



FEB1000W Portable Power Station

User Manual

Please read this manual before use and follow its guidance.
Keep this manual for future reference.

Safety instructions

Please observe the following instructions to ensure safe usage:





1. Do not alter or disassemble this product.
2. Do not move during charging or using it, because the vibration and impact during
3. moving will lead to poor contact of output interface.
4. In case of fire, use dry powder fire extinguishers for this product. Do not use water fire extinguisher, which may cause electric shock.
5. Close supervision is required when using this product near children.
6. Please confirm the rated specification of your load, and do not use it beyond the specification.
7. Do not place the product near heat sources, such as electric furnace and heaters.
8. Do not touch the product or the plug-in points if your hands are wet.
9. Check the product and accessories prior to every use. Do not use if it is damaged or broken.
10. Please unplug the AC adapter from the wall outlet immediately in case of lightning stroke, which may cause heating, fire and other accidents.
11. Use original charger and cables for the wall outlet charge.
- 12. Please use the FEB1000W power station carefully and keep children away from it.**

- WARNING: In case of fire, ONLY dry powder fire extinguisher works.
- WARNING: DO NOT insert foreign objects into any ports of the FEB1000W (AC, DC, or ventilation holes). The power station generates the same potentially lethal AC power as a household wall outlet.
- WARNING: It is hazardous for anyone other than the authorized person to carry out any service or repair operation involving replacing the internal battery or other equipment components.

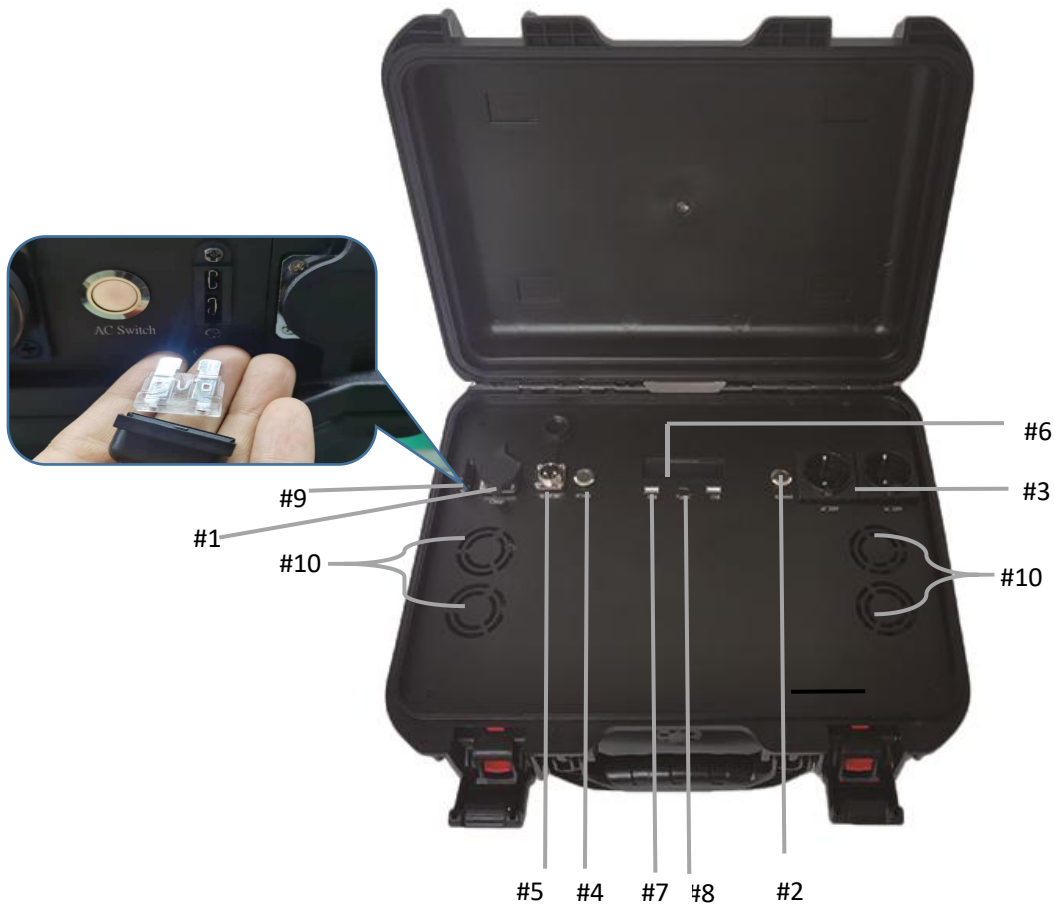
1. Packing list

No.	Description	Quantity(pcs)	standard	option
1	FEB1000W Power Station	1	√	
2	AC adapter (including AC charging cable)	1	√	
3	Solar Panel 200W /Open Circuit Voltage 24V			√

