

**CEA**<sup>®</sup>

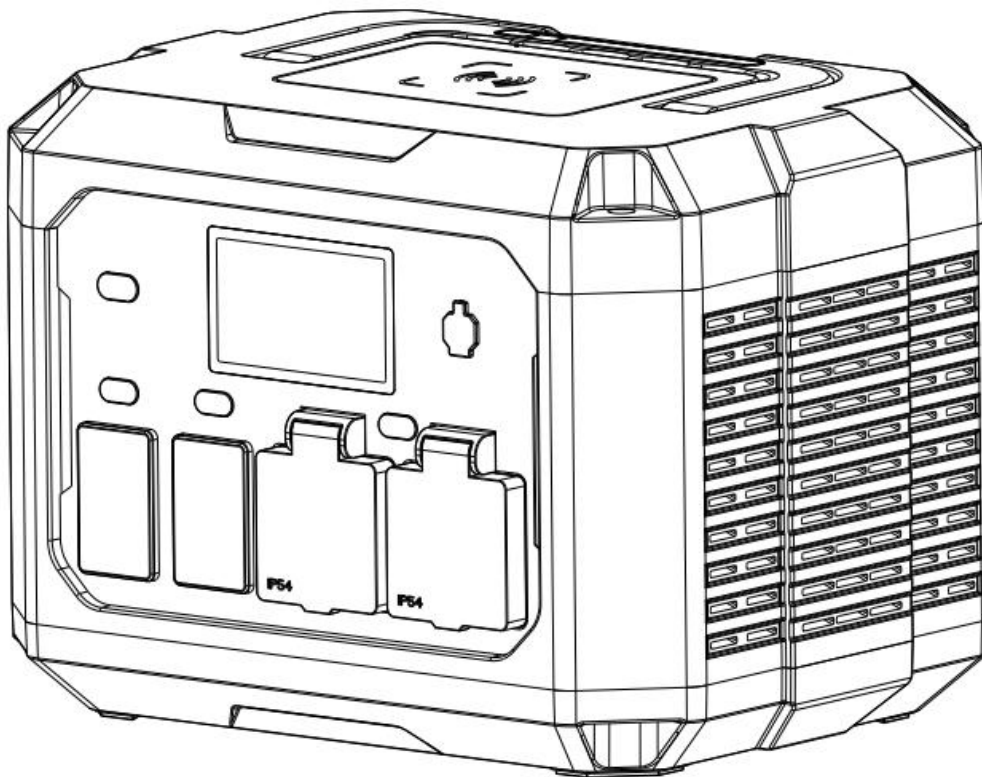
Portable energy storage power supply

EA500-480WH-1YE

Version A0

# Product use and technical specification

Please read the manual carefully and follow the instructions before using



**CEA ELECTRIC CO.,LTD**

# I. Product Application and Scope of Use

- Product name: portable energy storage power supply
- Model/Specification: EA500-480WH-1YE
- Product features:
  1. This product has long endurance;
  2. Using lithium iron phosphate battery core, safe and reliable, with lots of cycle times and long service life;
  3. Flexible charging, small and light, portable;
  4. MPPT technology, built-in SEC intelligent control technology, BMS intelligent battery management system and HH-STREAM fast charging technology, to ensure the safety of products and electrical equipment;
  5. Intelligent electricity management, electricity consumption is clear;
  6. Pure sine wave output, intelligent output;
  7. This product has charging over-voltage protection, discharge under-voltage protection, short circuit protection, discharge over-current protection, charging over-current protection, over-temperature protection.
- Purpose and scope of application:

This product can be used in family emergency, emergency rescue, outdoor live broadcast, open-air camping, street stall, night market and other scenes;

