

# Shenzhen Hongde Industrial Co., Ltd.

## TEST REPORT

**SCOPE OF WORK**

Test report

**REPORT NUMBER**

200312072GZU-002

**ISSUE DATE**

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**REVISION DATE**

None

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26

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Single test report \_a\_ May 2017



Report No.: 200312072GZU-002

## TEST REPORT

<b>Applicant</b>	:	Shenzhen Hongde Industrial Co., Ltd.
<b>Address</b>	:	533, No. 1, Shen Hua Street, Liu Yue Community, Heng Gang, Long Gang District, Shenzhen City, China
<b>Sample Description</b>		
Name of Sample	:	jump starter
Model Number	:	A11, A7, A10, A15
Brand Name	:	-
Sample Development Level	:	prototype
Quantity of Sample(s)	:	8
Date of Receiving	:	25 Mar., 2020
Date of test Conducted	:	25 Mar., 2020 to 13 Apr., 2020
Report Issue Date	:	17 Apr., 2020
<b>Test</b>		
Test Requested	:	Portable Power Packs according to ANSI/CAN/UL 2743:2018 Ed.2
Test Method	:	Portable Power Packs [ANSI/CAN/UL 2743:2018 Ed.2].
Test Observation:	:	The battery pack is tested according to UL 2743, recorded in <b>Appendix A.</b>
Test Conclusion:	:	From the results of our examining and testing on the submitted samples, we are of the opinion that the submitted samples complied with the relative clause of above standard, see page 4-10.
Other information	:	DC Input: 5VDC, 2.1A(Type C); USB Output: DC 5V, 3.1A(total); Jump starter 250A, 2S (2s on, 30s off); Internal Li-ion Battery Capacity: 14.8Vdc,2500mAh Operation temperature: 0~25° C
Remark	:	This test report is only for evaluation of the specified standard clauses listed in <u>Test Requested</u> . Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

Tested by:

*Kady*

Kady Qin  
Engineer

Approved by:

*Spark*

Spark He  
Reviewer

## TEST REPORT

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The testing of this report is type tests. The requirements and tolerances permitted by this report are related to testing of a type-test sample submitted by the manufacturer for that purpose. Compliance of the type-test sample does not ensure compliance of the whole production of a manufacturer.

Possible test case verdicts:	
- test case does not apply to the test object :	N/A
- test object does meet the requirement :	P (Pass)
- test object does not meet the requirement :	F (Fail)

Factory: Shenzhen Hongde Industrial Co., Ltd.

Address: 533, No. 1, Shen Hua Street, Liu Yue Community, Heng Gang, Long Gang District, Shenzhen City, China

The product covered by this report is a portable power pack, which contained one DC input, Two USB output ports rated 5Vdc, jump starter, LED light, one built-in Li-ion polymer battery pack with 4 cells (1P4S) in series.

This product was supplied by a specified certified charger, which should be in accordance with UL 60950-1 and CAN/CSA C22.2 No. 60950-1 or UL 1310 and CAN/CSA C22.2 No. 223 or UL 1012 and CAN/CSA C22.2 No. 107. 2.

The product could not be charged and supply the power to output port at the same time. This device is intended to be stored indoors when not in use. This device shall not be stored or left outdoors when not in use.

All the models are same except model name and outward, the model A11 was selected to test for representative model.

## TEST REPORT

<b>Appendix A:</b>			
<b>HOUSEHOLD AND COMMERCIAL BATTERIES - UL 2743</b>			
Clause	Requirement - Test	Result - Remark	Verdict
1	Scope		P
2	Units of Measurement		P
3	Components		P
4	Undated References		P
5	Glossary		P
<b>Construction</b>			--
6	General		P
6.1	If the operation and maintenance of a power pack by the user involves a risk of injury to persons, a risk of electric shock, or a risk of fire, means shall be provided to reduce the risk. When evaluating a power pack, consideration shall be given to reasonably foreseeable misuse of the product.		P
6.2	Power packs intended for use within a repair facility, and marked as such as indicated in 69.4, shall be provided with instructions containing the statement in 74.3 and shall be marked as shown in 70.19. Power packs that are not intended for use in a repair facility shall be marked in accordance with 70.20.		N/A
6.3	Outdoor use power packs shall be evaluated for all environmental considerations addressed by this standard and are intended to be used and stored either outdoors or indoors. Temporary outdoor use power packs shall be evaluated for exposure to rain, shall be marked in accordance with 70.20 and 70.21, and shall be provided with instructions in accordance with 74.5. Indoor use only power packs shall be marked in accordance with 70.22 and shall be provided with instructions in accordance with 74.6. Indoor use only packs need not comply with the environmental considerations in 7.5.	This device shall not be stored or left outdoors when not in use.	P
6.4	For power packs not marked in accordance with 70.23, the device shall be subjected to the Vibration Test, Section 51.		P
7	Frame and Enclosure		P
7.1	General		P
7.2	Metallic enclosures		N/A
7.3	Nonmetallic enclosures	Material information: V-0, RTI: 120°C	P
	Conductive coating		N/A
7.4	Openings in enclosures		P
7.5	Environmental considerations		N/A
8	Flammability of Materials	See the CDF	P
9	Assembly		P

