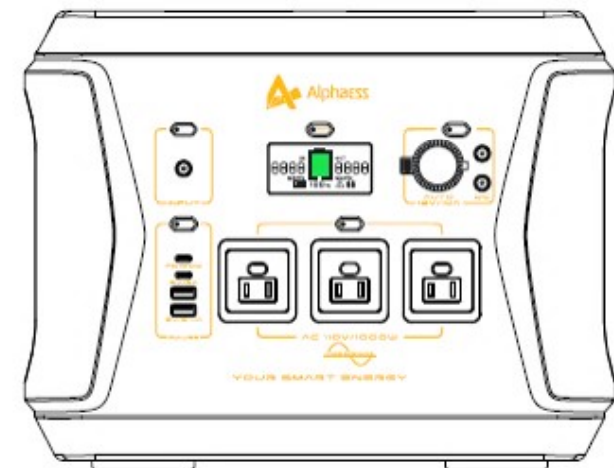


USER MANUAL

BlackBee 1000



Read me, know me, and I will work for you better.

If in need of service, feel free to contact us.

 www.alphaess-pps.com
 service.pps@alpha-ess.com
 @AlphaEnergyStorageSystem

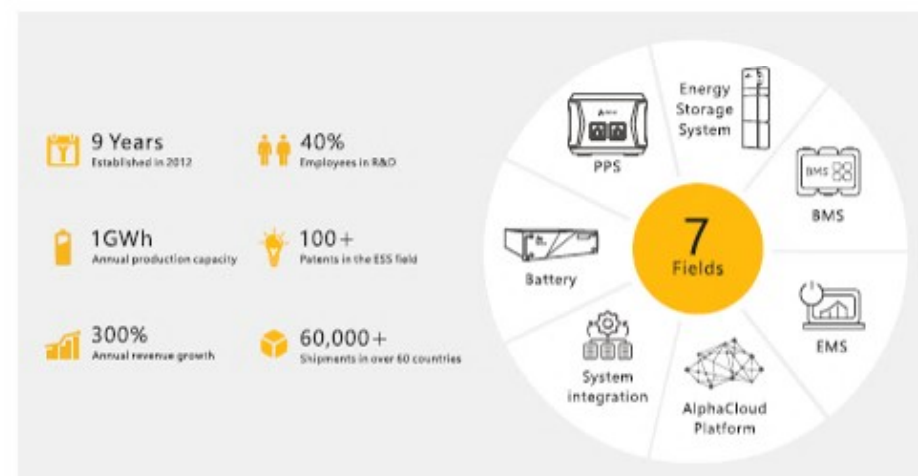
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ABOUT ALPHA-ESS

Thank you for purchasing an Alpha-ess AP1000 portable power station. Hope you have great time with it.

AlphaESS is one of the leading energy storage solution and service providers in the globe. The company specializes in the residential and commercial market, aiming to deliver the most cost-effective and fit-for-purpose solutions. AlphaESS has 10+ subsidiaries providing local services and 60,000+ systems actively running in over 60 countries, enabling millions of people to live with reliable, accessible and clean energy.



I WARNING & ATTENTION

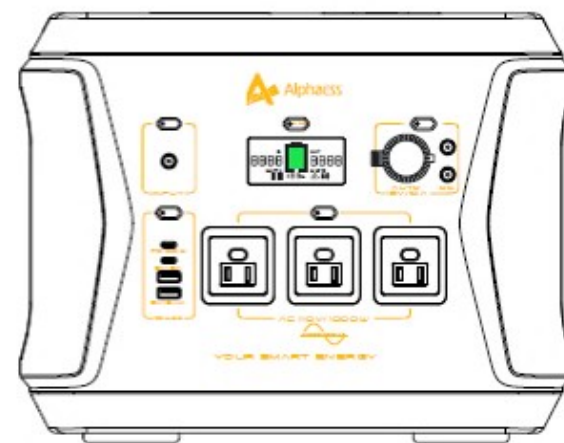
WARNING

- ◆ Do not put the unit in a high temperature environment or bake by a fire, or explode in the sun.
- ◆ Do not place the unit in water or rain outdoors.
- ◆ Do not place the unit on its side or upside down when in use or storage.
- ◆ Do not use the unit in an environment outside the scope of the use environment.
- ◆ Do not use the unit if the power cord is damaged or broken.
- ◆ Do not let children use the unit. Keep the unit away from children and pets.
- ◆ Do not recharge the unit via power supply systems that operate outside of 100-240V.