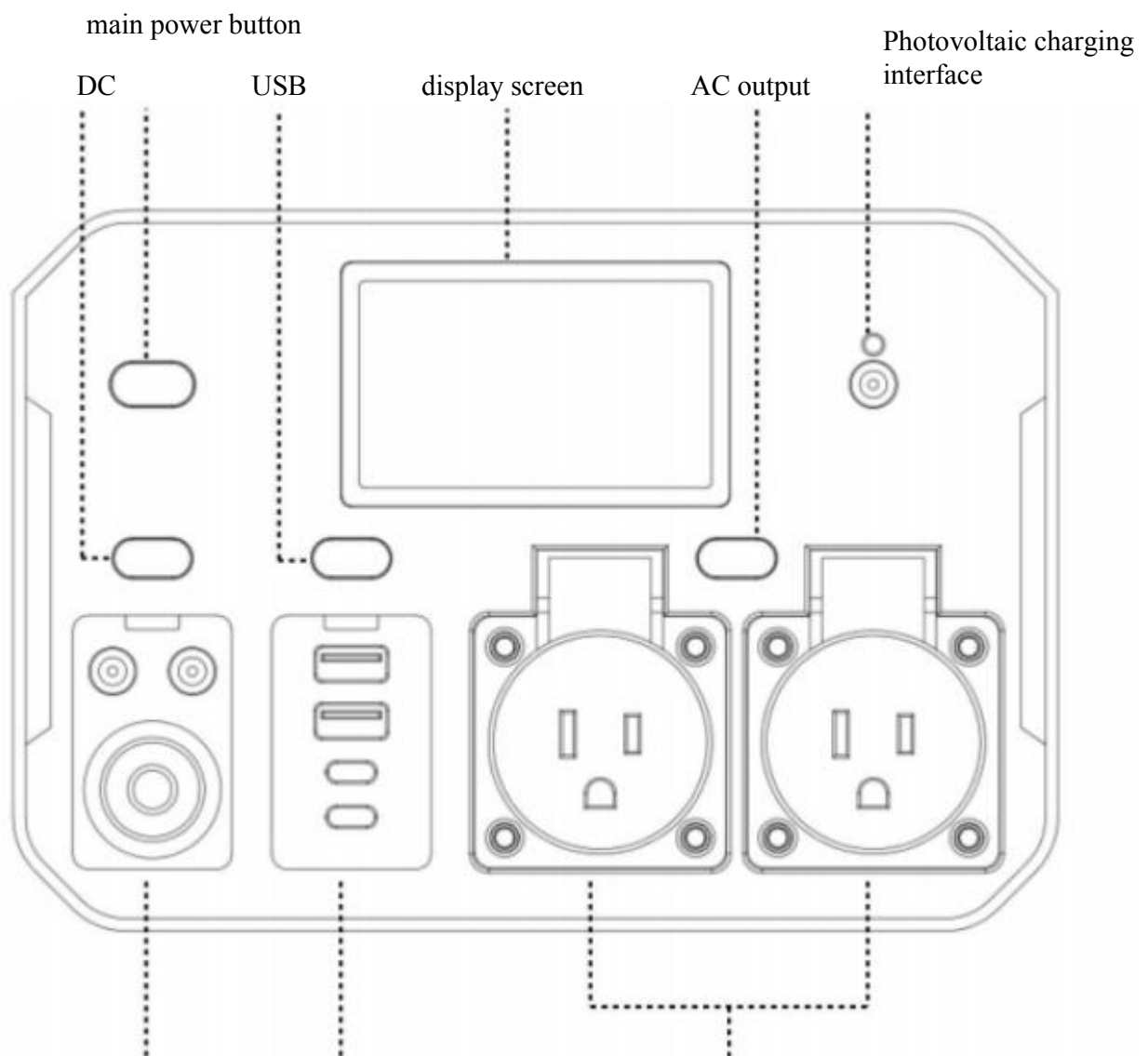
Suitable for TV, laptop, printer, mobile phone charging, unmanned aerial vehicles, outdoor lamp, digital camera, beauty lamp, outdoor acoustic equipment, projector, etc.

# II. Product introduction

## 1. Composition

Portable energy storage power supply is mainly composed of housing, inverter, display screen, main control panel and lithium iron phosphate battery

