	The AC power adapter might be broken, please contact the after-sales service to deal with it.
	(3)The charging indicator is illuminated but the product can not be recharged.	This product might be broken,please contact the after-sales service to deal with it.
No output	(1)The devices are not well connected with this product cables.	Please connect again to make sure the devices and the product cables are well connected.
	(2)The output power button is not turned on.	Turn on the output power and then its indicator will be illuminated.
	(3)Product is in a low battery level.	Recharge the product.
	Exclude(1) (2) (3) mentioned above, this product is still no output.	This product might be broken, please contact after-sale service to deal with it.
Output interrupted with devices connected	(1)The starting power or the nominal power of some devices might exceed the actual power of this product.	Please choose a power station with higher power (watts).
	(2)If the devices are low-powered, the power station will be turn off automatically in few hours later.	Non-product issues.Press the button to start again, re-timer off.
	Exclude(1) (2) mentioned above, this product is still unable to output.	This product might be broken. please contact after-sales service.

Fault code	Fault description	Probable cause	Processing scheme
E1	The main controller and inverter communication is abnormal	1:Main control board problem 2: Inverter board problem 3:Communication harness problem	1: Check whether the inverter is normal (the short circuit switch is forced to start, the indicator light is on and there is AC output) 2: If the inverter board is normal, replace the main control board to determine whether the main control board is abnormal (commonly, the communication terminal is welded incorrectly) 3: If the main control board is replaced but still not normal, replace the inverter board. It may be the inverter board software error. Return the inverter to the factory for maintenance
E2	The main controller communicates abnormally with BMS	1: main control board problem 2: BMS problem 3: communication harness problem	Change the BMS to determine whether the BMS is abnormal
E3	The main controller communicates abnormally with MPPT		Check whether the main control and MPPT communication interface is normal
01	Busbar soft start failed	1: Inverter board damage 2: Or battery pack voltage is insufficient. 3: False alarm	If the restart fails, return to the factory for maintenance
02	Bus overvoltage	1: Inverter board damage 2: false alarm	Check the battery voltage and restart. If it cannot be restored, return to factory for maintenance
03	Busbar under voltage	1: Inverter board damage 2: false alarm	Check the battery voltage and restart. If it cannot be restored, return to factory for maintenance
05	Busbar short circuit	1: Inverter board damage 2: false alarm	If the restart fails, return to the factory for maintenance

Fault code	Fault description	Probable cause	Processing scheme
06	Inverter soft start failed	1: Inverter board damage 2: false alarm	If the restart fails, return to the factory for maintenance
07	Invert high voltage	1: Inverter board damage 2: false alarm	Check the battery voltage and restart. If it cannot be restored, return to the factory for maintenance
08	Inverter under voltage	1: Battery pack voltage is lower than the inverter low point 2: false alarm	Check the battery voltage and restart. If it cannot be restored, return to factory for maintenance
10	Output short circuit	The output load is short-circuited	Normal short circuit protection can be restored by reboot
22	Overload output	The output load is overloaded	Normal overload protection Restart and reload to recover
23	Overheating	The inverter is over temperature protected	Normal over-temperature protection, after the temperature is restored, the fault can be cleared
38	Overcurrent in charging		Normal overcurrent protection Restart can be restored by normal operation
55	The temperature sensor is open	1: The inverter temperature sensor is open	Check whether the sensor is loose and try to re-weld it or return it to the factory for repair
59	Overvoltage in charging		Normal charging overvoltage protection restart can be restored by normal operation
67	Voltage difference is too large	Cell imbalance or BMS abnormality	Replace the BMS or defective cell
70	BMS discharge overcurrent		Normal overcurrent protection Restart can be restored by normal operation
71	BMS charging overcurrent		Normal overcurrent protection Restart can be restored by normal operation
72	The BMS charging temperature is too high		Normal over-temperature protection and automatic recovery of normal temperature

Fault code	Fault description	Probable cause	Processing scheme
73	The BMS charging temperature is too low		Normal over-temperature protection and automatic recovery of normal temperature
74	The discharge temperature of BMS is too high		Normal over-temperature protection and automatic recovery of normal temperature
75	The discharge temperature of BMS is too low		Normal over-temperature protection and automatic recovery of normal temperature
76	The temperature difference of the cell is too large	Some cells are abnormal or BMS is abnormal	Replace the BMS or defective cell

9/Charging ways

When using or storing the product, please use the power charging cable to charge the product. The LCD indicator panel displays the current power and charging power, which is full when the battery power icon number is full.