ATTENTION

- ◆ Keep the power vents open.
- ◆ Do not cover this product with objects, such as towels, clothing during use.
- ◆ When the product is not in use, please press the corresponding button to turn off the output, otherwise the internal circuits of the DC and AC parts are still in the power consumption state.
- ◆ Use the original or certified charger and cables.
- ◆ Non-technical professionals should not disassemble the unit.
- ◆ Not permitted on aircrafts.
- ◆ To preserve the battery lifespan, please use and recharge at least every 3 months.

II PACKAGE LIST



Power Station*1



USB-C cable
(1M)*1



AC adapter with
power cable*1



Car charger
cable 12V*1



Warranty Card*1



User manual*1

III SPECIFICATION

BATTERY

Cell Chemistry	Lithium Ion
Energy Storage Capacity	1036.8Wh
Single Cell Equivalent Capacity	28,800 mAh @ 3.6V
Lifecycles	≥1000 cycles to 80% with full charge/discharge
Shelf-life	Up to 6 months after full charge; re-charge every 3 months
Wattage Compatibility	1000W Continuous, 2000W Peak Surge
Battery Management System (BMS)	Input undervoltage protection, output over voltage protection, overload protection, short circuit protection, overtemperature protection

INPUT PORTS

DC Charging Port (5525)	12V-24V, 180W MAX, AC adapter, Car charger(included)
USB-C PD port	One (1) USB-C port, PD 100W

OUTPUT PORTS

USB Ports (4)	One (1) USB-C port, PD 100W (5V/3A; 9V/3A; 12V/3A; 15V/3A, 20V/5A) One (1) USB-C port, QC 3.0 Two (2) USB-A port (5V, 2.4A each)
DC Port (5525) (2)	12V/10A
Car Port (1)	12V/10A
AC Inverter (3)	110VAC, 60Hz, Pure Sine Wave 1000W continuous, 2000W Surge Peak
Wireless charging (2)	10W*2

Note	Try to keep the receiver in the best position during charging
------	---

GENERAL INFO

	LCD display - info relates watt input/output, battery status, Warning symbol display
Dimensions (LxWxH)	13.5*10*10.5 inch
Weight	≈25lb (11.35kg)
Recharging temperature	32°-104° F (0°-40° C)
Operating temperature	14°-104° F (-10°-40° C)
AC Adapter (Included)	100-240V / 60Hz; 180W (MAX)
Certifications	FCC, CE, RoHS, UN38.3, MSDS
Warranty	24 months

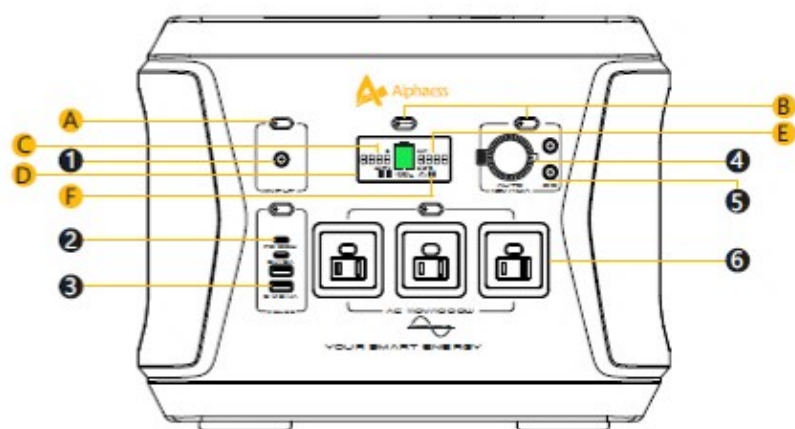
LED LIGHTING FUNCTION

Output current	200±50mA
Output power	≤3W
Color temperature	5700-6700K
Brightness level 1	200±100LUX
Brightness level 2	800±150LUX
Brightness level 3	1400±200LUX