## 2. Function key description



DC output interface,  
car charging interface,  
5521

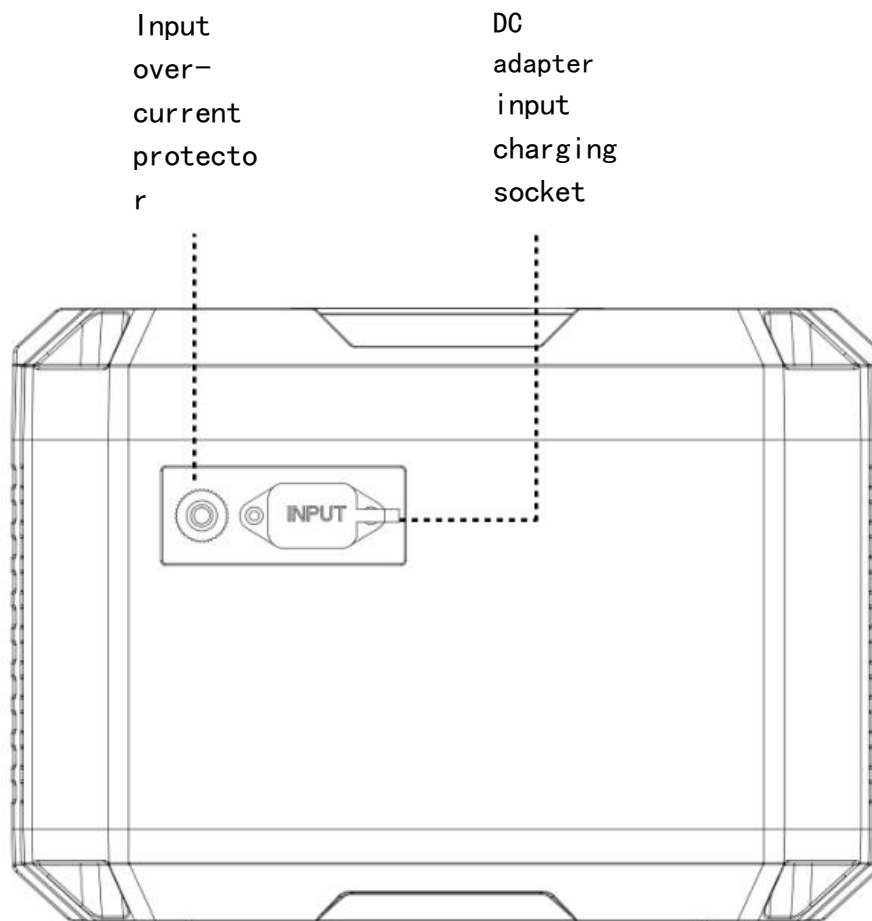
USB output interface,  
type-C

AC output socket

## II. Product introduction

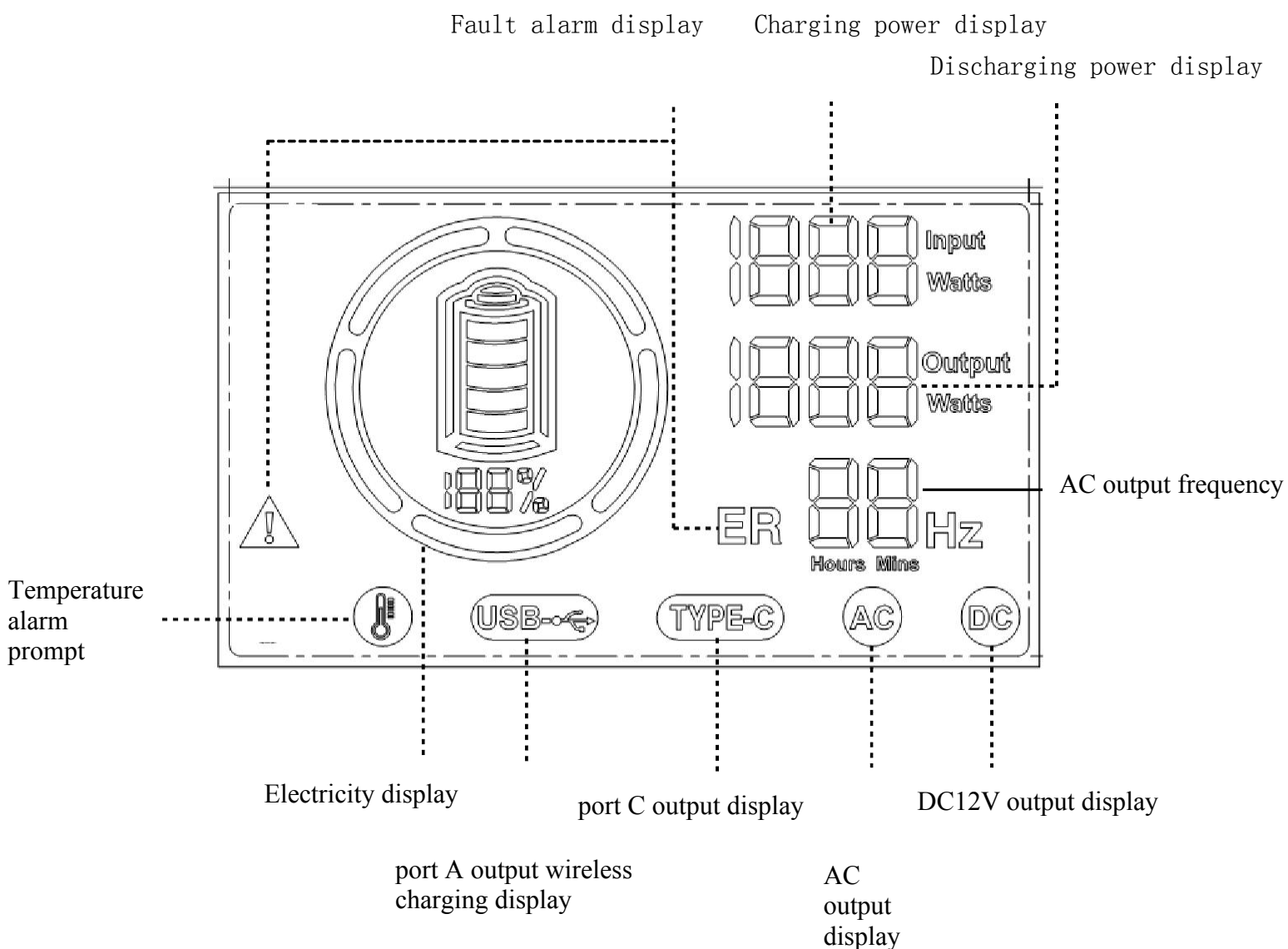
Remarks:

1. Press and hold LED light button + main power button for 3 seconds, display screen will reset and restart;
2. When the AC output is off, press and hold the main power button + AC button for 3 seconds to switch the frequency between 50 and 60HZ;
3. Long press the AC button to turn on or off the buzzer;
4. After the main power button is turned on, if other functions are not operated for three minutes, it will enter the sleep mode;
5. Press and hold the LED button for 10 seconds, and the display screen will not go out automatically;
6. Press and hold the AC button + LED button for 3 seconds to view the system version;



## II. Product introduction

### 3. Display screen function description:



### III. Technical parameter

Project		Parameter
Battery capacity		Lithium iron phosphate soft package 480WH
Product size		298*220*213mm
Product weight		7.5 kg
Use ambient temperature range		-10 ~ 40 °C
Storage temperature		-10 ~ 40 °C
Input	Solar charging	100W (11-23V 5A) support MPPT power tracking function
	Adapter charging	100W DC: 20V 5A
Output	Type-c1 output	Single discharge 30W 5V3A 9V3A 12V2.5A 15V2A Support PD/QC3.0/QC2.0/AFC/BC1.2/APPLE and some other fast charging protocols
	Type-c2 Output	Single discharge 30W 5V3A 9V3A 12V2.5A 15V2A Support PD/QC3.0/QC2.0/AFC/BC1.2/APPLE and some other fast charging protocols

	USB A1 Output	Independent 18W fast charging: supports QC3.0/QC2.0/AFC/BC1.2/A PPLE and some other fast charging protocols 5V3A
	USB A2 Output	Independent 18W fast charging: supports QC3.0/QC2.0/AFC/BC1.2/A PPLE and some other fast charging protocols 5V3A
	Car charging output	5521*2 1*Cigarette lighter, 12V10A
	AC Output	2X, 110V, 60Hz 500W (with cover) American standard socket
Charging time	Solar charging	About 5H
	Mains electricity charging	About 5H
Illumination	Lamp power	2W
	Flashlight power	2W supports SOS flash
Wireless charging		10W

# IV. Operation and use methods

## 1. Charging steps and methods:

1.1 Insert the output end of the adapter into the charging socket at the back of the device, and connect the other end of the adapter to the mains power to charge.

Adapter parameters: DC 20V 5A, and power is 100W;

1.2 DC charging products support input voltage range DC: 11-23V 5521 interface.

Check the input voltage range before charging and insert the DC input interface into the 5521 interface in the upper right corner of the front of the equipment to complete DC charging;

## 2. How to use the output with load:

2.1 AC load: check that the power range and voltage range of on-load electrical equipment should match with this equipment before use, insert the power plug of on-load products into the output socket of the equipment, turn on the main power button and AC output button in turn, and the display screen shows the output on-load power;

## 3. How to use DC/USB output:

Before use, check that the voltage and corresponding parameter range of the on-load electrical equipment should match with this equipment, insert the interface plug of the on-load product into the corresponding interface of the equipment, and turn on the main power button and DC/USB button in turn;

