

Operating Instruction

Mobile Power Supply with accessories and charger

MPS-2301000

Nominal Capacity C1:	80 Ah	Nominal Energy: 1200 Wh
Nominal Voltage:	14,8 V	
Nominal Temperature:	20 °C	

The Mobile Power Supply contains a battery. KEEP AWAY FROM CHILDREN.
Only use the Mobile Power Supply with the delivered accessories and charger.
Never use other chargers.



Consider Operating Instruction and place it visible at the place of charge.

Because of lack of applicable standards consider EN 50272-3 and EN 50272-2



Wear safety goggles while working with or on batteries.



Dangerous voltage.

Avoid touches and short circuits.

Attention! Metal parts and battery the battery itself can have a voltage. Therefor place no foreign parts or tools to the battery.

1. Safety Precaution

Before using this Mobile Power Supply, please read the "safety instructions" carefully to ensure correct and safe use, and keep the manual in a safe place. If the Mobile Power Supply is damaged due to failure to follow the instructions in this manual, the company reserves the right not to carry out quality assurance.

During operation, please pay attention to all warning signs and operate as required.

Avoid direct exposure to the sun, rain or wet environment to use this equipment.

The Mobile Power Supply cannot be installed near the heat source area, or near the similar appliances such as electric heaters and hot stoves.

When placing products, there must have safe space around them to ensure ventilation. When installing, refer to the instructions.

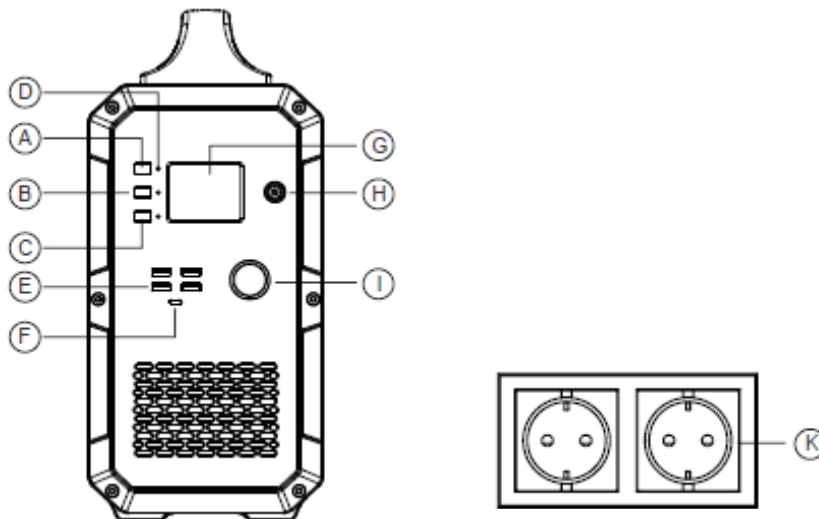
When cleaning, please use dry cloth to wipe.

In case of fire, please use dry powder fire extinguishers. Do not use liquid fire extinguishers to avoid the risk of electrical shock.

If the Mobile Power Supply is used outdoor, it must be protected from direct contact with water and must be protected from condensing water.

2. Operation

Check the Mobile Power Supply for mechanical damages. The accessories and connectors must be connected safe. The battery must be recharged before and after the use of the Mobile Power Supply.



A: Master power button

B: DC output button

C: AC output button

D: LED indicator light

E: 5 V USB output

F: Type C-PD output

G: Display

H: Charger / PV charge input

I: 12 V cigarette lighter output

K: 230 V AC output

3. Usage

1. Power on and Power off

Master power button

Turn on: Press the master power button more than 1 second can turn on the generator, then the power LED indicator and LCD screen will be lit up.

Turn off: Press the main power button more than 1 second can turn off the generator, LCD screen will turn off, after loosen hand the power LED indicator will go out.

DC button

Turn on DC function: long press DC ON button more than 1 second can open DC function, DC LED will be lit up and screen will show" DC ON".

Turn off DC function: long press DC ON button more than 1 second can close DC function, DC LED will go out and screen will show" DC OFF".

AC button

Turn on AC function: long press AC ON button more than 1 second can open AC function, AC LED will be lit up and screen will show" AC ON".