DIMMING FUNCTION

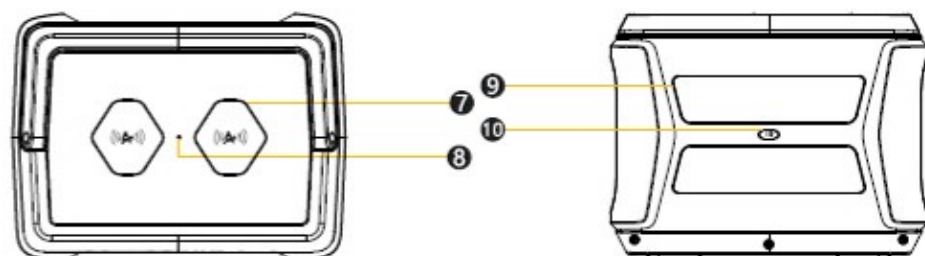
Brightness switch	Short press the button, brightness level 1->level 2->level 3->turn off (cycle in turn)
SOS MODE	Double-press the button to turn on. Short-press the button to turn off.

IV PRODUCT TOUR & FUNCTIONS



- A. Recharge status indicator
- B. Switch button
- C. Input power display
- D. Info display
- E. Output power display
- F. System temperature status display

- 1. Input port (DC 5525)
- 2. USB-C port (output/input)
- 3. USB-A port (output)
- 4. Car port (output)
- 5. DC 5525 port (output)
- 6. AC output port



- 7. Wireless charging*2
- 8. Wireless charging indicator

- 9. LED lights*2
(Brightness*3, SOS mode)
- 10. Light Switch button

V CHARGE & RECHARGE

WARNING SYMBOL DISPLAY

IF YOU OPERATE THE POWER STATION IN IMPROPER WAY, THERE WILL BE APPEARING SYMBOLS ON LCD SCREEN.

When the input voltage of recharging is too high, the symbol will display and stop charging. When the input voltage is restored to normal, the symbol will not display and normal charging will be resumed.



When the discharge output of the product appears over current short circuit, the output will be shut down immediately, and the symbol flashes 5 seconds prompt.



This symbol flashes to indicate that the product is in a low power state (less than 3%). Solution: Please kindly charge it to 100% and then use it.



This symbol flashes to indicate the unit is in cryogenic protection and the protection will be released if the icon does not display.



This symbol flashes to indicate the unit is in overtemperature protection and the protection will be released if the icon does not display.



BATTERY SYMBOL DISPLAY



0%-25%



25%-50%



50%-75%



75%-100%

HOW TO RECHARGE

RECHARGE YOUR AP1000 NOW

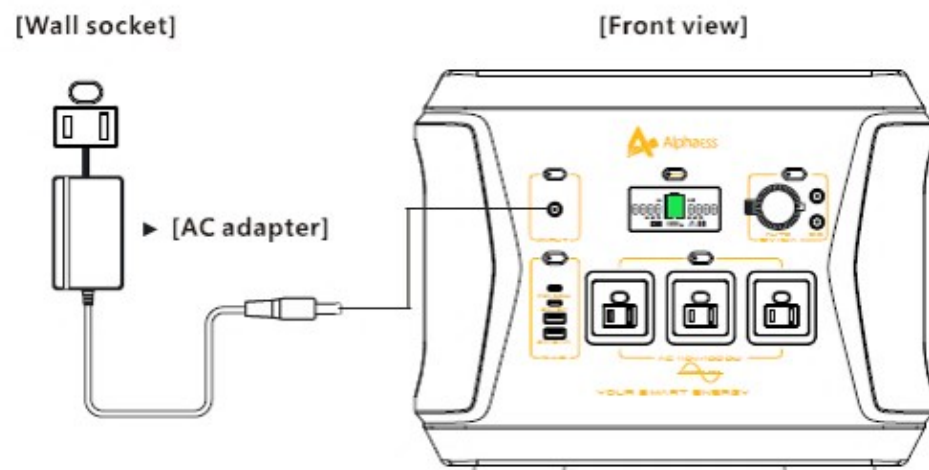
NOTE:

- 1). The input indicator will be flashing when AP1000 is being recharged.
- 2). Once fully recharged, the battery display indicator will read 100%.
- 3). We recommend to recharge the unit every 3 months.

