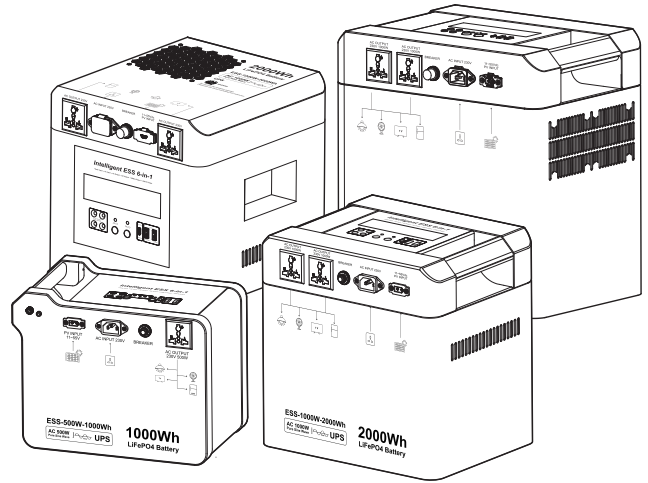
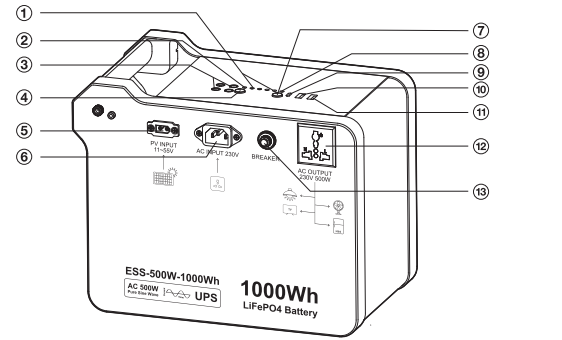


ESS All-in-One Portable Power Station User Manual



Thank you for purchasing ESS All-in-One Portable Power Station. Before operating your new device, please read this user's manual carefully. This manual will inform you the specifications and proper operation procedures, safety warnings and other useful information. Please keep this manual for easy reference.

Model No.:
ESS-500W-1000Wh

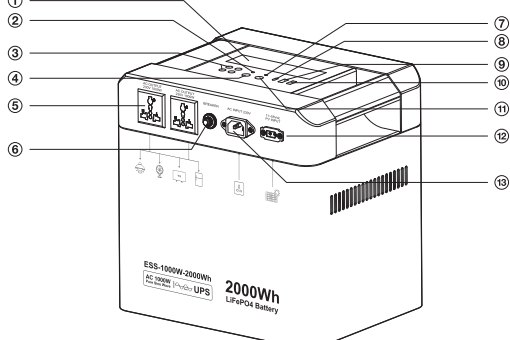


① Battery Level Indicator	⑧ DC Work Indicator
② AC Work Indicator	⑨ USB-C Output
③ DC Output x 4	⑩ USB-A Output 1
④ AC Power Button	⑪ USB-A Output 2
⑤ PV Input	⑫ AC Output
⑥ AC Input	⑬ Breaker
⑦ DC Power Button	

Specifications :

Capacity	3.2V / 314Ah (1004.8Wh)
Battery Type	LiFePO4 Battery
AC Input	90V-280V , 45-65Hz, 500W Max.
PV Input	11V-55V, 10A Max, 300W Max.
AC Output	230V, 50Hz, 500W Max.
DC Output x4	12V=4A, Total 48W Max.
USB-C Output	PD 20W Max. (5V=3A, 9V=2A, 12V=1.67A)
USB-A Output 1	QC 20W Max. (5V=3A, 9V=2A, 12V=1.67A)
USB-A Output 2	5V=3A
Weight	10.5kg
Size	304 x 180 x 245mm
Discharging Temperature	-10°C to 50°C (Optimum 20°C to 30°C)
Charging/Storage Temperature	0°C to 45°C (Optimum 20°C to 30°C)

Model No.:
ESS-1000W-2000Wh

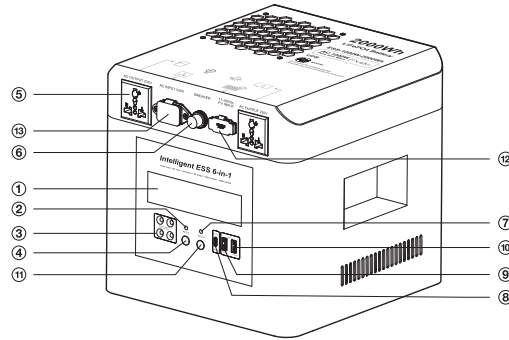


① LCD Display	⑧ USB-C Output
② AC Work Indicator	⑨ USB-A Output 1
③ DC Output x 4	⑩ USB-A Output 2
④ AC Power Button	⑪ DC Power Button
⑤ AC Output x 2	⑫ PV Input
⑥ Breaker	⑬ AC Input
⑦ DC Work Indicator	

