zybra Power Bank



Dimension:144.5*69.6*29.5 mm
N.W.: 415 g

Manual

This power bank built in 20000mAh battery and 3 charging cables,support PD22.5W fast charging. Products Performance Parameter:

Products Name: zybra Power Bank
Battery Capacity: 20000mAh
Type C Input:5V/3A 9V/2A 12V/1.5A
UsbA Input: 5V/2A
Usb Output: 5V/3.1A 9V/2.5A 12V/1.9A(Max)
Type C Output:5V/3.1A 9V/2.5A 12V/1.9A(Max)
Built in Type C Cable Output:5V/3.1A 9V/2.5A 12V/1.9A(Max)
Built in Lightning Cable Output:5V/2.4A

The charging protocols used and supported for each part are as follows:

1）Type-C（Orange）Support SSCP/QC2.0/QC3.0/FCP/AFC /SFCP/PD2.0/PD3.0 Fast charging input /Output.

2）TYPE-C（Black）Support SSCP/QC2.0/QC3.0/FCP/AFC/ SFCP/PD2.0/PD3.0 Fast charging Input.

3）USBA（Orange）Support SSCP/QC2.0/QC3.0/FCP/AFC/ SFCP Fast Charging Output.

4）Built in Cable Type C Support SSCP/QC2.0/QC3.0/FCP/ AFC/SFCP Fast Charging Output.

5）Built in Lighting Cable support Apple2.4A Output（This port closes output when the end USBA voltage is above 6V）

6）Built in USBA Cable support DCP/BC1.2 Input(This input line is in the black TYPE-C line, can not be used simultaneously)

I Use operational instructions

1）For the first time, the main control chip IP5356 is in a locked state, which needs to be activated by charging and inserted for charging. At this time, the digital tube is fully bright, and the digital tube shows the power percentage, and the activation is successful.

2）Key operation (click the key to press the button and release within a second, double click the key to click twice within a second, long press the key to hold the key for more than two seconds)

3)In the standby state after normal activation, clicking the button will start the machine and open the output. Without pressing the button, the output port can also automatically identify the boot output.

4)Discharge state:

①Clicking on the key will have no impact;

②Double clicking the button will close the boost;

5）Charging state:

①Click or double clicking the button has no effect;

II Display instructions and fast charge management

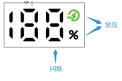
1）1188 digital tube display, abnormal, such as output over current, output short circuit, input over voltage, chip over temperature, NTC protection and other conditions on the digital tube 188 flicker 5 times after the system shutdown. At low power, digital tube single digit shows 5% start with 1 HZ flashing less than 0% system shutdown.

2）When charging:

Voltage	⚡	188	%
5V	not shown	Flash light Single digit	Light on
Non-5V	Light on	Flash light Single digit	Light on

The fast charging adapter input system automatically matches the charging voltage

If input high voltage display as below:

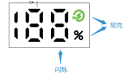


3）When Discharing:

Voltage	⚡	188	%
5V	not shown	Flash light Single digit	Light on
Non-5V	Light on	Flash light Single digit	Light on

The system automatically matches the voltage when powering the mobile phone or other equipment

If high voltage output display as below:



4）Each time the system switches the state of fast charging and ordinary charging. In order to ensure the safety of the electrical equipment, the system will turn off the output of all output ports for a short time, wait for the voltage 5V / 9V / 12V to be switched over, and then restart the output after it is stable.

5）If the device and the output port support, the system will automatically switch to the fast discharge state within about 16 seconds.

6）Multiple port output at the same time, and the system automatically switches to 5V output. The multiport output is filled by the system. Whether the load is removed or not, the other output will enter if the output supports fast charging.

7）Under the charging state, if the charging adapter supports the fast charging, the system will automatically start the fast charging.

8）In the state of charging and discharging, the system default 5V charging and discharge.