IN THE BOX

No.	Category	Quantity
1	 FEB1000W solar power station	1pc
2	 12V 20A adapter for AC charging	1pc
3	 Accessory 1pc GX-25 aviation plug for solar charging port 1pc GX-20 aviation Plug for DC outlet 2pcs fuse for replacing the input overcurrent	1 sets
4	 User Manual	1pc

2. Function introduction



1. Input charge port for AC wall outlet and Solar panel.
2. AC Switch to control 2pcs AC outputs, to press “AC ON/OFF” button to turn on/off the AC output
3. 2pcs AC outlet
4. DC Switch to control all DC output including USB, and LED light outlet, to press “DC ON/OFF” button to turn on/off the DC output.
5. DC output for LED light 12V100W
6. LCD Display
7. 2pcs USB-A ports (5V/3A 9V/2A 12V/1.5A)
8. 1pc USB-C port (5V/3A 9V/2A 12V/1.5A)
9. Secure setting for over current protection, it will break the fuse when the charging input current over 20A, and only need to replace the fuse to restart the device.
10. Vent hole for cooling.

Note:

AC stands for alternating current.

DC stands for direct current.

3. General Information

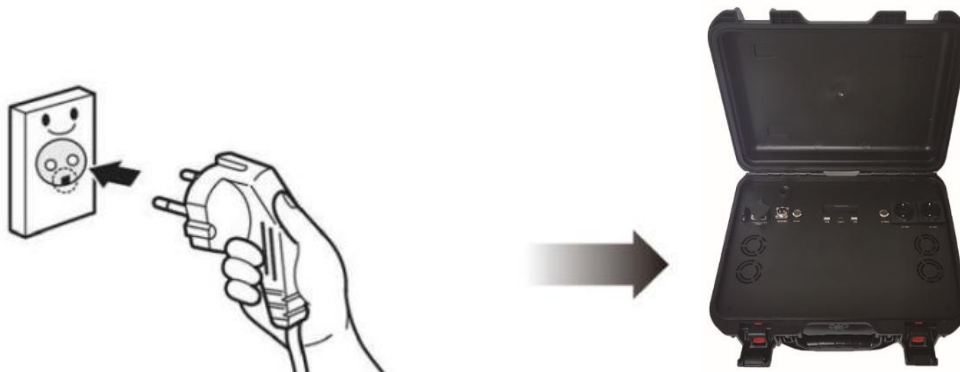
Power	1000W rated / 2000W peak	
Capacity	1280Wh	
Frequency	220V/50 Hz	
Output	AC outlet（220V）	2 PCS
	USB-A port（5V/3A 9V/2A 12V/1.5A）	2 PCS
	USB-C port（5V/3A 9V/2A 12V/1.5A）	1 PCS
Power consumption	Stand by	≤0.7A
	Low power warning	≤20mA
	Shutdown	≤1mA
	Low power sleep mode	≤100uA
Charging way	AC wall outlet	GX25-2 plug, rated current 20A, charging rated voltage 12V Max, 240W Max
	By solar panel	
LCD Display Screen	Battery capacity/voltage/Charging mode Low voltage warning/AC output voltage AC frequency	
Cooling	Cooling Fan	
Environment temperature	Storage ambient temperature	-40℃~70℃
	Discharging temperature	-20℃~60℃
	Charging temperature	0℃~55℃
	Working environment humidity	5% ~ 95%
Case Material	PP	
Color	Black	
Net Weight	14.1kg	
Size	L42*W33.5*D19.5cm	

4. Charging the device

There are two ways to charge:

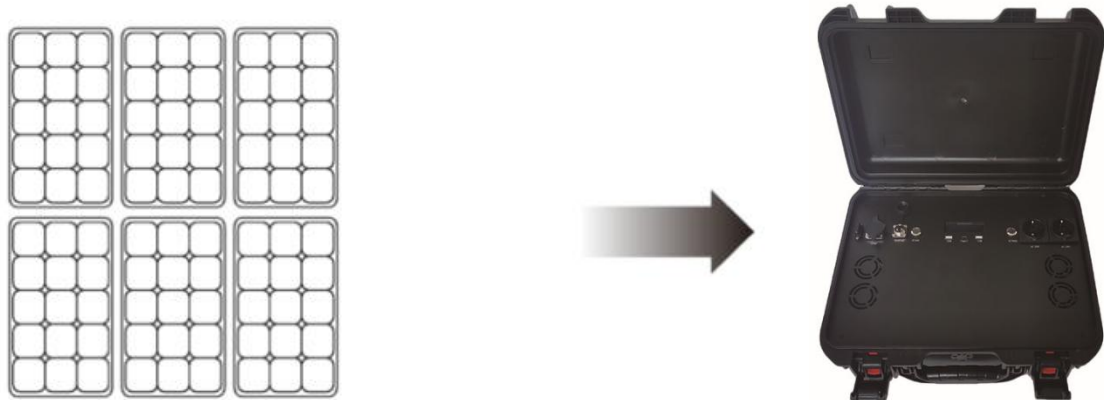
(1) Charging mode 1: From AC Wall outlet