Specifications :

Capacity	3.2V / 628Ah (2009.6Wh)
Battery Type	LiFePO4 Battery
AC Input	90V-280V, 45-65Hz, 800W Max.
PV Input	11V-55V, 15A Max, 550W Max.
AC Output x2	230V, 50Hz, Total 1000W Max.
DC Output x4	12V=4A, Total 48W Max.
USB-C Output	PD 20W Max. (5V=3A, 9V=2A, 12V=1.67A)
USB-A Output 1	QC 20W Max. (5V=3A, 9V=2A, 12V=1.67A)
USB-A Output 2	15W Max. (5V=3A)
Weight	19.5kg
Size	304 x 240 x 304mm
Discharging Temperature	-10°C to 50°C (Optimum 20°C to 30°C)
Charging/Storage Temperature	0°C to 45°C (Optimum 20°C to 30°C)

Model No.:
ESS-1000W-2000Wh-B

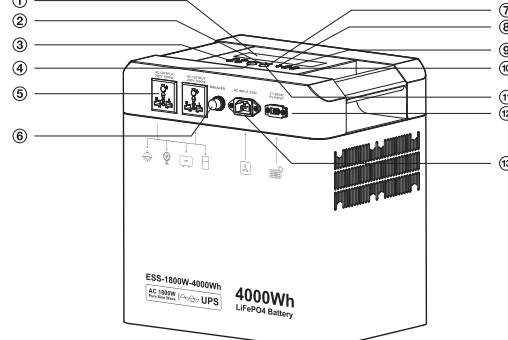


① LCD Display	⑧ USB-C Output
② AC Work Indicator	⑨ USB-A Output 1
③ DC Output x 4	⑩ USB-A Output 2
④ AC Power Button	⑪ DC Power Button
⑤ AC Output x 2	⑫ PV Input
⑥ Breaker	⑬ AC Input
⑦ DC Work Indicator	

Specifications :

Capacity	3.2V / 628Ah (2009.6Wh)
Battery Type	LiFePO4 Battery
AC Input	90V-280V, 45-65Hz, 800W Max.
PV Input	11V-55V, 15A Max, 550W Max.
AC Output x2	230V, 50Hz, Total 1000W Max.
DC Output x4	12V=4A, Total 48W Max.
USB-C Output	PD 20W Max. (5V=3A, 9V=2A, 12V=1.67A)
USB-A Output 1	QC 20W Max. (5V=3A, 9V=2A, 12V=1.67A)
USB-A Output 2	15W Max. (5V=3A)
Weight	18.5kg
Size	260 x 267 x 260mm
Discharging Temperature	-10°C to 50°C (Optimum 20°C to 30°C)
Charging/Storage Temperature	0°C to 45°C (Optimum 20°C to 30°C)

Model No.:
ESS-1800W-4000Wh



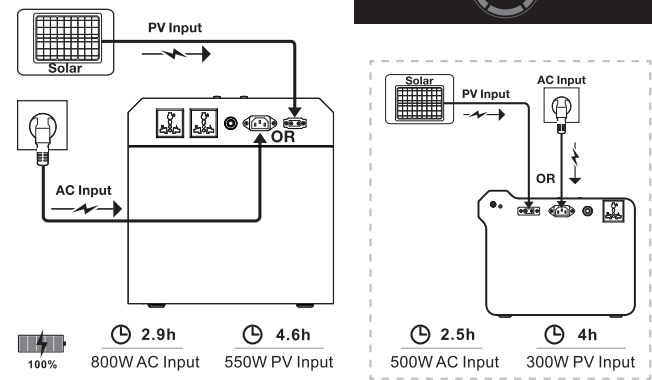
① LCD Display	⑧ USB-C Output
② AC Work Indicator	⑨ USB-A Output 1
③ DC Output x 4	⑩ USB-A Output 2
④ AC Power Button	⑪ DC Power Button
⑤ AC Output x 2	⑫ PV Input
⑥ Breaker	⑬ AC Input
⑦ DC Work Indicator	

Specifications :