AC input port is charged with AC power

Access to AC input port AC power cord (2000W Max), display light, display charging power long in time, AC output open, can be charged and discharging, (charging input current is greater than 15A to protect ac charging port, performance as key pop up), confirm the machine after no fault, plug and plug again charging can be restored.It also supports independent charging of charging piles.

XT60 input port for solar charging or vehicle charging

XT60 interface: use or solar photovoltaic panels for the battery charging input port, 20-150V, maximum support 20A input current, maximum 1000W. When using a solar photovoltaic panel alone, the icon appears automatically.

Tips: The actual charging efficiency of solar energy will vary greatly due to the weather, ambient temperature, sunlight intensity, the Angle of the solar panel facing sunlight and other factors, and the actual charging efficiency shall prevail.

10/MPPT tech

This product has a built-in MPPT (Maximum Power Point Tracking) technology, which can be efficiently charged through solar panels. The MPPT technology is designed for use in wind turbines and photovoltaic (PV) solar systems to maximize power extraction under all conditions. With MPPT technology, the product can compare the output voltage and battery voltage of the solar panel in real time, and then intelligently identify the optimal power output for charging to maximize the battery charging efficiency.

11/Regular charging technology

1.Support UPS

2.Intelligent inverter system

3.Support large power solar energy charging (1000W)

4.Support automatic frequency switching.When the local AC frequency is inconsistent with the product frequency, please plug in the local AC to charge, so that the product frequency will automatically switch to the local AC frequency.

12/UPS function

The product has the entry-level UPS function, which supports simultaneous charging and discharging. When the power grid suddenly cuts off, less than 15ms can automatically switch to the power supply mode of the product host.(This function is a non-professional level UPS function, does not support 0ms switching, do not receive equipment requiring high uninterrupted power supply, or confirm compatibility after multiple tests, such as data service and workstation).

11/Product parameters

Type:	PT3650S
Volume:	5222.4Wh（51.2V/102Ah）
Voltage regulation method:	Pure sine wave output
AC charging:	220V 2000W
Solar charging:	20-150V ⎓ 20A(1000W Max)
AC output*3:	220-240V，50Hz/60Hz Rated power：3600W Peak power：7200W
USB-A output*2 (QC3.0):	5V-12V（18W Max）
USB-C output:	5V/9V/12V/20V（ 100W Max）
DC car charging output port:	12V（ 10A Max）
UPS switching period:	≤15ms
Battery type:	lithium iron phosphate ion battery
Service life:	Cycle charge and discharge for more than 3500 times
Charging Temperature:	0℃~50℃
Discharge Temperature:	-10℃~60℃
Storage Temperature:	-10℃~40℃
security guard:	Temperature control, overload protection,short-circuit protection, etc
Size:	508*310*658mm
Weight:	about 66Kg

14/Common fault tips and handling methods

1.Do not supply electricity?

1.Make sure that the POWER power and output buttons are on.(If the ambient temperature is not in the range of -10℃ ~ 50℃, the power supply may not be used).

2.When connecting the power plug of the electrical equipment to the local machine, the plug must be plugged to the root. If there is any water or foreign matter on the charger connector or the charging input terminal, please remove it.

3.Checking the remaining power level on the display screen. If it shows less than 10% left, please charge the portable emergency power supply.

4.Please check whether your equipment voltage and power consumption are higher than the output power value limit of this product.

5.It will be activated protection function if the upper limit is exceeded, short circuit protection, overcharge protection, over current protection, discharge protection, temperature protection, overload protection, etc. The portable emergency power supply will automatically shut down. Please check whether the protection circuit is normal.

2.What is the capacity of the 5222.4Wh?

"Wh" represents the energy consumed.5222.4Wh means the product keeps 5222.4W (Watt) devices running for an hour. of course, a device that consumes 100W (watts) can run 52.22 hour.(This is a theoretical value, and the actual use time will be reduced by 10% - 15% due to heat loss and power conversion loss). Note that the actual available Wh is about 85% - 90% due to the discharge loss of 10%-15% during use.

15/Warranty Card

Model:	PT3650S
Date of Purchase:	
Warranty Period:	1 year from date of purchase
Name :	
Address :	
E-mail :	
Vendor Name:	

16/Contact Us

This product has a 12-MONTH warranty from the date of purchase.

Our friendly customer service is always standing by to help and we would make every effort to offer you a satisfying answer.

RoHS