



Growatt New Energy Technology Co., Ltd
best solar solution

The training of the infinity 1500
portable power station / LV

Xianzhong.Deng
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GROWATT

INFINITY 1500

Portable Power Station



SHENZHEN GROWATT NEW ENERGY CO., LTD



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1. Product Description

The infinity 1500 portable power station(HV/LV) uses the latest high energy density lithium-ion battery technology, which can output 220V/110V AC pure sine wave with rated power of 2000W, 13.6V/10A automotive cigarette lighter DC output, 4 USB ports and TYPE-C ports (60W) to power and charge laptops and smartphones. Built-in overcharge protection, overload protection and short circuit protection to ensure safe operation.

The LCD panel clearly shows the user the battery level, input charging power, DC and AC output power, ect.

The 800W solar array can be charged with the help of the built-in MPPT solar controller, it means that the maximum PV input solar charging is 800W@12A. As far as we know its default output is 1800W(the maximum output is 2000W), so the infinity 1500 portable power station is ideal choice that off-grid/remote power alternatives for generators in noise sensitive area.

INFINITY 1500

Portable Power Station

Energy Storage
Expert Solution



Faster
Charging Speed



Powerful
Output Wattage



Versatile
Outlet Ports



Smarter
App Control



BATTERY

Cell Chemistry	NMC
Capacity	1512Wh
Lifecycle	>800 cycles to 60%
System Management	BMS

INPUT

Solar Charging	800W (15-100V, 12A) / 2.5Hrs
MPPT	99% efficiency
Vehicle Charging	12V/24V, 8A / 12.5Hrs
AC Wall Charging	1500W / 1.6Hrs

OUTPUT

AC Outlet	100V~120V, 60Hz, Pure Sine Wave Default: 1800W, 3600W surge peak Max. 2000W , 4000W surge peak
12V Cigarette Port	1 x 13.6V, 10A
USB-A	2 x 12W Max (5V, 2.4A)
Quick Charge 3.0	2 x 18W Max (5V/3.6A,9V/2A,12V/1.5A)
USB-C PD	2 x 60W Max (5V,9V,12V,15V,20V/3A)
Wireless Charging	15W Max

CONNECTIONS

Connections Mode	Wi-Fi & Bluetooth
App Management	Support



With Protective bag

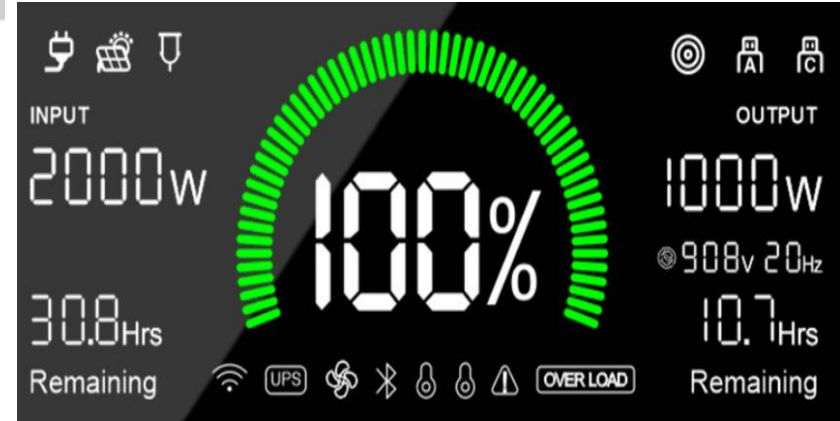
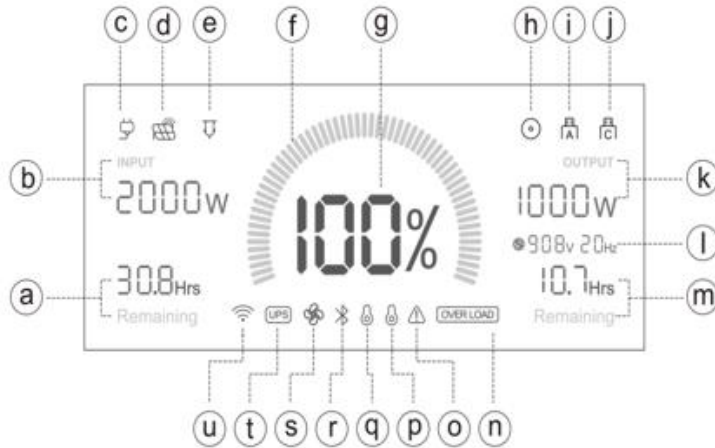
100/200W Solar Panel

