Product Specifc
ation Sheet

Name of client	neutral
Name of product	Portable energy storage power supply
Product Model / Version	G500 V1.2.00
Product Specifications	500/519.48Wh
Specification Version	A0
Date of issue	2022-9-5

Shenzhen zhifu new energy resources co., ltd		
to copy	To exam ine	Approval
Yang Chao		Gu Jinbo

Customer signature		
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1.

Revision rec ord				
Version number	date	Revised cont ent explaina tion	Draft	Approva l

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1 Introduction

1.1 About this product

Model: G500M (Amer

ican and Japanese r

egulations) Produc

t version number: V

1.2.00

Customer Name: Neutral

1.2 About this specification

This product specification is compiled and released by the com pany's product center, which is the specification of the product re leased by the company, and is an important basis for the company to carry out the relevant work of this product (including production, inspection, testing, certification, marketing, etc.).

This product specification is maintained and updated by the company 's product center.

1.3 Normative reference

Reference standards are as follows:

1）

GB31241-2014Safety requirements for lithium-ion batterie

s and batteries for portable electronic products

（countryHome Standard No.1No. The amended）

2）

GBT35590 - 2017 "General Standard for Mobile Power Supply for Di gital Equipment"

3）

CethTS018-2020Technical Specification for Portable Li-ion Batt ery Energy Storage Power Source Certification(for the first tim e)

2 Product Overview

G500MIs a US / Japanese AC power standard, rated AC output power of500 W, adopted18650Ternary lithium battery, the battery capacity is519.48Wh Portable energy storage power products for the home shouldEmergency el ectricity, outdoor travel, emergency relief, field work and other occasions.

The product AC total output power is 500 W,Have two ways110VAC output, three-way complianceQC3.0StandardUSB-AOutput, all the way in line withPD60StandardUSB-COutput, two waysDC5525outputWith a flare port output, built in 5 W LEDLighting andSOSAlarm function, support10WWireless charging

Yes.

This product comes standard with 25 V / 4AofACAdapter Support110V AC charging, but also supports DCphotovoltaic18V/100-200WCharging and DC 12VThe car charger charges the product.

3 Schematic diagram of the whole machine

4 Switches and buttons

Serial numb	Key name	Number	Introduction

er			s
1.	Master switch button	1 individual	Press the master switch, turn on, LCD screen lights up. Touch and press off. Press the master switch to control:DC5525 With the cigarette lighter output, the control USB-A、USB-C, Wireless Charge Output
2.	AC Output Switch	1 individual	Control the AC output.
3.	DC output switch	nothing	
4.	USB/Wireless charging switch	nothing	
5.	Light switch	1 individual	Normal: Short Press1 Next light, and then short press1 Secondary closure SOS: Continuous Short Press2 Next Flash, Short Press1 Next change light, and then short press 1 Secondary closure

5 LCD screen display

Serial number	Information item	type	Introductions
6.	Battery power	blend	Displays the current battery charge as an energy column+Percentage presented.
			The main switch is turned on, and the battery power is displayed. During charging, the energy column is displayed dynamically.
7.	Charging power	numerical value	When charging,“POWER IN”The icon lights up and shows the charging power.
8.	DC output power	numerical value	After the master switch is turned on,“DC OUT”Icon lights up and displays the total DC output of the Use power.
9.	USB/Wireless charging output power	numerical v	After the master switch is turned on,“USB OUT”The icon lights up and displays theUSB-A、USB-CThe total power output of the three wi

		alue	reless charging.
10.	AC output power	numerical value	After the AC output switch is turned on, “AC OUT”The icon lights up and displays the communication Total used power output
11.	Lighting lamp	icon	Light on, light bulb icon on
12.	fan	icon	Core ≥ detected45 Degree or power ≥ 40%After the rated load, the fan starts, Fan icon lights up
13.	Temperature alarm	icon	The temperature of the cell is detected to reach the set protection value, such as the charging protection temperature value. The exclamation mark icon flashes if the discharge temperature protection value is reachedOften bright.