1. RECHARGING FROM THE WALL WITH AC ADAPTER

Plug the AC adapter (included) to household outlet, and connect the other end to AP1000 (input port).

The AP1000 can be fully recharged from zero in about 7-8 hours by the AC adapter.

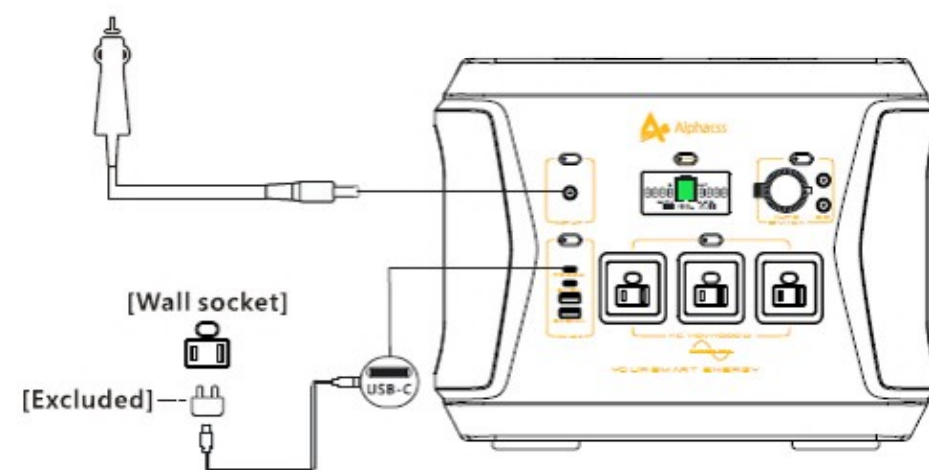


2. RECHARGING FROM A USB-C CHARGER

- 1). Using the USB-C cable(included), plug it into the 100W USB-C Power delivery port and attach into a compatible third-party USB-C charger (not included).
- 2). Plug your charger into a household wall outlet.

3. RECHARGING FROM AUTO CHARGER

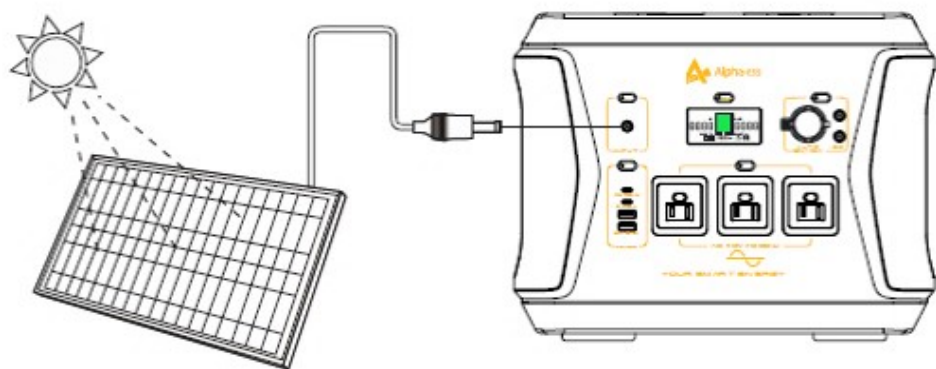
Using the car charger cable(included), plug the charger to your Auto port and connect the other end to the input port of AP1000.



4. RECHARGING FROM SOLAR PANEL

IMPORTANT NOTICE: Please notice that the AP1000 input voltage is 12-24V, and the input port is DC5525.