Growatt offers a variety of solar panel options to allow different combinations between portability and outdoor charging speeds. INFINITY 1500 supports up to 800W solar input, which means you can use up to 4 x 200W Growatt solar panels to quickly recharge your portable power station within 2.5 hours in full sun.



2. Product external interface and functions

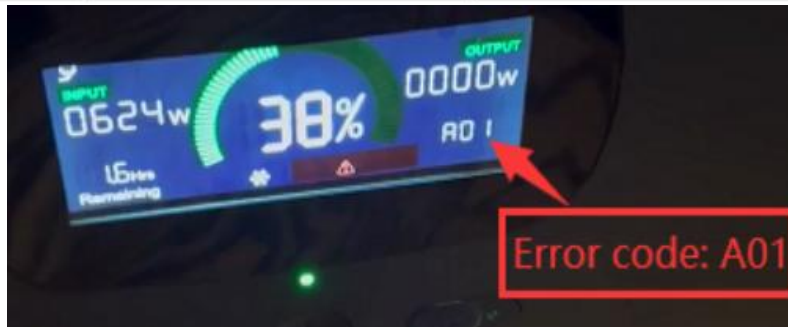
LED Display



	Indicators	Description
a	Remaining Charge Time	The remaining charging time calculated by the system based on the current power consumption, accurate to 0.1 hour.
b	Input Power	The total input power of wall charge, solar charge, and car charge.

c	AC Input Indicator	Infinity 1500 is being charged using the wall charger.
d	PV Input Indicator	Infinity 1500 is being charged using the solar panels.
e	Car Input Indicator	Infinity 1500 is being charged using the car charger..
f&g	Remaining Battery Percentage	Displays the current remaining battery percentage in real time.
h	Car Output Indicator	Infinity 1500 is supplying power to external devices via the car output port.
l	USB-A Output Indicator	Infinity 1500 is supplying power to external devices via USB-A port(s).
j	USB-C Output Indicator	Infinity 1500 is supplying power to external devices via USB-C port(s).
k	Output Power	The total output power of DC, AC, and wireless charging.
l	Output Voltage and Frequency	Displays the current AC output voltage and frequency.
m	Remaining Discharge Time	The remaining discharging time calculated by the system based on the current power consumption, accurate to 0.1 hour.
n	OVERLOAD Warning	The current total output power is higher than 2000W, the AC output will be stopped for battery protection.

o	System Alert	The product is not working properly. Check the error codes in the appendix to understand the cause of the error and find the solution.
p	High Temperature Warning	The temperature of Infinity 1500 is too high. Please place the product in an open area for cooling.
q	Low Temperature Warning	The current battery temperature is low, and the charging efficiency will be reduced. Keep using the product, and the charging efficiency will return to normal as the temperature rises.
r	Bluetooth Indicator	The product is connected to Bluetooth and can be controlled remotely through the MyGro APP.
s	Fan Status Indicator	The fan is running to cool the product.
t	UPS Indicator	The product has turned on UPS mode to provide uninterrupted power to your devices.
u	Wi-Fi Indicator	The product is connected to Wi-Fi and can be controlled remotely through the MyGro APP.