6 Product function and performance

6.1 Battery pack characteristics

project	Minimum	standard	Maximum	Introductions
Voltage	16.8V	22.2V	25.2V	
capacity	21.80Ah	23.4Ah 519.48Wh		Battery Pack Factory Capacity:0.5CDischarge ≥21.8Ah(0.2C Charge to25.2V, 0.02CCurrent cutoff,0.5Cdischarge To 16.8 V, resulting capacity)
Battery Pack Low Voltage protect	17.8V	18.3V	18.8V	When the battery pack voltage is below this value, stop discharging(Through the Lord Control)
Charging high temperature protection	45℃	50℃	55℃	Battery temperature exceeds this value, stop charging, charging protection diagram Exclamation point flashing;
Charging high temperature protection Post-recovery	40℃	45℃	50℃	After the high temperature protection stops charging, it returns to this temperature and automatically recovers. Recharging;

Low temperature protection for charging	-5℃	0℃	5℃	Battery temperature below this value, stop charging, charging protection diagram Exclamation point flashing
Low temperature protection for charging Post-recovery	0℃	5℃	10℃	After the low temperature protection stops charging, it returns to this temperature and automatically recovers. Recharging
High temperature discharge protection	60℃	65℃	70℃	Battery temperature exceeds this value, stop discharge Discharge protection icon Exclamation point
High temperature discharge protection Post-recovery	55℃	60℃	65℃	High temperature protection after termination of discharge, return to the temperature, you can press Key recovery
Discharge cryogenic protection	-10℃	-15℃	-20℃	Cell temperature below this value, stop discharge, discharge protection diagram Exclamation mark often bright
Discharge cryogenic protection	-15℃	-10℃	-5℃	Low temperature protection after termination of discharge, return to the temperature, you can press
Post-recovery				Key recovery

6.2 DCinput(Charge) Characteristic

project	Minimum	standard	Maximum	Introductions
DC Charging mode				SupportAC Adapters, car chargers,PV,
PV Input port		1 individual		
DC Input port		1 individual		
DC Input vol	12V	25V	26V	

tage				
DC Input current		4A	8.5A	Standard25V4A adapter
DC Input power			105W	
PV Input voltage	12V	18V	26V	
PV Input current		6A	8.5A	
PV Input power			105W	
Car charging input voltage	12V		15V	
Car charger input current		8A	8.5A	
Car charger input power		100W	105W	
Multiple charging at the same time		Not supported		When charging, only one input mode can be selected to charge the product.
Charge and put		Not supported		Allowed when chargingDC,USB, Not AllowedAC discharge

6.3 ACOutput characteristics

project	Minimum	standard	Maximum	Introductions
AC Output Jack		2		Meiji
AC power transfer		500W	510W	Pool Set Voltages 20.4 ~ 25.2V PF 1.0R Load
Output peak power		1000W		Protection Off Output after Maximum Power Continues 200 ms
AC Out Wave		sine wave		Resistance R load
THDV		5%		Resistive belt
AC Frequency	59HZ	60HZ	61HZ	
No-load outp	105V	110V	115V	

ut voltage				
Output voltage with load	100V	110V	120V	
Inverter efficiency	85%	87%		Load current at rated voltage 40%, 60%, 80%, 100% The Average Efficiency of Four Points with R Load Plate End
AC Effective Output Capacity amount	400Wh			Ambient temperature 25 ± 2 degrees, rated power test;
AC Overload Protection	510W	550W	590W	. ACThe load power is greater than the550WContinued3SPost-trigger overloadProtection, OffAC, Key Recovery . DC+USB+ACThe load power is greater than the550WPost-trigger overloadProtection, OffAC, ReservationsDC/USBOutput, key recovery complex
Inverter overtemperature protection	85℃			Turn off the AC output, button recovery

6.4 DC5525 + Flare Output Characteristics

project	Minimum	standard	Maximum	Introductions
DC5525 Port		2		
Cigarette Lighter Port		1		
Output voltage	11.8V	12.8V	14V	
Output current		10A		Two way 5525 + one way cigarette lighter total output
Output current limiting protection	10.1A	11.5A	13A	Turn off output, no damage to circuit, key recovery