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<b>Clause</b>	<b>Requirement - Test</b>	<b>Result - Remark</b>	<b>Verdict</b>
10	Corrosion Protection	The material:	N/A
11	Supply Connections		P
11.1	General		P
11.2	Flexible cord connection		N/A
11.2.2	Strain relief		N/A
11.2.3	Bushings		N/A
11.3	External power supplies	External power supply comply with UL 1310 or UL 60950-1 or UL 1012	P
11.4	Vehicle adapters		N/A
11.5	Photovoltaic panels		N/A
12	Output Connections		P
12.1	General	Tested with appliance	P
12.2	Booster cable assemblies		P
12.2.1	General		P
12.2.2	Cables		P
12.2.3	Clamps		P
12.3	Receptacles		N/A
12.4	DC output connectors and USB connectors	Tested with appliance	P
12.5	Vehicle adapter sockets		N/A
13	Grounding		N/A
13.1	General		N/A
13.2	Grounding identification		N/A
14	Double Insulated Products		N/A
15	Current Carrying Parts		P
16	Internal Wiring		P
16.1	Mechanical protection		P
16.2	Wiring insulation		N/A
16.3	Splices and connections		P
17	Separation of Circuits		N/A
18	Insulating Materials		N/A
19	Compressors		N/A
19.1	General		N/A
19.2	Motors and thermal protection		N/A
19.3	Parts subject to pressure		N/A
19.3.1	A part of the power pack that is subject to pressure during normal or anticipated abnormal operation shall withstand, without rupture, a pressure corresponding to five times the maximum pressure that can be developed by the system.		N/A

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<b>Clause</b>	<b>Requirement - Test</b>	<b>Result - Remark</b>	<b>Verdict</b>
19.3.2	In the event that a test is required to determine whether a part complies with the requirement in 19.3.1, two samples of the power pack are to be subjected to the Hydrostatic Strength Test, Section 59. Prior to the test, parts molded of polymeric material are to be conditioned in an air circulating oven for 7 hours at a temperature of 70°C (158°F) or 10°C (18°F) higher than the maximum temperature measured on the part under normal load, whichever is greater. The samples are to be removed from the oven and allowed to cool to room temperature prior to the test.		N/A
20	Capacitors and Electrochemical Capacitor Modules		N/A
20.1	Capacitors		N/A
20.2	Electrochemical capacitor modules		N/A
21	Resistors		P
22	Lampholders		N/A
23	Transformers		N/A
24	Switches and Controls		N/A
24.1	A switch or other control device shall be suitable for the application and shall have current and voltage ratings not less than those of the circuit that it controls when the power pack is operated as intended.		N/A
24.2	A primary circuit switch that controls an inductive load having a power factor less than 75 percent, such as a transformer, and that does not have an inductive rating, shall be rated not less than twice the full load current rating of the load, or the switch shall be investigated for this application.		N/A
24.3	A switch or other control device not having an inductive rating that is connected in a transformer secondary circuit shall comply with the Normal Temperature Test, Section 47, and with the Overload of switches and controls test, Section 53.2.		N/A
24.4	Unless rated for the application, a switch or other device that controls a motor and is not interlocked so that it will not break the locked rotor motor current shall be subjected to the Overload of switches and controls test, Section 53.2, based on the locked rotor current of the motor.		N/A
24.5	A switch that controls a tungsten-filament lamp shall have a tungsten-filament lamp current rating not less than the maximum current it will control.		N/A
24.6	A switch shall not disconnect the grounded conductor of a circuit.		N/A

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24.7	If unintentional operation of a switch results in a risk of injury to persons, the actuator of the switch shall be located or guarded so that such operation is unlikely. The actuator of a switch may be guarded by recessing, ribs, barriers, or the like.		N/A
25	Printed Wiring Boards	V-0	P
26	Interlocks		N/A
27	Overload Protection Devices		P
27.1	An overcurrent or thermal protective device shall be suitable for the application.		N/A
27.2	An automatic reset device used to comply with 27.1 shall be cycled through 200 operations. At the end of the 200 operations, the device shall be able to perform its intended function with no additional risk of fire, electric shock, or injury to persons. See Overload of protection devices, Section 53.3.		N/A
27.3	A fuse involving a risk of electric shock shall be inaccessible: a) To the user from outside the enclosure, and b) To the user during any user servicing.		N/A
27.4	A fuse that can be serviced by the user shall be secured in a fuseholder that is constructed and installed such that no uninsulated live parts will be accessible to contact by persons removing or replacing the fuse. The power pack shall be marked in accordance with 70.10. This marking shall be adjacent to the fuse.		N/A
27.5	The screw shell of a plug fuseholder and the accessible contact of an extractor type fuseholder shall be connected to the load.		N/A
28	Internal Battery	Li-ion Cells comply with UL 1642	P
28.1	General		P
28.2	Lead acid batteries		N/A
28.2.1	A lead acid battery shall comply with the requirements in the Standard for Standby Batteries, UL 1989.		N/A
28.2.2	The power pack shall provide a means of reverse polarity protection or the test of 50.3 shall be performed.		N/A
28.2.3	The power pack shall provide short circuit protection for the battery or the test of 50.2 shall be performed.		N/A
28.2.4	The power pack shall provide a means to prevent overcharge of the battery or the test of 50.9 shall be performed.		N/A
28.2.5	The battery shall be subjected to the Normal Operation Charging Test, Section 43.		N/A

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28.3	Lithium-ion batteries		P
28.3.1	A lithium-ion battery cell shall comply with the requirements in the Standard for Lithium Batteries, UL 1642, or in the Standard for Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes – Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made From Them, for Use in Portable Applications, UL 62133.	Complied with UL 1642	P
28.3.2	The power pack shall provide a means of reverse polarity protection or the test of 50.3 shall be performed.		P
28.3.3	The power pack shall provide short circuit protection for the battery or the test of 50.2 shall be performed		P
28.3.4	The power pack shall provide a means to prevent overcharge of the battery or the test of 50.9 shall be performed.		P
28.3.5	The battery shall be subjected to the Normal Operation Charging Test, Section 43.		P
28.3.6	The power pack shall be subjected to the Lithium-Ion Charging System Test, Section 44.		P
29	Spacings		N/A
30	Inverters		N/A
30.1	Inverters provided as part of the power pack shall be shown to comply with the applicable requirements in this outline. See 30.2. Exception: Inverters that comply with the Standard for Power Units Other Than Class 2, UL 1012, comply without further evaluation.		N/A
30.2	With reference to 30.1, specific attention should be given to: a) Printed Wiring Boards, Section 25; b) Spacings, Section 29; c) Normal Temperature Test, Section 47; d) Dielectric Voltage Withstand Test, Section 48; and e) Abnormal Operation Tests, Section 50.		N/A
31	Charging Functions		N/A
31.1	Specialized packs that provide a charging function while connected to the source of supply that is intended to charge the external battery through the pack's booster cable assembly, or other output connection, shall have the charging circuits evaluated in accordance with the applicable requirements in the Standard for Battery Chargers for Charging Engine-Starter Batteries, UL 1236.		N/A
<b>Protection Against Injury To Persons</b>			P
32	General		P
33	Back Feed Protection		N/A
34	Sharp Edges		P