Connecting the product to the AC wall outlet, the charging will automatically stop when it reaches 100%



Charging mode 2: From the solar panels

- Choose the solar panel with working voltage DC 12V-14.6V.
- Connect the solar panel to the product via solar charging cable (excluded).
- Plug and play charging: it will start charging automatically after connecting the solar panel to the product even it is off status.
- Max. current of the solar is 20A, 240W Max;



5. Application scenario

(1) Outdoor:

Car equipment: car fridge, car vacuum cleaner and other backup power;

Camping equipment: garden electric tools (power tools such as blowers, lawn mowers,

electric drills, electric saws), BBQ grills, LED lights, etc.

(2) **Indoor:** Refrigerator, kitchen devices such as kettle, toaster, blender, coffee maker, rice cooker, laptops, phones, lighting, etc.

6. Examples of loads

(1) USB output ports are suitable for most products in the market, but some products may trigger over current protection if there is a large current impact at the moment of starting.

(2) The power of electrical products used for AC output should be less than 1000W.

(3) According to the different electrical products, when the rated power is less than 1000W, some air conditioners, motors and other devices that need instantaneous high current when starting may trigger over current when the ratio of peak value of rated current exceeds 1:2. At this time, we recommended that you select the electrical appliances with lower power rate.

(4) When the output is overload, over-current or short circuit, the product will turn off the corresponding output, and then it will automatically start thrice (at an interval of 10s). If there is still an overload, over-current or short circuit alarm, the output will be locked, and it needs to be manually troubleshooting and then restart. If the output stops repeatedly after restart, please stop using it immediately (only after troubleshooting) or contact the seller or maintenance agent for help.

(5) When the battery power is discharged to 0%, the DC and AC output will automatically turn off. Only when the battery power is charged to more than 20%, the DC and AC output can be turned on, which is to protect the battery and enhance its cycle life.

(6) This device supports charging and discharging simultaneously.

7. Specification

Output		
2pcs x AC output	Rated output power	1000W
	Rated voltage	220VAC
	Efficiency	≥90%
	Overload capacity	1000W<load<2000W,2min 2000W<load immediately
	Short circuit protection	yes
	Over temperature protection	yes
	Noise	Load>2000W.Max.60dB
1pc x DC12V/10A output for LED light	Rated voltage	12V
	Rated current	10A
	Overload power	>100W .1S
	Short circuit protection	yes
2pcs x USB-A quick charge 1pc x USB-C quick charge	Rated voltage	5V/3A 9V/2A 12V/1.5A
	Short circuit protection	yes

Input		
AC charging	Input voltage	12V AC
	Maximum charging voltage	14.6V DC
	Maximum charging power	240W
	Charging time	≥5h
Solar charging	Input voltage	12~14.6V
	Maximum circuit	20A
	Maximum charging power	240W
	Charging time	>6~8h in full sun
Remarks: It supports charging while discharging, and does not support UPS function.		
Battery Pack		
Battery option	Lithium iron phosphate	
Nominal Capacity	100Ah	
Nominal Voltage	12.8V	
Max Charging Voltage	14.6V （4 series）	
Life cycle	2000 cycles	
Protection	Discharge & charging Over current protection Over voltage protection Low voltage protection Short circuit protection High temperature protection low temperature protection	
Inverter		
Wave Form	Pure Sine Wave	
Continuous output	1000W	
Output voltage	AC 220V	
Output current	4.5A	
Rated output frequency	50Hz	
Efficiency	90%	
input Voltage	11.5V±0.2V~14.6V±0.2V	
Charging rated current	20A	
Protection	Low voltage protection Over voltage protection Over load protection Short circuit protection Over temperature protection Over current protection	