Output short circuit protection		Support		Turn off output, no damage to circuit, key recovery

6.5 USB-AOutput characteristics

project	Minimum	standard	Maximum	Introductions
USB A port		3		
QC3.0		Support		
Output power		18W		
5V No-load output	4.7V	5V	5.5V	
5V Full Load Outputer	4.5V	5V	5.5V	
5V Positive Current	---	3A	---	
9V No-load output	8.7V	9V	9.6V	
9V Full Load Outputer	8.6V	9V	9.5V	
9V Positive Current	---	2.0A	---	
12V No-load Outputer	11.6V	12	12.6V	
12V Full Load Outputer	11.5V	12V	12.6V	
12V Positive Current	---	1.5A	---	
Automatic identification	---	Yes	---	Output voltage and current according to different load
Output current limiting protection	3.1A	3.8A	4.5A	Turn off the output, without damaging the circuit, automatic recovery
Output short circuit protection		Support		Turn off the output, without damaging the circuit, automatic recovery

6.6 USB-COutput characteristics

project	Minimum	standard	Maximum	Introduc

				tion s
USBC port		1		
PD3,0		Support		
Output power		60W		
5V No-load output	4.6V	5V	5.5V	
5V Full Load Outputer	4.5V	5V	5.5V	
5V Positive Current	---	3A	---	
9V No-load output	8.6V	9V	9.5V	
9V Full Load Outputer	8.5V	9V	9.5V	
9V Positive Current	---	3A	---	
12V No-load Outputer	11.6V	12V	12.6V	
12V Full Load Outputer	11.5V	12V	12.5V	
12V Positive Current	---	3A	---	
15V No-load output	14.6V	15V	15.6V	
15V full load output	14.5V	15V	15.6V	
15V Positive Current	--	3A	---	
20V No-load output	19.7V	20V	21V	
20V full load output	19V	20V	20.8V	When the power is ≤ 10%, 20V output is not supported.
20V Positive Current	---	3A	---	
Automatic identification	---	Yes	---	Output voltage and current according to different load
Output current limiting protection	3.1A	3.8A	4.5A	Turn off the output, do not damage the circuit, self-recovery
Output short c		Support		Turn off the output, do not damag

ircuit protection				e the circuit, self-recovery

6.7 Wireless charging and output characteristics

project	Minimum	standard	Maximum	Introductions
Wireless charging port		1		
Output power		10W		
Output voltage	8.8V	9V	9.3V	
Output current	0.8A	1.1A	1.3A	
FOD		Support		
Temperature protection	60℃	65℃	70℃	Turn off the output, without damaging the circuit, automatic recovery

6.8 Energy saving and environmental protection characteristics

project	Minimum	standard	Maximum	Introductions
Automatic shutdown		Support		The load power is ≤ 5 W; Continuous 8 H Automatic Shut Down
Whole machine working idle Power consumption		500mA	650mA	Battery pack output22.2V, OpenDC.USB.ACMeasuring batteryB+ End access
When the whole machine shuts down since Electricity consumption		≤1mA		
Runtime noise			75db	Less than 35db when fan free and less than 75db when fan starts

6.9 Other

project	Minim	standa	Maxim	Intr

	um	rd	um	oduc tion s
Lighting pow er		5W		Surface light source
Illuminant b rightness		600LM		Distance 20CM Test
Illuminant c olor tempera ture		3000K		
Lights dorma ncy		8H		After opening, no open DC, USB, AC within 8 H Yes, turn off the lights to sleep;

7 Working environment

project	Minimum	standa rd	Maxim um	Intr oduc tion s
Charging ope rating tempe rature	0℃	25℃	40℃	environmental temperature
Discharge op erating temp erature	-10℃	25℃	40℃	environmental temperature
Storage temp erature	-20℃	---	45℃	
Working humi dity	10%	---	75%	
Storage humi dity		---	45%	
altitude			2000 ri ce	
Test ambient temperature	23℃	25℃	27℃	
If the battery is stored for more than three months, please use the c harger with the specified parameter range to charge and discharge the p roduct once. Charge to50%;				