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<b>Appendix A:</b>			
<b>HOUSEHOLD AND COMMERCIAL BATTERIES - UL 2743</b>			
Clause	Requirement - Test	Result - Remark	Verdict
35	Strength of Enclosure		P
36	Attachments		N/A
37	Stability		N/A
38	Strength of Handles		N/A
39	Surface Temperatures		P
40	Safety Circuits and Control Circuits		N/A
<b>PERFORMANCE</b>			
41	General		P
42	Power Input Test		N/A
43	Normal Charging Operation Test		N/A
44	Lithium Charging System Test		N/A
45	Capacitor Discharge Test		N/A
46	Leakage Current Test		N/A
47	Normal Temperature Test		P
47.1	General		P
47.2	Maximum normal load		N/A
47.3	Power pack ampacity temperature test		P
48	Dielectric Voltage Withstand Test		N/A
49	Leakage Current Following Humidity Conditioning		N/A
50	Abnormal Operation Tests		N/A
50.1	General		N/A
50.2	Output short test		N/A
50.3	Reverse polarity of booster cables		N/A
50.4	Component faults		N/A
50.5	Relay and solenoid burnout		N/A
50.6	Printed wiring board abnormal test		N/A
50.7	Disconnected fan test		N/A
50.8	Blocked ventilation test		N/A
50.9	Overcharging test		N/A
50.10	Internal battery reverse polarity test	Without removable internal batteries	N/A
51	Vibration test		N/A
52	Ground Continuity		N/A
53	Overload Tests		N/A
53.1	General		N/A
53.2	Overload of switches and controls test	No such component	N/A
53.3	Overload of protection devices	No such component	N/A
53.4	Overload of interlocks	detachable flexible cord	N/A
54	Strain Relief Test		N/A
54.1	General		N/A
54.2	Push-back strain relief test		N/A
55	Strength of Enclosure Tests		N/A
55.1	General		N/A
55.2	Impact test		N/A
55.3	Drop test		N/A
56	Mold Stress Test		N/A
57	Strength of Handles Test		N/A
58	Stability Test		N/A

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<b>Clause</b>	<b>Requirement - Test</b>	<b>Result - Remark</b>	<b>Verdict</b>
59	Hydrostatic Strength Test		N/A
60	Rain Test	Not considered	N/A
61	Tests on Insulating Materials		N/A
62	Accelerated Aging of Gaskets, Sealing Compounds, and Adhesives Test		N/A
63	Metallic Coating Thickness Test	Plastic enclosure	N/A
64	Permanency of Wrapped Hang Tag Marking		N/A
65	Power Pack Ampacity Test		N/A
66	Back Feed Test		N/A
67	Cold Bend Test		N/A
68	Clamp Tests		N/A
68.1	General		N/A
68.2	Cold drop test		N/A
68.3	Dielectric voltage-withstand test		N/A
68.4	Secureness test		N/A
<b>Marking (69-70)</b>		The marking provided by applicant, but the marking complied the UL 2743.	P
<b>Instructions (71-76)</b>		The instructions provided by applicant, but the marking complied the UL 2743.	P

## TEST REPORT

47 Normal Temperature Test					
Output Current: <u>250</u> A <u>2S on 30S off</u>				Ambient temperature: 25.0°C	P
Ch.	Location	Temp. Rise (°C)	Actual Temp (°C)	Limit (°C)	
1	Enclosure outside top near battery	9.0	34.0	60	
2	Enclosure outside bottom near battery	9.6	34.6	60	
3	Booster connector	34.5	59.5	120	
4	Booster cable outside	28.1	53.1	200	
5	Clamp surface	4.3	29.3	60	
6	Enclosure of booster	9.4	34.4	60	
Temperature rise of winding::	R1(Ω)	R <sub>1</sub> (Ω)	T (°C)	Required T(°C)	Insulation class
Primary Winding	-	-	-	-	-
Secondary Winding	-	-	-	-	-
Remark: Discharging with internal battery pack fully charge					

## TEST REPORT

Appendix: List of critical components (Partial)