- 1). Position your solar panel where it can get as much direct sunlight as possible.
- 2). Insert the solar panel plug into input port. You will know the AP1000 is recharging when the indicator is flashing. The AP1000 is fully recharged when the battery display indicator reads 100%.
- 3). Some solar panels are chainable to provide more power to your AP1000 and reduce solar recharge time.



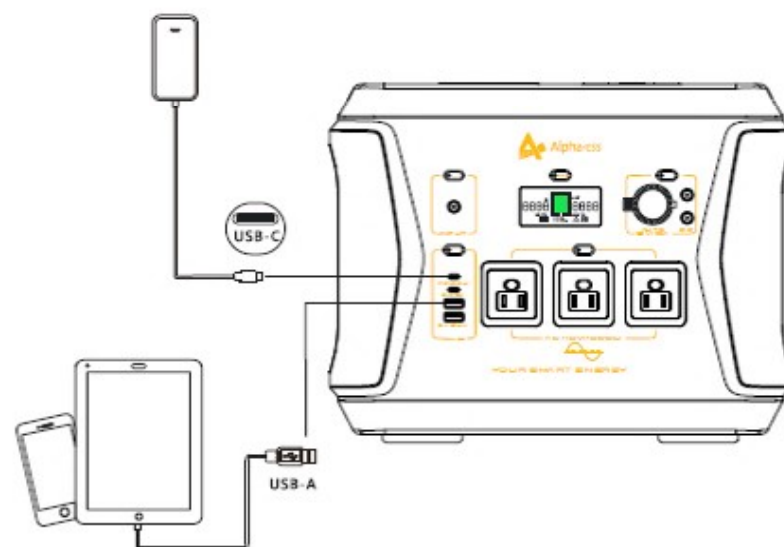
WHAT CAN IT POWER

IMPORTANT NOTICE

Press the AC or DC power button located on front to activate its power function. When not using the AC or DC ports, make sure to turn the power off to conserve power.

1. OUTPUT FROM USB-A, USB-C PORTS

SWITCH ON: Press the USB button to activate power to the USB ports, connect the standard USB cable of the device to the USB interface of this product. The USB of this device will provide power for the device.

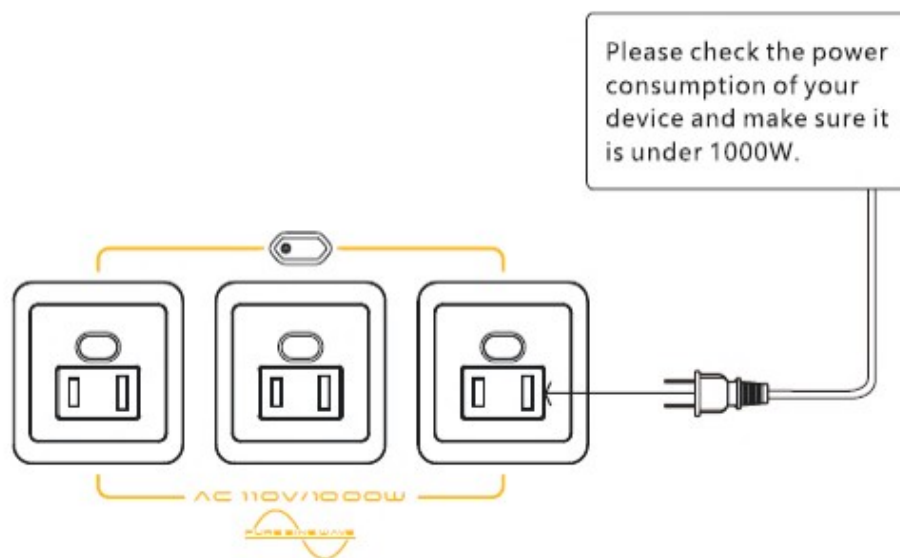


2. OUTPUT FROM AC PORTS

SWITCH ON: Press the AC button to activate power to the AC devices, connect the plug of the power cord of the device to the AC output of the power station.