III Main technical parameters

Parameter	Unit	Mini	Normal	Max	Error	Ambiambient temperature 25℃
Input						
TYPE-C(Black) Input Voltage (DC)	V	4.5	5/9/12	14		Input the (charge) voltage value
TYPE-C(Black) Input Current (DC)	A	/	2.5/2/1.5	2.8		Input the (charge) current value
TYPE-C(Orange) Input Current (DC)	A	/	2.5/2/1.5	2.8		Input the (charge) current value
USBA Input Voltage(DC)	V	4.75	5.0	5.25		The USBA input voltage value
USBA Input Current(DC)	A	1.80	2.0	2.2		The USBA input current value
Charging cut-off current	mA	80	100	200		
Enter the interface	Type-c Black//TYPE-C Orange//USBA					
Output						
output voltage (DC)	V_{out}=5V@3A	4.95	5.12	5.23		Output port rated voltage
	V_{out}=9V@2A	8.75	9	9.25		
	V_{out}=12V@1.5A	11.75	12	12.25		
USB (Orange) Output Current(DC)	V_{out}=5V	/	3.0	3.1		Output port rated current
	V_{out}=9V	/	2.0	2.5		
	V_{out}=12V	/	1.5	1.9		
USB overcurrent protection	A	/	/	3.8		System protection, the cell voltage =3.7V/ V_{OUT}=5V
Conversion boost efficiency	%	88	90	92		Cell voltage=3.7V/ V_{OUT}=5V
Type-c Output Current (DC)	V_{out}=5V	/	3.0	3.1		
	V_{out}=9V	/	2.0	2.5		
	V_{out}=12V	/	1.5	1.9		
Type-c Over current protection	A	/	/	3.8		System protection, the cell voltage =3.7V/ V_{OUT}=5V
Conversion boost efficiency	%	88	90	92		Cell voltage=3.7V/ V_{OUT}=5V
Built in Type-c cable output current (DC)	V_{out}=5V	/	3.0	3.1		
	V_{out}=9V	/	2.0	2.5		
	V_{out}=12V	/	1.5	1.9		
Built in Type-c cable over current protection	A	/	/	3.8		System protection, the cell voltage =3.7V/ V_{OUT}=5V
Conversion boost efficiency	%	87	89	91		Cell voltage=3.7V/ V_{OUT}=5V
Built in Lightning Cable current output (DC)	V_{out}=5V	/	2.4	2.7		
Built in Lightning over current protection	A	/	/	2.8		
Conversion boost efficiency	%	87	89	91		Cell voltage=3.7V/ V_{OUT}=5V

IVHardware protection board parameters

Protection plate part						
Overcharge voltage	V	4.25	4.3	4.35	±50mV	Charge protection when the cell voltage is bigger than this value
Over Discharge voltage	V	2.3	2.4	2.5	±75mV	Cut discharge when the core voltage is less than this value
Overput / overcharge current	A	/	/	9	±50mV	Discharge is cut-off when the cell current is greater than this value
Short circuit protection function		Support				Refers to the short-circuit protection function between B + and GND
--Overdischarge voltage delay	mS		40	100	±50mV	Discharge is cut-off when the cell current is greater than this value
--Delay of over-current protection	mS		6			Means the transient overload current between B + and GND
-Charging Periond the NTC temperature protection	℃	0		50		
--Discharging Periond the NTC temperature protection	℃	-20		55		

Conditions for safe storage, including any incompatibilities:

1)This product has over-current protection function. If the wrong product will turn off or reduce the output power, reduce the charging speed, and ensure safety, please check if the equipment or other improper use.

2) This product should not be used in more than 40 degrees environment. It is recommended that the best working environment should be 25 degrees.

3) Do not place the product in water, fire medium high temperature (> 45 degrees) and too low temperature (below-20 degrees), do not play for children, especially let children contact accessories.

4)Please use dry soft cloth to clean the surface, not with chemicals, soap or detergents.

5) Do not place the product in high temperature or fire source, avoid storage in direct sunlight.

6)Do not store with oxidizing, acidic substances.

7)Do not store the power bank in boxes or drawers that may cause short-circuiting each other or by other metal objects.

WARMING: Please follow the above safety instructions otherwise it will cause fire, electronic shock, damage or other damage.

CE FC RoHS

Made in China