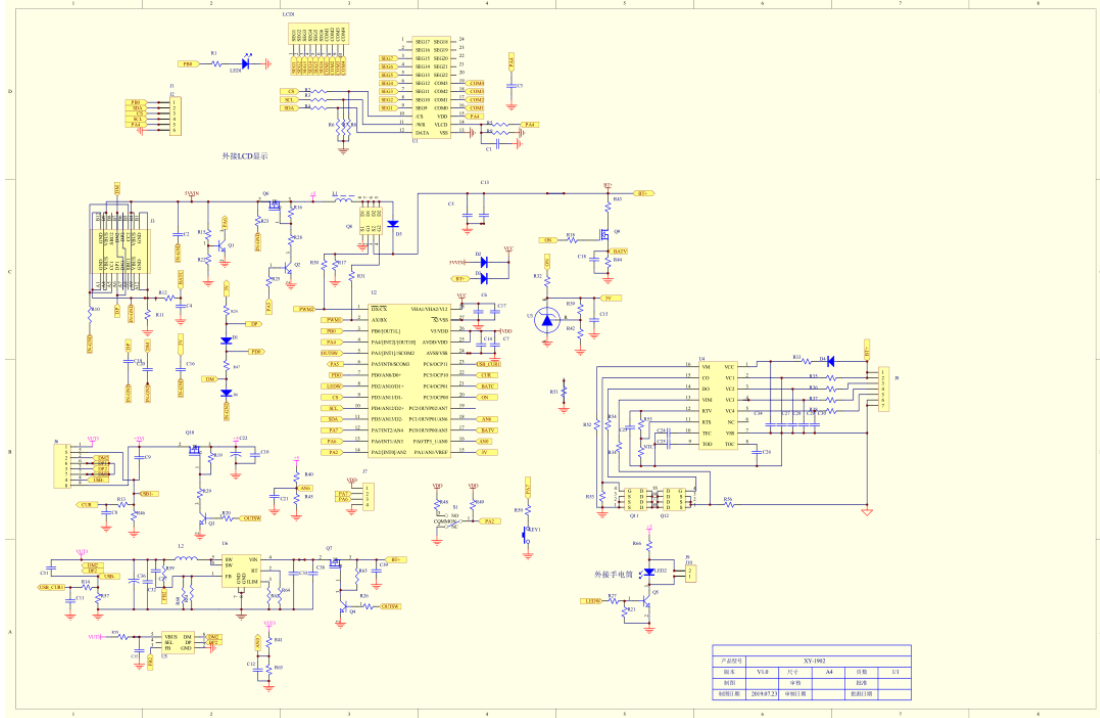
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Mark(s) of conformity <sup>1)</sup>
Plastic enclosure	SABIC INNOVATIVE PLASTICS US LLC	940(f1)	PC, V-0, minimum RTI:120°C, min. thickness 2.0mm	UL E121562
USB output port	AMPHENOL TECHNOLOGY (ZHUHAI) CO LTD	C10-670932-B2P	5Vdc min. 4.2A Max	UL E335170
Internal lead wire	DONGGUAN CHENG XING ELECTRONIC CO LTD	2468	VW-1, 22AWG, 300V, 80°C	UL E249743
Internal lead wire Alternative	Various	2468	VW-1min. 22AWG, 300V, 80°C	UR
PCB	DONGGUAN FAN LI SHENG ELECTRONICS CO LTD	YFL-D	V-0, 130°C, minimum thickness 1.5mm	UL E471141
PCB Alternative	Interchangeable	Interchangeable	V-0, 130°C, minimum thickness 1.5mm	UR
Battery protective IC on battery protection (U4)	Interchangeable	Interchangeable	Over charge protection voltage:4.175-4.250V, Over discharge protection voltage:2.500-3.000V, Temperature rang:-10~50°C	NR
Battery protective IC on battery protection (Q11 Q12)	Interchangeable	Interchangeable	Over charge protection voltage:4.175-4.250V, Over discharge protection voltage:2.500-3.000V, Temperature rang:-10~50°C	NR
Battery cell	Shenzhen Vigor Power Battery CO.,LTD	5043126	Max Charging Voltage:4.2V, 2500mAh	TUV RH UL1642
Booster cable set	Shenzhen Hongde Industrial Co., Ltd.	B1	Input high voltage protection:16.8V±0.3V the jaw ends of the clamps to span a minimum distance of 920 mm.	NR
Clamp (plastic)	FORMOSA CHEMICALS & FIBRE CORP PLASTICS DIV	AC3900	PC, minimum RTI: 80°C , minimum thickness 1.5mm, V-0	UR
Booster cable	DONGGUAN ZHONGZHEN ELECTRONIC WIRE CO LTD	3239	10AWG, 200°C, 600V	UR

## TEST REPORT

Booster cable Alternative	Various	3239	10AWG, 200°C, 600V	UR
Enclosure for booster function controll circuit	FORMOSA CHEMICALS & FIBRE CORP PLASTICS DIV	AC3900	PC, minimum RTI: 80°C , minimum thickness 1.5mm, V-0	UR
Connector for booster cable	TAISU PLASTIFICATION MATERIAL SCI& TECH CO LTD	PA66 T303	V-0, 120°C	UR
PCB for booster function controll circui	FENGSHUN JUNDA ELECTRONIC CO LTD	JD-C	V-0, 130°C	UR
PCB for booster function controll circui Alternative	Interchangeable	Interchangeable	V-0, 130°C, minimum thickness 1.5mm	UR
K1(relay)	XIAMEN HONGFA ELECTROACOUSTIC CO LTD	HFKP012	12Vdc min., 70A	UR
Lable (not shown)	Various	Various	Min. 80°C, suitable for plastic enclosure	UR