IMPORTANT NOTICE

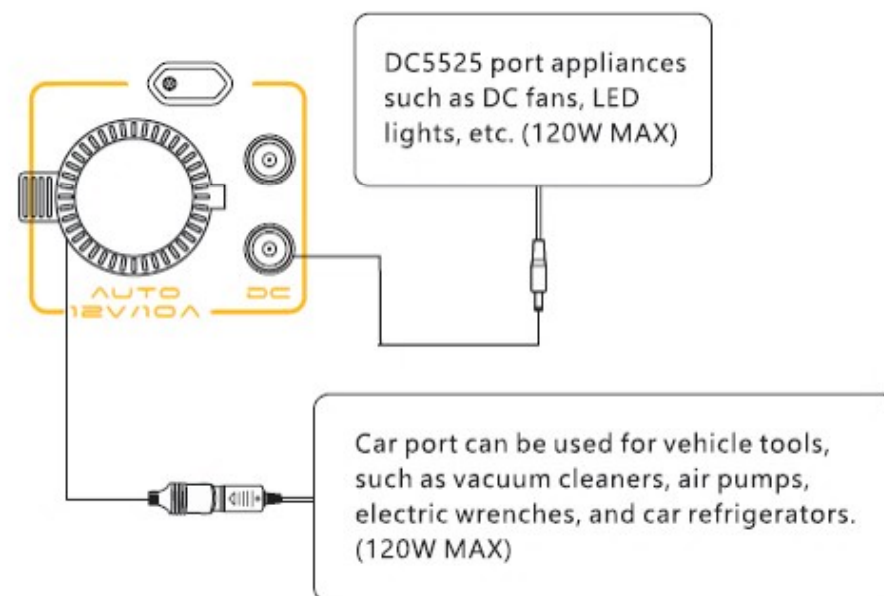
If the AC output is shorted or the load's electrical power exceeds the AC output power of the product. The power station will trigger a short circuit protection or overload protection. To eliminate the short circuit, disconnect the attached device, and then restart the power station to restore AC output.



3. OUTPUT FROM DC PORTS

SWITCH ON: Press the DC button to activate power to the DC devices ports, before connecting the device to the DC output of the power station.

Make sure the interface of DC 12V device is a DC5525 male connector, with an outer diameter power plug of 5.5mm. As per the specifications, the DC 5525 port can take in devices that are 12V, 10A.



4. WIRELESS CHARGING

SWITCH ON: Double press the INFO button to turn on the wireless charging, then put your devices (with wireless charging function) on the appointed area.

BATTERY MANAGEMENT SYSTEM(BMS)

It is an electronic system that manages the charging of battery to ensure safety, including input under voltage protection, output over voltage protection, overload protection, short circuit protection, over current protection, over temperature protection.

SHORT CIRCUIT / OVERLOAD PROTECTION

If the AC output has a short circuit or the output is overloaded (i.e. the load is > 1000W), the unit will turn off the AC output for protection, please troubleshoot and press the AC output button again to achieve AC output. Some electrical equipment, such as air conditioner, hair dryer may require a peak power to start-up or may occur during its usage.

Though the peak power time may be short, this peak power may exceed 1000W or higher, which will result in the unit's overpower protection mode. Such a device is not compatible with the unit. Press the AC button of the unit to reset and activate the AC output.

VI USE TIPS



FIRST USE

It will take few seconds to activate when the first time AP1000 is connected with a power source device (AC adapter or solar panel) .



ENERGY CONSUMPTION TIP

When power is converted via the inverter, there is some energy lost.



LOW LOAD

For power saving, AP1000 will be shut down automatically in 12 hours if the total output is less than 10W.



AN OPERATING PRINCIPLE

The fan will run when cell temperature is higher than 113°F or AC output power is more than 400W, and stop when the cell temperature is lower than 104°F and the AC output power is less than 400W.



BATTERY RECYCLE

Always return used electronics, batteries, and packaging materials to dedicated collection points.