Pay attention please:

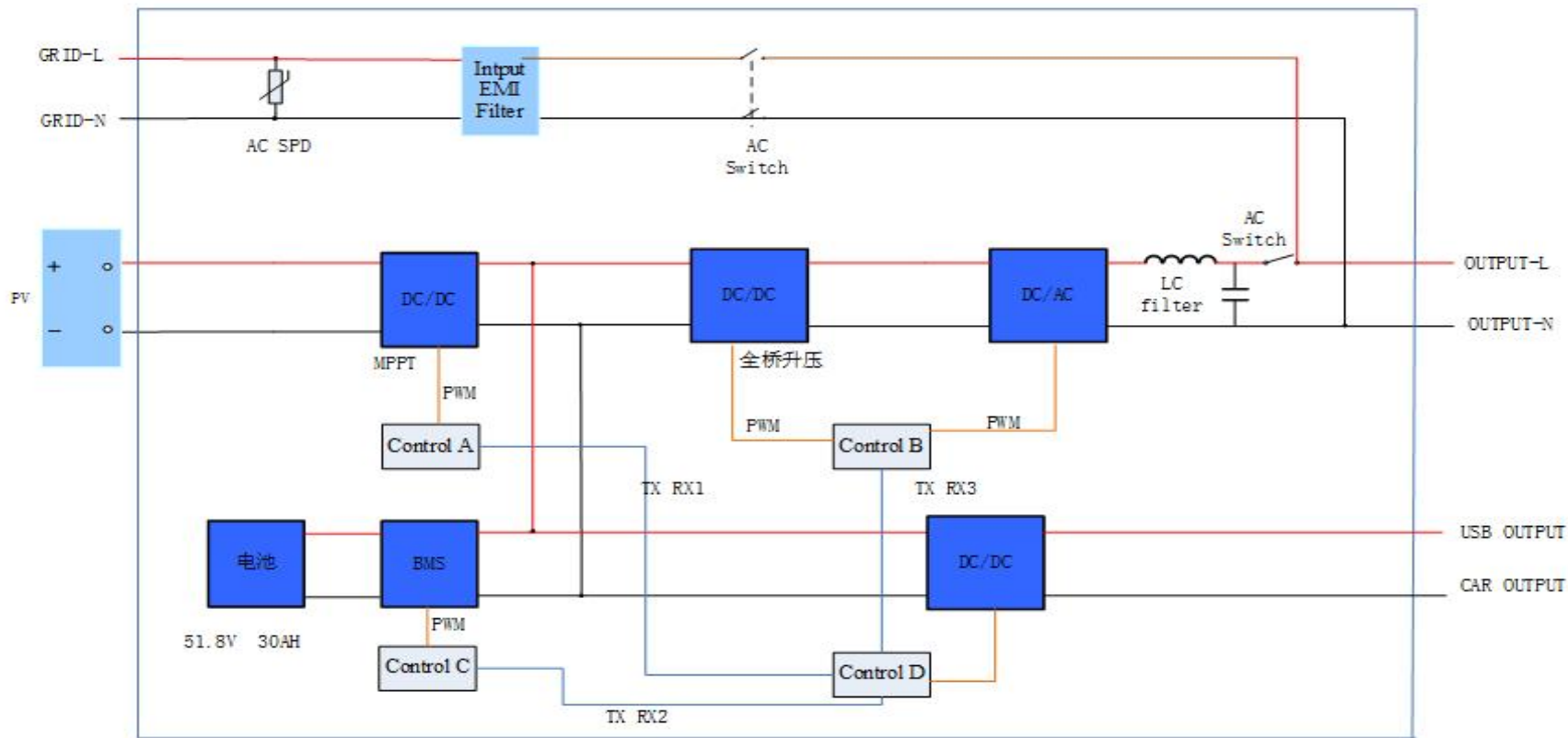
for the indicator M, it also will show the error code when there is fault in the system.

ATTENTION:For the AC button, Press it to enable or disable the output, and hold down 6S to show the output frequency of 50HZ or 60HZ. It also has the function of extinguishing screen and lighting up.

Power/AC/DC Button
Easily turn ON/OFF your power



3. System block diagram introduction



INFINITY Y 1500

Main working mode introduction:

1. Standby mode

Long press the power button, light up the screen, and enter the standby mode. At this time, there is no input of mains and PV, no output of AC, USB, wireless charging, and car charging. Only the internal auxiliary source works, and it keeps the internal board communication of the whole device.