Capacity	3.2V / 1256Ah (4019.2Wh)
Battery Type	LiFePO4 Battery
AC Input	90V-280V, 45-65Hz, 1500W Max.
PV Input	18-110V, 15A Max, (1200W Max.)
AC Output x2	230V, 50Hz, Total 1800W Max.
DC Output x4	12V=10A, Total 120W Max.
USB-C Output	PD 20W Max. (5V=3A, 9V=2A, 12V=1.67A)
USB-A Output 1	QC 20W Max. (5V=3A, 9V=2A, 12V=1.67A)
USB-A Output 2	15W Max. (5V=3A)
Weight	32kg
Size	336 x 239 x 355mm
Discharging Temperature	-10°C to 50°C (Optimum 20°C to 30°C)
Charging/Storage Temperature	0°C to 45°C (Optimum 20°C to 30°C)

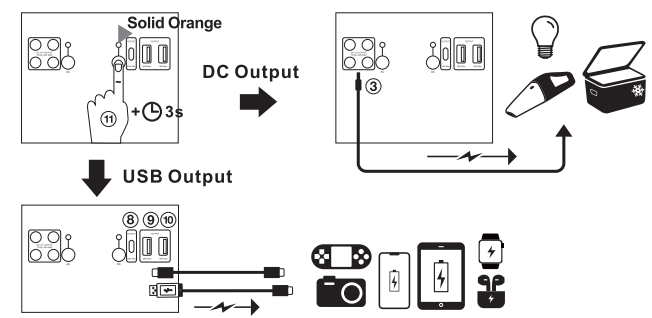
Charge the Power Station:

During charging, the real-time input power and battery level will show on the LCD Display:



Remarks:
Solar Panel is NOT included.
Only use original and qualified charging cable to recharge.
Model ESS-500W-1000Wh, refer to Fig. 1.

Charge DC Electronic Devices:

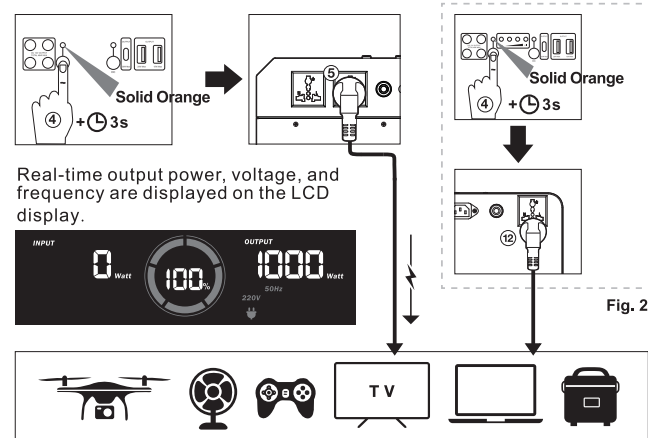


Real-time output power is displayed on the LCD Display.



Caution:
DC Cable or USB Cable is not included.
Only use qualified cable to perform the charging.
Press and hold on DC Power Button for 3 seconds to turn off DC Output after use every time.

Supply AC Power for Electronics:



Remarks:
Model ESS-500W-1000Wh, refer to Fig. 2.

Caution:
Do not operate the unit above the specified power rates.
Press and hold on AC Power Button for 3 seconds to turn off AC Output after use every time.

****Note:**
If the AC / DC Work Indicator is flashing, the unit is in an error state. Please stop using it immediately, and check the Error Code on the LCD Display.

Error Code:

In case of overload or other emergencies, ESS-1000W-2000Wh safety protection system will switch into protection mode automatically with displaying the corresponding code. In such case, please follow the prompts:

CODE	CAUSE	ACTION
001	Low battery voltage	Recharge the unit
002	Battery over voltage	Stop Charging
003	Low temperature protection	Move into the circumstance over -10°C
004	Battery overheat protection	Stop use and cool down for 30 minutes
005	DC output over load	Remove the load of DC Outlet
010	DC output overheating	Stop using DC power and cool down for 30 minutes
018	Mains undervoltage	Stop AC input until voltage returns to normal
019	Mains over voltage	Stop AC input until voltage returns to normal
020	PV over voltage	Stop charging until the PV voltage is in the range of 11-55V
021	PV over current	Stop PV charging
031	Inverter fault	Stop AC input and output
041	PV overheat protection	Stop PV charging and cool down for 30 minutes
049	PV undervoltage	Stop charging until the PV voltage is in the range of 11-55V
052	PV fault	Stop PV charging
055	AC output overload	Remove the load of AC Outlet
056	AC input over current	Stop AC input

Turn On / Off the Power Station:

Press AC / DC Power Button to turn on the unit and check the battery level. Press and hold on AC / DC Power Button for 3 seconds to turn on the AC / DC Output.
After use, please press and hold the AC / DC Power Button for 3 seconds to turn off the corresponding output power, or turn off the unit completely.