VII TROUBLESHOOTING

1. PROBLEM WITH INPUT (AC/DC)

- * Make sure the ORIGINAL AC/DC charger cables are connected firmly and correctly.
- * Check if the charging indicator is ON.
- * Check if the LCD shows INPUT WATTS.
- * Check if the power station can be recharged via the DC/AC charger cables normally.

2. PROBLEM WITH SOLAR CHARGING

- * Make sure the ORIGINAL cable is connected firmly and correctly.
- * Use a SOFT cloth to remove the dust or dirt on the solar panel.
- * Make sure there is NO shadow cast on the panel.
- * Test it under midday STRONG sunlight.
- * Try to unplug and plug for several times.

Note:

Test if the power station can be recharged via the AC charger normally, if yes, please check if something is wrong with the solar panel.

3. PROBLEM WITH OUTPUT(AC/DC/USB/LCD SCREEN)

- * Try RESETTING the power station by holding the INFO BUTTON for 15 seconds.
- * Recharge the power station to 100% and test it again.

VIII FAQ

Q1: What devices can AP1000 power?

A: Please note that the total output of AP1000 is 1000W, which means it can power any devices under 1000W.

Q2: Can the AP1000 be recharged while using?

A: Yes, AP1000 supports pass-through charging, which is not suggested since it may cause damage to battery life.

Q3: Can the AP1000 be used as UPS?

A: No, the AP1000 can't be used as UPS, need to press the power button to turn on the AC/USB /DC output, so it can't be turned on and off automatically.

Q4: How to know the working time for my device?

A: Working time = $1036\text{Wh} \times 0.9$ / operating power of your device.

Q5: Does the AP1000 include a built-in MPPT controller?

A: All Alpha-ess power stations have built-in MPPT controller.

Q6: How do I know the AP1000 is recharged?

A: Check if the LCD Battery Display shows the input watts.

Q7: Can I keep this charged up by keeping it plugged in all the time in case of power outage?

A: Yes, you can keep the battery plugged in to charge.

Q8: Can I use it indoors?

A: Yes, the AP1000 is safe to use indoors.

Q9: Why it takes so long to recharge the power station from 99% to 100%?

A: When the power station is charged at low power, the charging power is the largest. With the increase of the power, the internal battery pack voltage of the energy storage gradually increases to the charging limit voltage and then enters the trickle charging stage with a lower charging rate, which can protect the battery from high current impact to damage the internal structure, so the charging speed will slow down.

Q10: Can I find any video about recharging the AP1000?

A: Please kindly check the video in the following instructions:

1. Go to www.alphaess-pps.com
2. Click the "Support", and then choose "FAQ"
3. Check "Product Video"

Q11: Are the output ports regulated, and if so, which ones are regulated?

A: All output ports of Alpha-ess power stations are regulated. The voltage won't change when the battery power decreases.

Q12: Can the battery inside be replaceable?

A: No, the batteries inside of Alpha-ess power station are not replaceable.

More questions, please kindly find the answer in the following way:

1. Go to www.alphaess-pps.com
2. Click the "Support", and then choose "FAQ"

IX WARRANTY

LIMITED WARRANTY

Alpha-ess warrants to the original consumer purchaser that the Alpha-ess 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 Alpha-ess' 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 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.

REMEDY

Alpha-ess will repair or replace (at Alpha-ess' option) any Alpha-ess product that fails to operate during the applicable warranty period due to defect in workmanship or material. If a valid claim is made during the applicable period, Alpha-ess, at its option, will either (1) replace the product, or (2) exchange the product with a product that is of equal value. A replacement product assumes the remaining warranty of the original product or 60 days from the date of replacement, whichever is greater. Customer is responsible for the return shipping costs.

LIMITED TO ORIGINAL CONSUMER BUYER

The warranty on Alpha-ess' product is limited to the original consumer purchaser.

EXCLUSIONS

Alpha-ess' warranty does not apply to (I) any product that is misused, abused, modified, damaged by accident, or used for anything other than normal consumer use as authorized in Alpha-ess' current product literature, or (II) any product purchased through an online auction house. Alpha-ess' 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.