2. INV mode

When the device is in the standby mode, press the AC button to enter INV mode, and output 120V@50HZ/60HZ AC (with load). The main board output INV sine wave by DC/DC and DC/AC. INV mode will not be enabled when the battery is 0%.

3. AC charging mode

When the device is not fully charged, if it is connected to AC grid , it will enter the AC charging mode to charge the device. The mainboard charging the battery by AC/DC and DC/DC. It will not enter the AC charging mode When the device is fully charged(SOC 100%).

4. Bypass mode

When the device is in the AC charging mode, press the AC button to enter the bypass mode. The AC grid will charge the device and carries the load at the same time.

5. PV charging mode

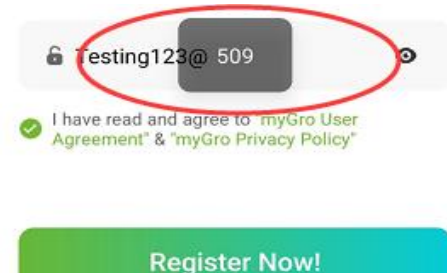
When the device is not fully charged, if it is connected to PV(solar panel) , it will enter the PV charging mode to charge the device. The MPPTboard charging the battery by BUCK / BOOST. It will not enter the PV charging mode When the device is fully charged(SOC 100%).

6. SNU mode (solar and utility charging together)

When the device is not fully charged, if it is connected to PV(solar panel) and AC grid , it will enter the SNU mode to charge the device. The maximum power set for PV is charged first, and The AC grid is used for supplementary charging. Also the output can be loaded by Bypass mode. It will not enter this charging mode When the device is fully charged(SOC 100%).

4. MyGro APP

1. the user can Operate some auxiliary functions by MyGro App, if necessary, you can download it from the APP Store or Google Play or the official website <https://growattportable.com>
2. the MyGro communicates with the device by Bluetooth or wifi. The user can change the parameter in the Setting page.
3. when you register the account, please operate it refer to the interface information. It can be used directly on the MyGro if your account have been registered on the Shinephone or OSS App.
4. **Attention:** you'd better shut off the GPS(Location system) when you register MyGro APP with the Android, otherwise the registration may fail and display 509.