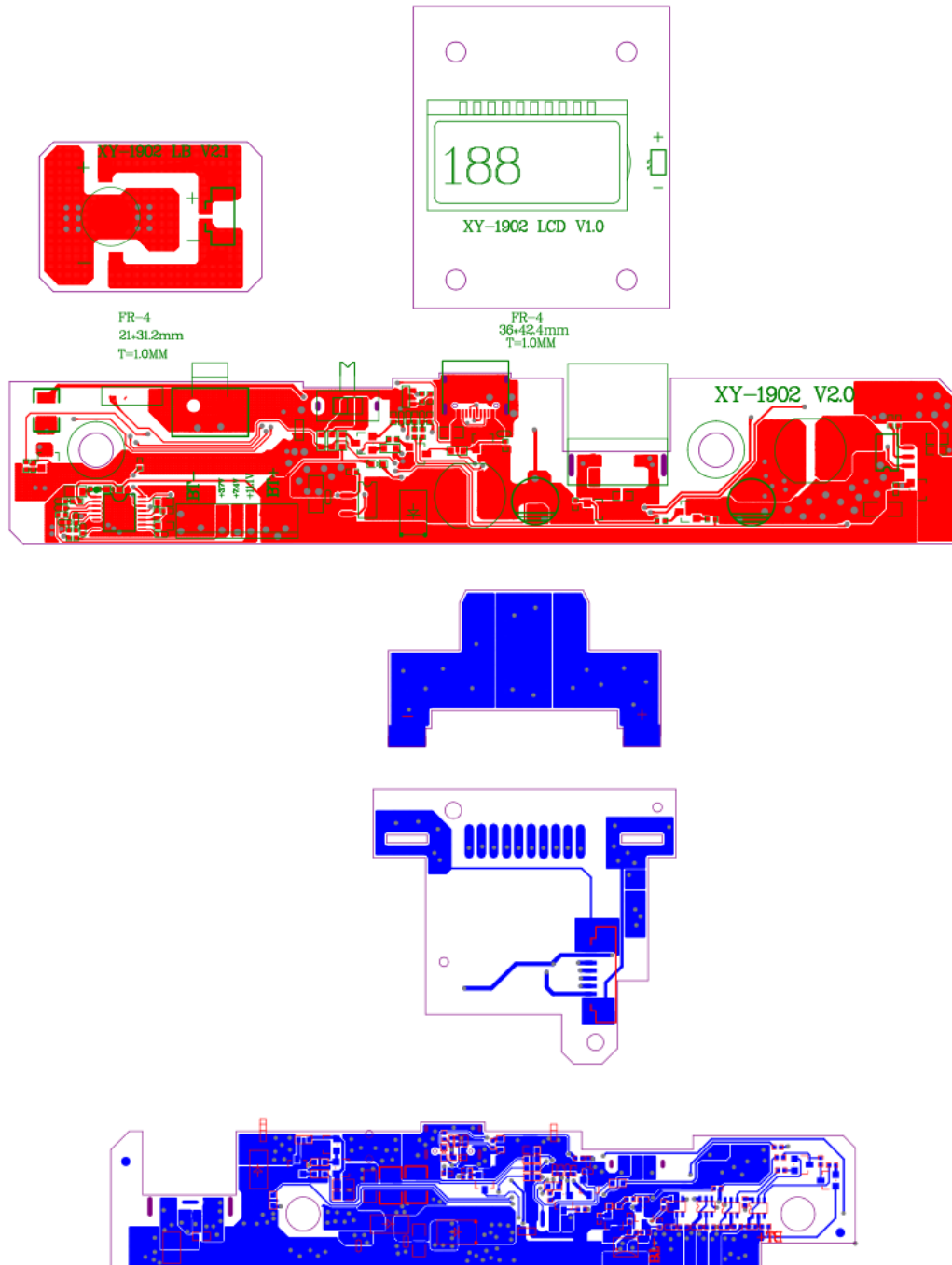
# TEST REPORT

## Appendix: Circuit Diagram



## TEST REPORT

Appendix: PCB layout



# TEST REPORT

## Appendix: Battery Packs specification



**深圳市伟之冠电池有限公司**  
 Shenzhen Vigor Power Battery CO.,LTD  
 Tel:86-755-33658385 Fax:86-755-27556255  
[www.vigor-power.cn](http://www.vigor-power.cn)

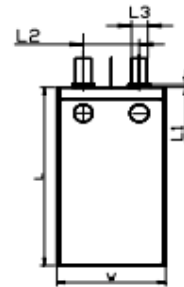
### 1.Scope 范围

The specification applies to polymer battery supplied by Shenzhen Vigor Power Battery  
 本标准适用于深圳市伟之冠电池有限公司生产的锂离子电池。

### 2.Specification 产品规格

#### 2.1 Cell specification 单电芯规格

NO.	Items	Specifications
1	Nominal capacity 标称容量	<u>2500mAh @ 0.5C</u> Discharge(放电)
2	Nominal voltage 标称电压	3.7V
3	Internal impedance 内阻	≤3.5mΩ
4	Dimension 尺寸	Thickness/厚度: 6.0±0.3mm
		Width/宽度: 43.0±1.0mm
		Height/高度: 128.0±2.0mm
		Tab width/极耳宽度: 15mm
		Distance between 2 tabs/极耳间距: 22±2mm
5	Cell weight (单电芯重量)	69.0±3.0g
6	Standard charge 标准充电	0.5C CC(constant current)charged to 4.2V, then CV(constant voltage 4.2V)charge till charge current decline to ≤0.05C at 25°C 在 25°C下, 用 0.5C CC (恒流) 充电至 4.2V, 再 CV (恒压) 充电直至充电电流 ≤0.05C
7	Rapid charge 快速充电	1C CC(constant current)charged to 4.2V, then CV(constant voltage 4.2V)charge till charge current decline to ≤0.05C at 25°C 在 25°C下, 用 1C CC (恒流) 充电至 4.2V, 再 CV (恒压) 充电直至充电电流 ≤0.05C
8	Charging time 充电时间	Standard charging: 3.0 hours(ref.) 标准充电: 3.0 小时 (参考值) Rapid charge: 2.0 hours(ref.) 快速充电: 2.0 小时 (参考值)
9	Standard discharge 标准放电	Constant current 40C, end voltage 3.0V, at 25°C 在 25°C下, 持续电流: 40C, 截止电压 3.0V
10	Peak discharge currents 瞬间电流	Peak current 80C, Continue time ≤2S 瞬间电流 80C, 持续时间 ≤2S
11	Operating temperature 工作温度	Charging(充电): 0-40°C Discharge(放电): -20-60°C





## TEST REPORT

Appendix: Photo of the appliance:



External view for all models

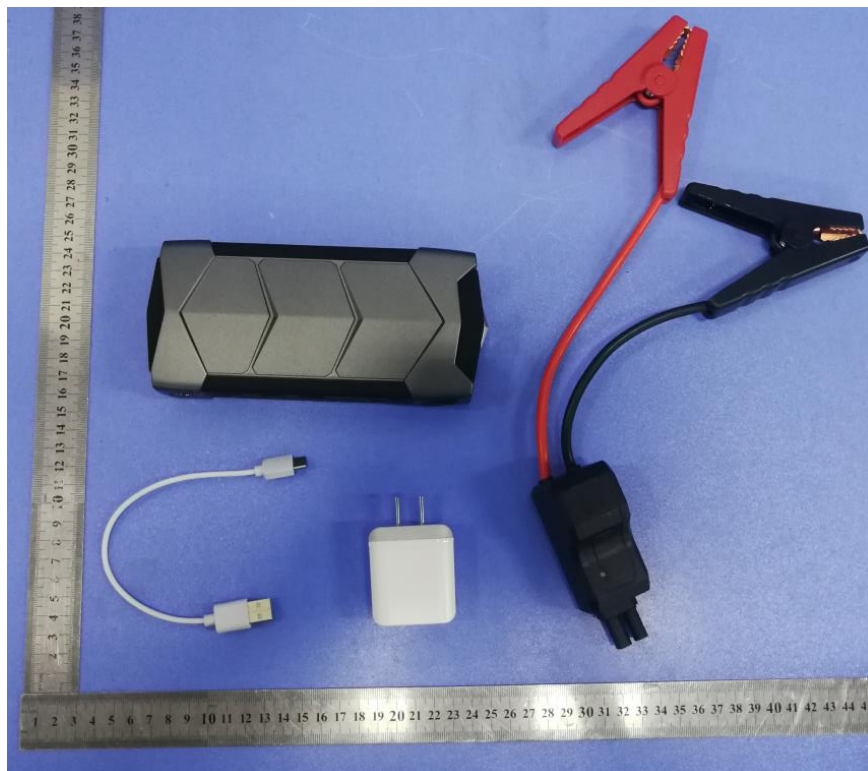


External view for A11

**TEST REPORT**

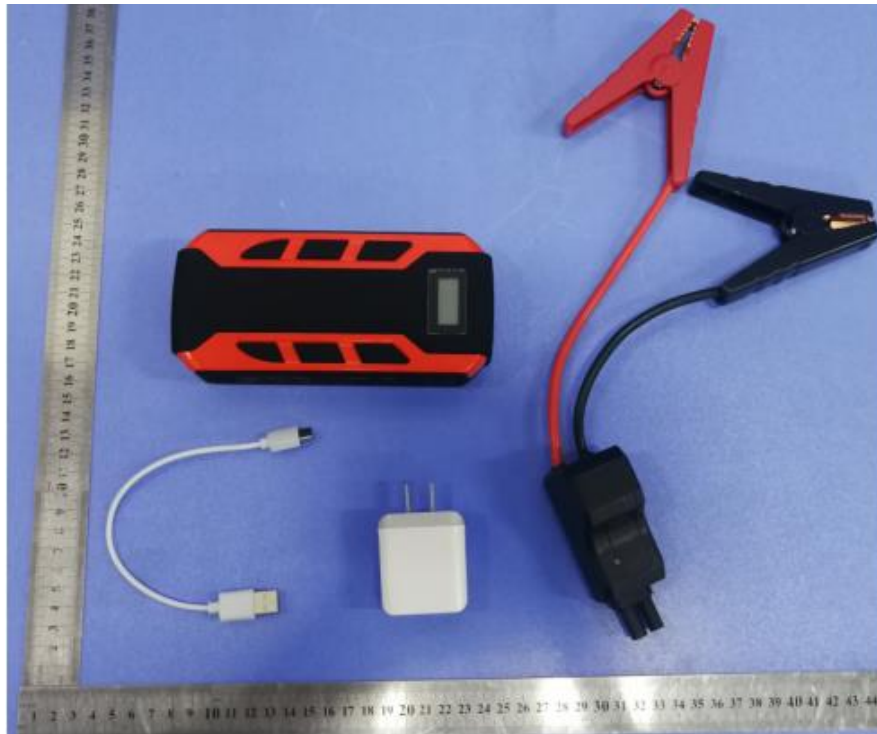


External view for A15



External view for A7

**TEST REPORT**



External view for A10



External view for A11 (representative)



**TEST REPORT**



External view for A11 (representative)



External view for A11 (representative)

**TEST REPORT**

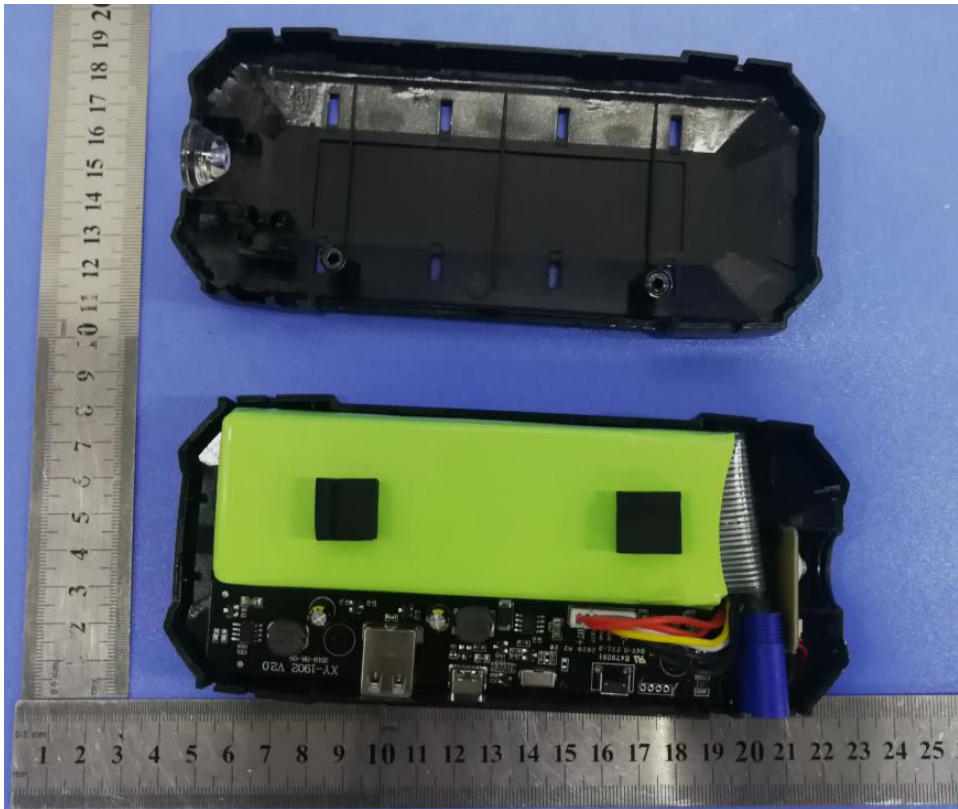


External view for A11 (representative)