Protection Circuitry Function		
Low voltage protection	When the battery voltage is lower than DC11.5V, the output will be turned off and warm. The voltage recovery to 12.5V, it will restart automatically.	$DC11 \pm 0.5V$
Over voltage protection	When the battery voltage is higher than DC15V, the output will be turned off and warn, and once the voltage recovery to 13.5V, it will restart automatically.	$DC15V \pm 0.5V$
Over load protection	When the Output is overload, power over 1000W, the product will turn off the corresponding output, and then it will automatically start thrice (at an interval of 7s). If there is still an overload, over-current or short circuit alarm, the output will be locked, and it needs to be manually troubleshooting and then restart. If the output stops repeatedly after restart, please stop using it immediately (only after troubleshooting) or contact the seller or maintenance agent for help.	$1000W \pm 50W$
	When the peak power of Output is overload 2000W, the product will turn off the corresponding output within 500uS, and then it will automatically start thrice (at an interval of 10s). If there is still an overload, over-current or short circuit alarm, the output will be locked, and it needs to be manually troubleshooting and then restart. If the output stops repeatedly after restart, please stop using it immediately (only after troubleshooting) or contact the seller or maintenance agent for help.	$2000W \pm 100W$
Short circuit protection	When the output is Short circuit, the product will turn off the corresponding output within 100uS, and then it will automatically start thrice. If there is still an overload, over-current or short circuit alarm, the output will be locked, and it needs to be manually troubleshooting and then restart. If the output stops repeatedly after restart, please stop using it immediately (only after troubleshooting) or contact the seller or maintenance agent for help.	50~100uS

Over temperature protection	When internal radiator temperature $\geq 40^{\circ}\text{C}$; cooling fan start cooling	$\geq 40^{\circ}\text{C} \pm 5^{\circ}\text{C}$
	Once the internal radiator temperature $\geq 80^{\circ}\text{C}$ to turn off the output, the internal radiator temperature to restore to 60°C , then automatically restart	$\geq 80^{\circ}\text{C} \pm 5^{\circ}\text{C}$
Charging protection	Once the battery voltage is over than 15V, the charging connection is automatically cut off, and when the battery voltage drop to 14V, then the connection is automatically restored	$\text{DC}15\text{V} \pm 0.5\text{V}$

8.Storage and maintenance instructions

- (1) Please fully charge the machine before storing it.
- (2) Turn off all power buttons.
- (3) To preserve the battery lifespan, please use and recharge at least once every 1 month.
- (4) Ensure proper ventilation while in use or store and keep away from any combustible materials or gases. Do not stack anything on top of the unit in storage or in use. Inadequate ventilation and/or improper storing may cause damage to the unit.
- (5) Avoid exposing the product to rain or using the product in humid environment.
- (6) Use and store the product in a clean and dry environment.
- (7) Keep this product away from children and pet.
- (8) Wring the cloth with water and wipe it clean In case of dirt.

9.Declaration

- Some changes may be made to the appearance and specifications without prior notice due to the improvement of the product.
- Our company shall not be liable for any damage caused by force majeure such as fire, typhoon, flood, earthquake or the user's intentional negligence, misuse or other abnormal conditions.
- No compensation shall be made for the failure of non standard connector/accessories.
- Our company will not bear all responsibilities if the damage is caused by not operating the product according to the use method in the operation manual.
- This product is not suitable for use on the relevant equipment or machines involving personal safety, such as atomic energy devices, aerospace devices, transportation devices, medical devices, etc., or the equipment or machines that must be highly reliable in electricity. If we use this product on the above-mentioned equipment or machine, we will not be responsible for personal accident, fire accident or wrong action of the machine and equipment caused by the failure of this product.

10.Common faults and troubleshooting

If this product is unable to charge or power other equipment, please check according to the following steps.

- (1) Make sure the DC ON / OFF button and AC ON / OFF button are on.
- (2) Check whether the left of battery capacity is more than 20%. If the left of battery capacity is less than 20%, please charge as soon as possible.
- (3) Ensure that the load equipment meets the power limit of the product, that is, the load power is within the maximum input range of each output interface;

If the above steps still do not solve the problem, please contact the seller for help.

11.FAQ(Frequently Asked Questions)

- **What is the depth of discharge (DOD)?**

To extend battery life, the portable power station has a DOD setting of 80%, which means that only 80% of the battery capacity can be discharged. Reserve 20% of the energy to avoid damage to the battery due to over discharge.

- **Can it be charged and discharged at the same time?**

Yes, it supports pass through charging for both AC and DC loads. We recommend if you do this that you make sure to fully charge the FEB1000W at least once per month to extend battery life.

- **Can AC output charge refrigerator, air conditioner or electric drill?**

Lower power for those devices can be charged. It is not recommended to use more than 900W power.

- **Can two products be used in parallel?**

No.

- **Can I use third-party solar panels?**

You can use any solar panels available as long as they have GX25-2 connectors and when wired together the voltage is between 20V and no more than 240W.

- **How do I know if my appliance will work with the product?**

When figuring what appliances can be powered with your portable power station, you will need to calculate how much the continuous loads are of each appliance you want to run simultaneously to determine if the total amount of watts is within the capacity of the generator. You can find the wattage of the appliance by looking at the manufacturer's information (this information is usually stamped or printed on most appliances and equipment) to measure it's wattage. Add all wattages of appliances to be run to determine if the total amount of watts is within the maximum continuous and surge watts.

- **Can I connect the product to my home circuit breaker box?**

Can not.