Monitoring

Real-time power consumption, input / output wattage, battery percentage level

Personalized Settings

Time schedule setting, personal preferences, mode setting, etc.,



Wi-Fi / Bluetooth

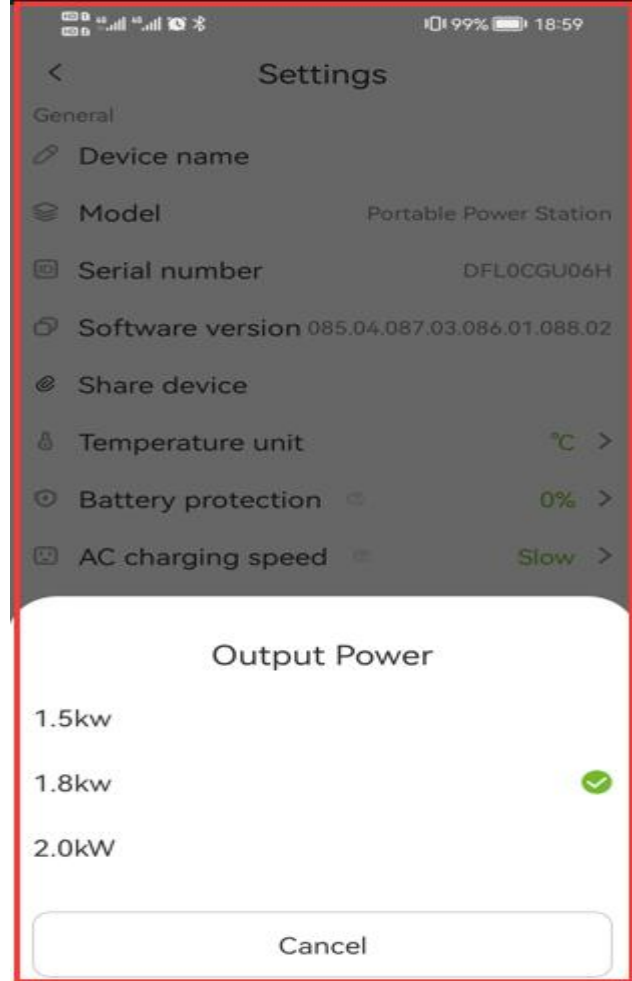
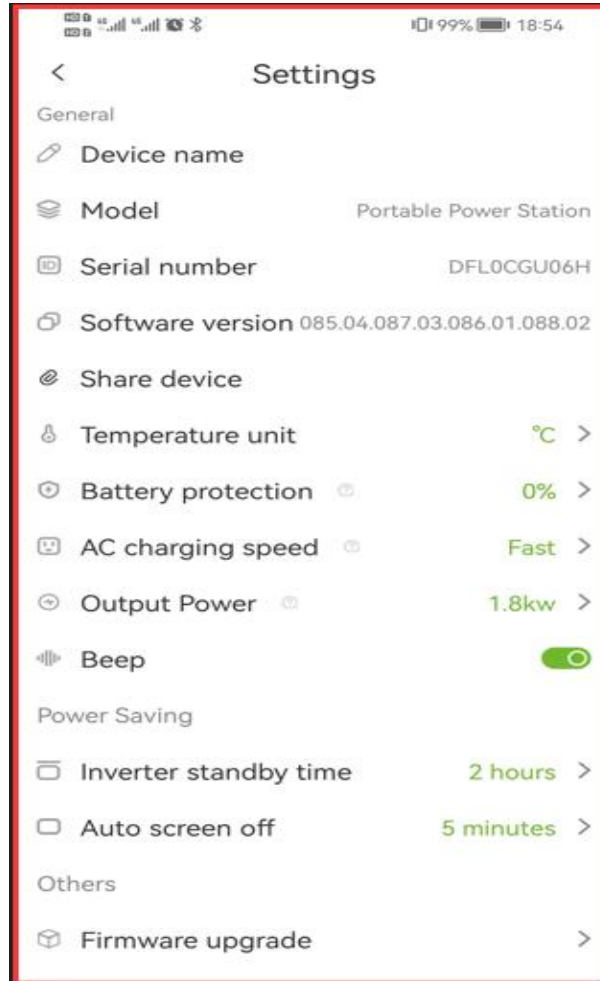
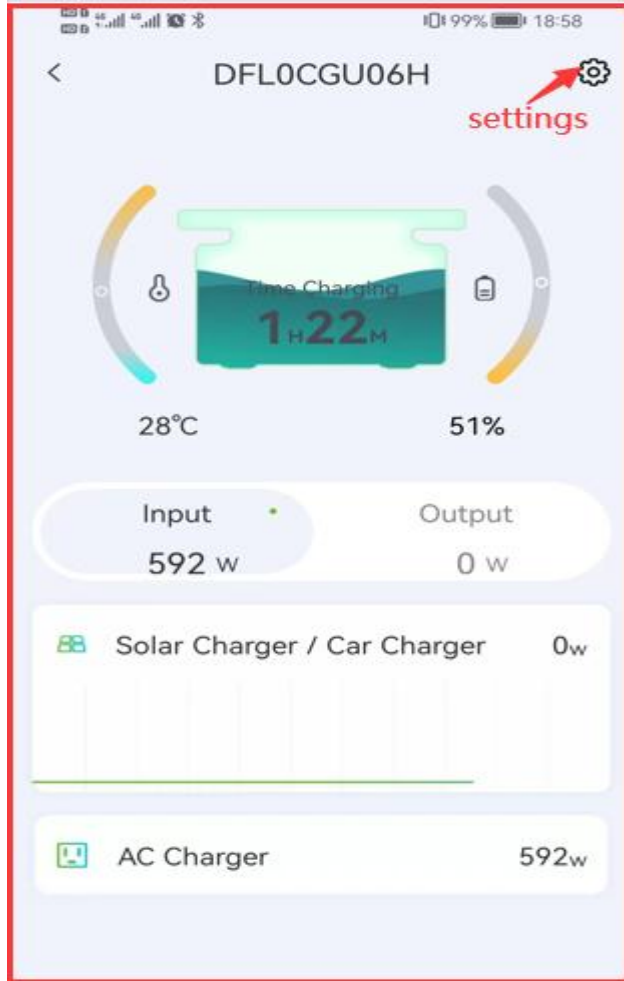
Control