**Note:

If the AC / DC Work Indicator is On, the unit will consume a small amount of power and lose battery capacity even without any load connected, need to turn off manually if no operation.

Toxic and Harmful Substances:

Composition and amount of toxic and harmful substances in Power Station					
Pb	Hg	Cd	Cr(VI)	PBB	PBDE
O	O	O	O	O	O

O: Indicate all homogeneous materials' hazardous substances content are below the MCV limit specified in the Standard 2002/95/EC(RoHS).

All Parts In the Box:

- Portable Power Station x 1 pc
- AC Charger x 1 pc
- User Manual x 1 pc
- LED Light x 2 pcs
- PV Charging Cable x 1 pc

⚠ Warnings:

To avoid fire or any other dangerous to persons, please follow these instructions and pay attention to the instructions of any electrical devices you intend to power for.

- Check the unit prior to every use. Do not use the unit if it is damaged or broken.
- Do not charge or use the unit in a bathroom or in an area exposed to rain or moisture.
- Do not touch the unit or the plug-in points if your hands are wet.
- Do not insert any metallic objects to any socket of the unit.
- Carefully read the instructions for the electric devices that you intend to power for.
- Do not use any inappropriate power cords.
- Do not use the unit with damaged or broken power cords.
- Only use the output socket to power external devices. Never connect the output to main power under any circumstances.
- Only use the original or certified adaptor and cables to recharge the unit, do not operate the unit above the specified input voltage.
- Do not use accessories for other usage.
- Unplug the power cord from the socket if thunderstorm weather.
- Conduct visual inspection of this product to check for the presence of any abnormalities (such as swelling of the main unit, cracks, any damaged parts etc.) before use. Do not use this product in case you notice any.
- Do not use this product in explosive atmospheres (e.g. in the presence of flammable liquids, gases or dust). And keep it away from fire, heat or water.
- Do not operate the unit above the specified power rates.
- Do not move the unit if it is recharging or in use.
- Do not put fingers or hands into any socket of the unit.
- Stop using the unit immediately if the unit was rust, peculiar odors, overheating or other abnormal circumstances.
- Turn off the unit immediately if it has accidentally fallen, was dropped or was exposed to vibrations.
- Make sure that the device you are connecting is switched off before you connect it.

⚠ Cautions:

Instructions to avoid risk of fire or injury to persons.

- Do not disassemble, repair or modify the unit.
- Do not place the unit close to or in fire or expose it to heat.
- Never smoke or allow a spark or flame in vicinity of unit.
- It's not waterproof, do not expose to liquids.
- Use and store the unit only in a clean and dry environment, never use or store in dusty and wet environment.
- Keep out of direct sunlight.
- Avoid dropping.
- Keep the unit away from children. Do not let children use the power supply unit.
- Keep the unit away from pets.
- Fully discharge and recharge the unit every 3 months to prolong its battery life.
- DON'T throw, or apply excessive force on this product.
- DON'T keep the unit any location where the temperature may exceed 45°C. Always recharge it at locations with an ambient temperature falling within the range of 0°C and 45°C.
- Under extreme conditions, battery leakage may occur.
- The batteries used with this product contain chemicals that are harmful to the environment.
- To preserve our environment, please dispose used batteries according to your local laws or regulations. Do not dispose batteries with normal household waste.
- For more information, please contact the local authority or your retailer where you purchased the product.

Warranty Information:

We offer a limited warranty for this product against any defects in material and workmanship for a period of 1 year from the date of purchase by the end user/consumer. The conditions of the warranty are as follows:

- The warranty is only valid upon presentation of the original receipt (from dealer/retailer) by the original purchaser with the product to be repaired or replaced.
- The warranty is void if the serial number, date of purchase and label are removed.
- The warranty does not cover damage or product failure resulting from normal wear and tear, physical abuse, improper installation, misuse, modification or repairs by unauthorized third parties.
- We do not assume responsibility for any loss or damage incurred during shipment or as a result of a force majeure.
- We are not liable for any incidental or consequential damages arising from the use or misuse of this product.
- All warranty claims are limited to repair or replacement of the defective product and at the sole discretion of us.
- If we repair or replace the product, the product will be covered for the remaining time of the original warranty period. Repair or replacement may involve the use of reconditioned units which are equivalent in function. Replaced part or product becomes the property of us.
- Consumable components such as batteries are not covered by the warranty.

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