X PHYSICS TECHNICAL TERM REFERENCE

Voltage (U)	Unit Volt (V)
Current (I)	Unit Ampere (A)
Power (P)	Unit Watt (W)-- Power = Voltage*Current (P=UI)
Capacity	Unit Ampere hour (Ah) / Milliampere hour (mAh) ---1Ah = 1000mAh Electric energy unit watt-hour (Wh) battery energy = nominal capacity*nominal voltage DC output (size/direction does not change with time) AC output (alternating current)(current whose size and direction change periodically)

PLEASE SEND BACK INFORMATION REQUIRED BELOW, WHICH WILL BE HELPFUL FOR US TO HAVE A FAST SOLUTION FOR YOUR ISSUE.

CUSTOMER SUPPORT: service.pps@alpha-ess.com

WARRANTY

CONTACT INFO			
Email address		Buyer name	
ORDER DETAILS			
Order ID			
Serial number			
Issue details			
Upload proof of purchase & photos of the device itself with Alpha-ESS logo showing.			

FCC Statement

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

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

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

CE NB Statement

Herby, Dongguan DBK Energy Technology Co., Ltd declares that this Portable Power Station, BlackBee 1000 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. In accordance with Article 10(2) and Article 10(10), this product allowed to be used in all EU member states.

Use the Portable Power Station in the environment with the temperature between 0℃ and 40℃ ,

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

The product shall only be connected to a USB interface of version USB2.0

Adapter shall be installed near the equipment and shall be easily accessible.

The plug considered as disconnect device of adapter

Adapter Model: HKA18019095-6C

Input: AC 100-240 V, 50/60 Hz, 2.5 A Output: DC 19.0 V, 9.47 A, 179.93 W

Input: 12-24VDC, 10A Max

Operation Frequency: 116.81kHz - 147.10kHz

Manufacturer: Dongguan DBK Energy Technology Co., Ltd

Address: No. 252, Zhangmutou Section, Dongshen Rd., Zhangmutou Town, Dongguan City, Guangdong Province, P.R. China

E-mail: Daniel.Kang@dbk.com.cn

DECLARATION OF CONFORMITY

I hereby declare that the product

Product:

Product Name: Portable Power Station
Model: BlackBee 1000, AP1000
Brand Name: AlphaESS
Hardware Version: V1.2
Software Version: V1.1

Accessories:

Adapter information:

Model: HKA18019095-6C
Input: AC 100-240 V, 50/60 Hz, 2.5 A Output: DC 19.0 V, 9.47 A, 179.93 W
Input: 12-24VDC, 10A Max
Manufacturer: Shenzhen Huntkey Electric Co. Ltd.
(Name of product, type or model, batch or serial number)

satisfies all the technical regulations applicable to the product within the scope of Council Directives 2014/53/EU, 2014/35/EU and 2014/30/EU and declare that the same application has not been lodged with any other notified body.

EN IEC 62368-1:2020+A11:2020
ETSI EN 301 489-1 V2.2.3 (2019-11)
Draft ETSI EN 301 489-3 V2.1.2 (2021-03)
ETSI EN 303 417 V1.1.1 (2017-09)
EN 62311:2020

(Title(s) of regulations, standards, etc.)

All essential radio test suites have been carried out.

NOTIFIED BODY: MCOM Labs Inc

Address:

575 Boulder Court,
Pleasanton, California 94566
USA
Identification Number: 2280

MANUFACTURER or AUTHORISED REPRESENTATIVE:

Address:

Dongguan DBK Energy Technology Co., Ltd
No. 252, Zhangmutou Section, Dongshen Rd., Zhangmutou Town, Dongguan City, Guangdong Province, P.R. China

This declaration is issued under the sole responsibility of the manufacturer and, if applicable, his authorised representative.

Point of contact:

Daniel Kang, 86-755-61861886/86-755-61886160
(Name, telephone and fax number)

2022-05-25

(Place, date of issue)



(Signature)

Daniel Kang, Sales Director

(Name and title in block letters)