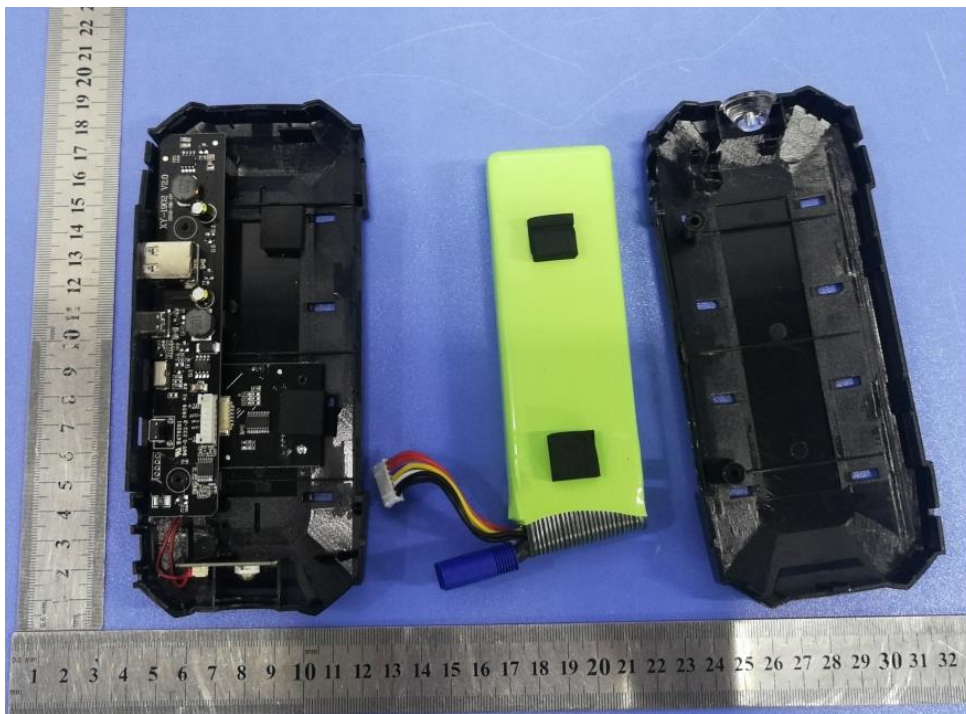


External view for A11 (representative)

**TEST REPORT**



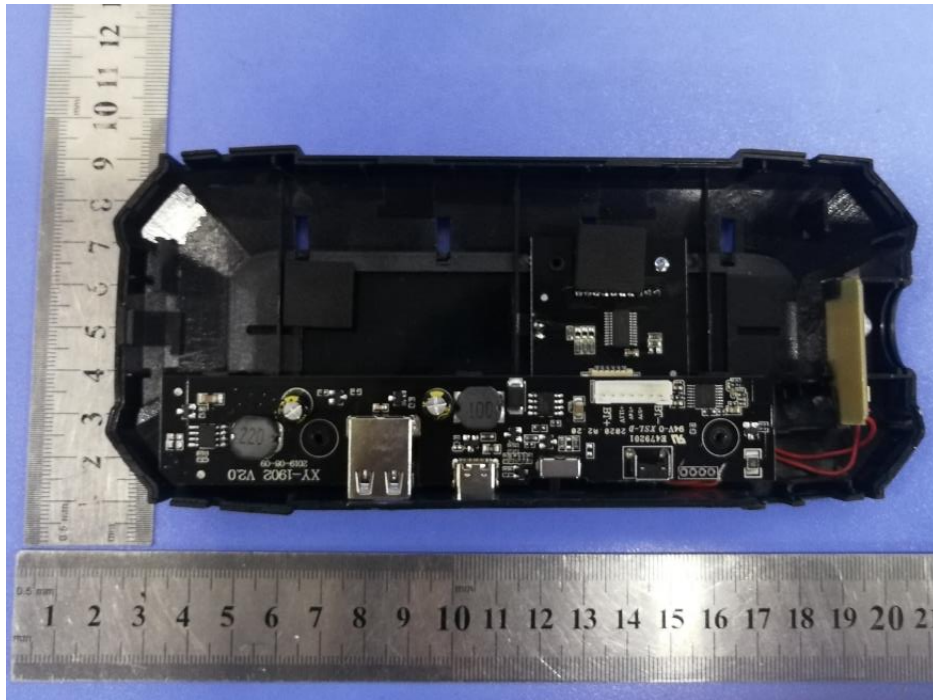
Internal view for A11 (representative)