8

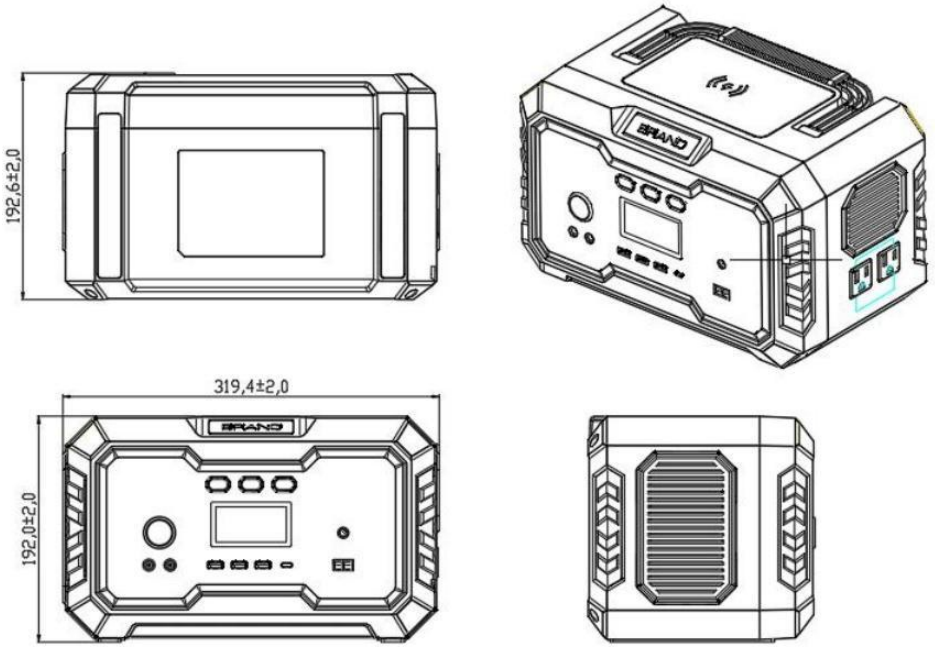
Compliance with certification or testing standards

According to the needs of customers can do the following certification or record: UL2743 report / FCC-sDOC / FCC-ID / UN 38.3 / MSDS / UN box performance list / dangerous package certificate, the cost is the customer's responsibility.

Certification Program	Certification Implementation Standards
FCC-sDOC	FCC 47 CFR Part 15 Subpart B: 2022
FCC-ID	FCC Part15 Subpart C, Paragraph 15.209
UL2743	UL 2743. Edition 2. Revision 2020
UN38.3	ST/SG/AC.10/11/Rev.7/Amend.1

9 Product physical parameters

The maximum size of the machine appearance: 319.4＊192.6＊192mm, 2 mm Body weight: 6.14KG,



10 Packing list

Serial number	name	Specifications	Number
1	G500M	500W/519.48Wh	1
2	User's manual	G500M: 142*210mm	1
3	AC Fit	Miki 25V4A 100W	1

11 Note

2. Do not put the product into water or rain!

3. Do not heat the product or approach the fire source! Do not disassemble or transform the product without authorization! Do not hit the product hard! Otherwise, it may cause the battery to overheat, short circuit, fire or function failure, short life and other hazards.

4. Do not use or place this product in high temperatures (in hot sunlight or in very hot cars), otherwise it may cause overheating of the battery, fire or failure of function, short life, and other hazards.

5. Prohibit disassembly and disassembly of power supply

6. Prohibit short circuit of the power battery

7. Prohibit the use of non-dedicated charger to charge the power supply, it will be dangerous;

8. Do not directly touch the leaking battery, the leakage of electrolyte will cause skin discomfort, in case the electrolyte enters the eyes, rinse with water as soon as possible, do not rub the eyes, and quickly sent to the hospital;

FCC STATEMENT :

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

NOTE: 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.

FCC Radiation Exposure Statement:

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.