## 4. How to use lighting:

The lighting switch button is located at the handle, and the lighting is divided into ordinary lighting and flashlight lighting. The control sequence of the switch button is: lighting 1 bright/lighting 1 flash/lighting 2 bright/off;

## 5. How to use wireless charging:

Place the mobile phone in a position marked with a wireless charging area on the top of the device, and turn on the main power button and the USB button in turn;



# V. Fault code display

project	abbreviation	description
Er 01	DC OCP	DC output module (DC12V & cigarette lighter) and output over-current
Er 02	DC SCP	DC output module (DC12v & cigarette lighter) and output short circuit or wrongly inserted into charger
Er 03	AC Error	AC module fault
Er 04	PD Error	One way type-C1 or type-C2 interface failure
Er 05	PCBA OTP	PCBA temperature too high
Er 06	BAT UTP	Battery temperature too low
Er 07	USBA Error	USBA1 or USBA2 output fault
Er 08	Reserve	Reserve
Er 09	BAT OTP	Battery over-temperature alarm
Er 10	BAT OCP	Battery over-current; System overload
Er 11	BAT UVP	Battery under-voltage warning
Er 12	BAT LOW	Battery low voltage warning
Er 13	WP Error	Wireless power charging failure

# VI. Product maintenance

- 6.1 Newly purchased products shall be fully charged before use;
- 6.2 Regularly remove the dust and dirt at the cooling window;
- 6.3 Under the condition of long-term storage for more than 3 months, at least 50% of the electricity power shall be stored;
- 6.4 If stored for more than 6 months, please charge and discharge the product for 1-2 times in order to prolong the service life of the battery;

# VII. Warnings and notes

- 7.1 The voltage standards of different electrical appliances are different. Before use, carefully check whether the rated voltage range of the product is consistent with the voltage range of the portable power supply, otherwise it may lead to dangerous situations;
- 7.2 After the battery is discharged to the termination voltage, more discharge is called over discharge. Over discharge is easy to cause serious power loss of the battery, which greatly shortens its service life. Therefore, deep discharge should be avoided when the battery is used;
- 7.3 The product shall be kept away from fire source, high temperature environment, wet and rainy environment during use and placement, otherwise it may cause dangerous situations;
- 7.4 This product has a built-in high-voltage power supply, and non professionals are not allowed to disassemble it by themselves;
- 7.5 Please do not discard this product at will after its service life. Please recycle it according to local laws and regulations;
- 7.6 The product shall be protected from rain, water immersion and violent vibration during transportation;
- 7.7 It cannot be used at an altitude of more than 2000m;
- 7.8 Product AC is AC output, please do not insert your hand or hand-held metal conductor into AC socket;
- 7.9 Do not drop, squeeze or pierce the product, so as to avoid exposing the product to external pressure, resulting in short circuit in the internal circuit of the product and battery damage;
- 7.10 Please shut down in time after use (there is no-load power loss when the AC output is turned on, which will continue to consume battery power);

7.11 please select the solar panel according to the electrical parameters specified by the manufacturer. If the voltage is higher than the parameters, the product may be damaged;

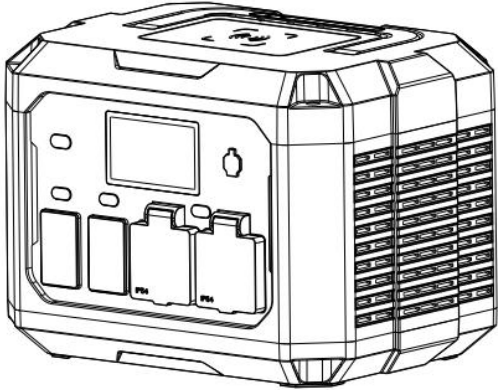



7.12 it is forbidden to short circuit the output port of the product;

7.13 This product and its accessories may contain some small parts. Please place the product and its accessories out of the reach of children. Children may inadvertently damage this product and its accessories, or swallow small parts to cause suffocation or other hazards. Children or people with limited intelligence should use this product with the accompaniment of their guardian;

7.14 Do not use this product in thunderstorm weather, which may cause product failure or electric shock;

7.15 If the product falls into water accidentally during use, it shall be placed in a safe open area and shall not be used again;

# VIII. Product packing list

<p>Portable energy storage power supply X 1</p>	<p>manual X 1</p>
	
<p>Power adapter X 1</p>	<p>DC car charging line X 1</p>
	

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