Turn on/off the power, turn on/off the outlets

Upgrade

Remote firmware upgrade





5. Trouble shooting

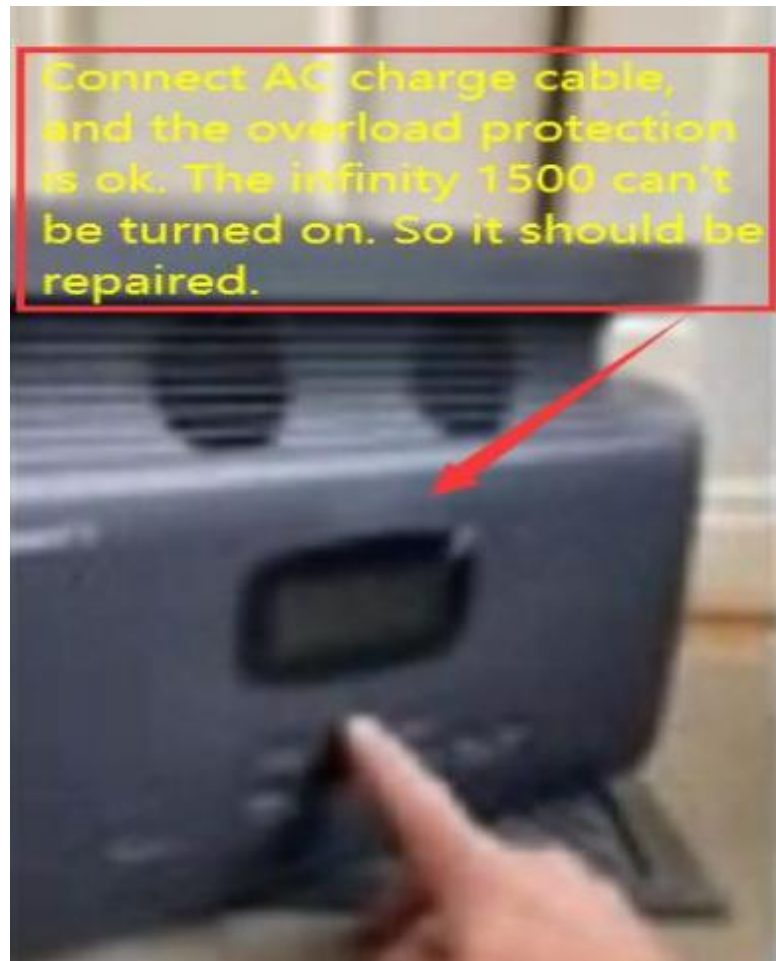
1. **Error code A01** : It is the Fan Blockage (AS show the picture)

Solution: Please check that whether the fan is blocked, if there is a blockage, please turn off the machine and remove the blockage, then restart the product to return to normal. If the problem persists, please contact the Growatt Customer Service for repair.



2.The infinity 1500 can't be turned on.

Solution: (1). Make sure the infinity 1500 has enough power. (2). Connect the AC charging cable, and make sure overload protection is ok. If the problem persists, please contact Growatt for repair.



3. There is no power output of the infinity 1500.

- Solution:**
- (1). Restart the infinity 1500, and make sure the infinity 1500 has enough power.
 - (2). Make sure the parameter of the load(s) is within the range.
 - (3). Please make sure the DC button is on when you want to use the DC output.
 - (4). Please make sure the DC button is on when you want to use the AC output.
 - (5). Connect the AC charging cable, and make sure overload protection is ok, the DC or AC button is on, if the problem persists, please contact Growatt for repair.

The trouble shooting of the infinity 1500 portable power station-20221108.pdf

THANKS



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