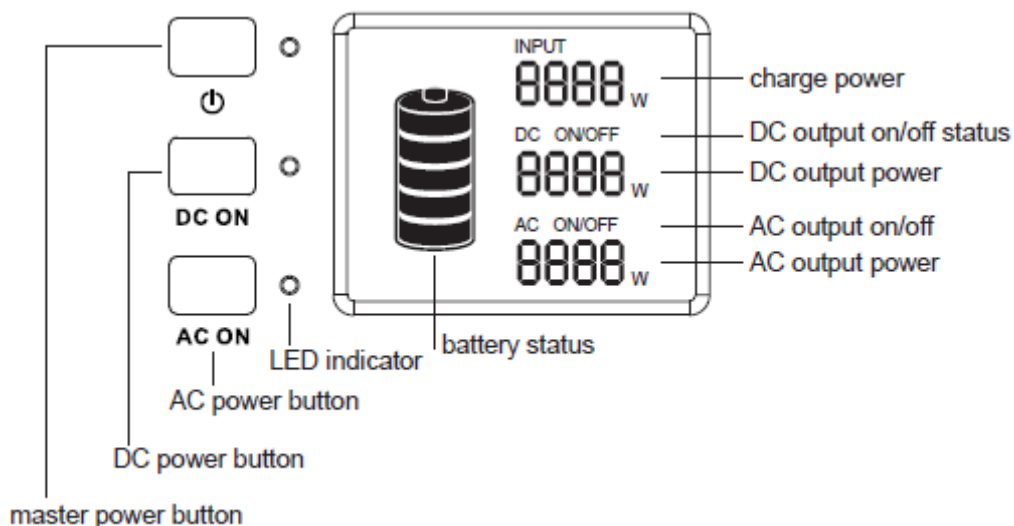
Turn off AC function: long press AC ON button more than 1 second can close AC function, AC LED will go out and screen will show" AC OFF".

2. Charge activation

Turn off generator, connect PV or charger to charge. The charge is activated automatically while the generator-function is off, means at this time, the generator is not supporting AC and DC functions!

If you want to open AC and DC functions in parallel, you need to press the master power button more than 1 second to turn on the generator. The screen will be lit up after the generator turned is activated but not on. To activate the Ac and or DC generator-function the DC ON and/or AC On buttons must be pressed.

3. Display



4. Cooling

The Mobile Power Systems has an intelligent cooling system which turns on under the following conditions:

- Inverter load > 400W
- 2. 5V USB load > 10W
- Type C-PD load > 30W;
- 12V cigarette lighter load > 50W
- PV input power > 100W.

Beside this functions, the intelligent cooling system will adjust the PV input or AC output power based on the outer case temperature. Therefor keep the outer case at a touchable temperature.

4. Maintenance

There is no maintenance necessary.

5. Care

The Mobile Power Supply must be kept clean. If cleaning is required this must be carried out by dry cloth only.

6. Storage

Keep the storage temperature within normal range as 0° C to 30° C. Do not store the Mobile Power Supply in direct sunlight.

7. Troubleshooting

Fault code	Cause	Action
E001	All battery over-voltage protection	No charge, only discharge.
E002	All battery low-voltage protection	Fully charged and re-power on
E003	All battery failure	Re-power on generator and charge
E004	All battery discharge overtemperature protection	Temperature is too high. Repower on after cool down.
E005	All battery discharge lowtemperature protection	Environment temperature is too low. Repower on when environment temperature is higher.
E006	All battery charge overtemperature protection	Battery pack is over-temperature. Charge when the temperature is lower.
E007	All battery charge lowtemperature protection	Battery pack is low-temperature. Charge when the temperature is higher.
E008	1st group battery low-voltage protection	Charge and repower on
E009	2nd group battery low-voltage protection	Charge and repower on
E010	3rd group battery low-voltage protection	Charge and repower on
E011	4th group battery low-voltage protection	Charge and repower on

E012	Inverter bus cable voltage failure	Turn off and repower on
E013	Inverter over-load protection	Reduce the load. Repower on AC
E014	Inverter short-circuit	Correct the short-circuit output. Repower on AC
E015	Inverter cooling fin discharge over-temperature protection	Repower on when the cooling fin temperature is lower.
E016	Inverter cooling fin temperature detector is fall off	Connect NTC and repower on
E017	PV input over-voltage protection	To check if you use proper PV input voltage solar panel array. If yes. Then disconnect PV and repower on and connect PV.
E018	PV output over-voltage protection	To check if you use proper PV input voltage solar panel array. If yes. Then disconnect PV and repower on and connect PV.
E019	PV cooling fin charge overtemperature protection overtemperature protection	Recharge after the cooling fin temperature is lower.
E020	PV cooling fin temperature detector is fall off	Repower on.
E021	Battery protection board charge protection	Recharge after the protection board temperature is back to normal.
E022	Battery false protection	Disconnection PV, repower on.
E023	Generator over-load (AC&DC) protection	Reduce the total load and repower on.

8. Trouble

In case of troubles the customer service must be called.