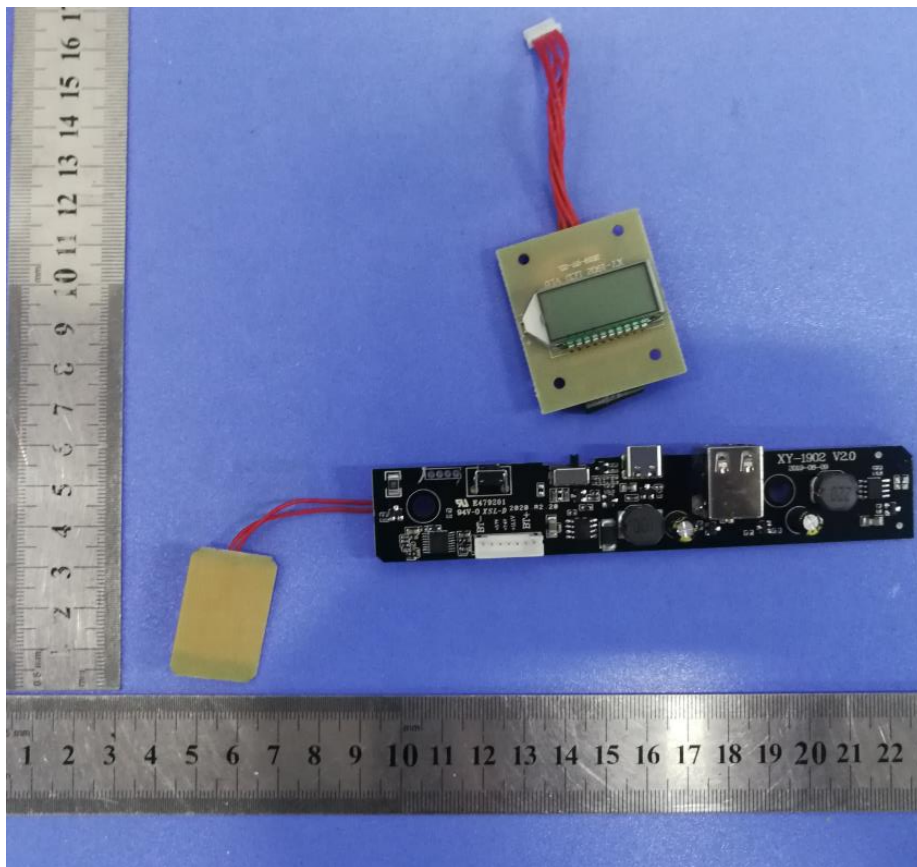
Internal view for A11 (representative)



TEST REPORT

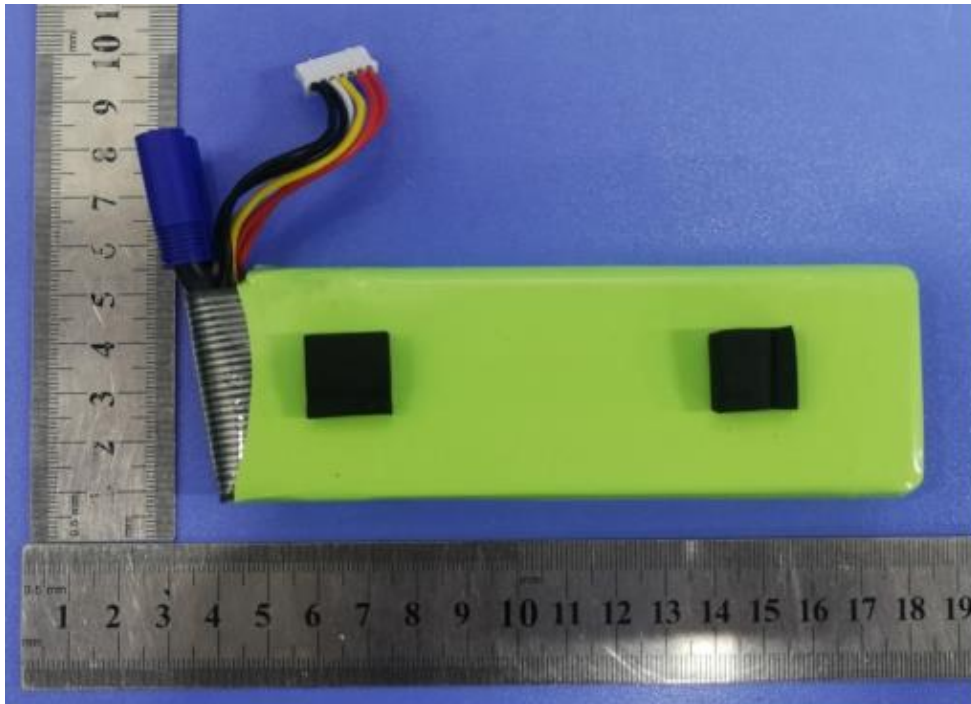


PCB view for A11 (representative)



PCB view for A11 (representative)

# TEST REPORT



Battery view



## TEST REPORT

Appendix: Marking:

<p>Model: A11 DC Input: 5VDC, 2.1A(Type C); USB Output: DC 5V, 3.1A(total); Jump starter 250A, 2S; Internal Li-ion Battery Capacity: 14.8Vdc,2500mAh Operation temperature: 0~25° C</p> <p><b>WARNING!</b></p> <ul style="list-style-type: none"><li>a. Do not overcharge the internal battery-See Instruction Manual.</li><li>b. Do not smoke,strike a match,or cause as park in the vicinity of the power pack.</li><li>c. Only charge the internal battery in a well ventilated area.</li><li>d. Risk of Injury To Persons. Do not use this product if the output cord or the booster cable are damaged in any way.</li><li>e. This device is not intended for use in a commercial repair facility.</li><li>f. This device is intended to be stored indoors when not in use. This device shall not be stored or left outdoors when not in use.</li><li>g. This device is intended for temporary use outdoors and reasonable care should be exercised when using this device in wet conditions.</li></ul>	<p><b>CONFORMS TO ANSI/CAN/UL 2743</b></p>
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The marking for other models is same as above except model name.

## TEST REPORT

Safety user manual:

### SAFETY WARNINGS AND GUIDELINES

Please read this entire manual before using this device, paying extra attention to these safety warnings and guidelines. Please keep this manual in a safe place for future reference.

- Do not leave the power bank unattended while charging.
- Do not use the power bank while it is being charged.
- Allow the power bank to cool for at least 15 minutes between each jump start
- Do not use the power bank with damaged clamps or a defective power plug.
- Do not allow children under 18 years of age to use the power bank without adult supervision.
- After performing a jump start, wait at least 30 minutes before attempting to charge the power bank.
- Always use the cables included with the power bank or certified replacement cables.
- Do not overcharge the internal battery.
- Do not smoke, strike a match, or cause a spark in the vicinity of the power bank.
- Only charge in a well ventilated area.
- This power bank is not intended for use in a commercial repair facility.
- Store the power bank indoors in a cool, dry place when not in use.
- This power bank is intended for temporary use outdoors. Reasonable care should be taken when using the power bank in wet conditions.
- This device contains a Lithium-ion battery. Dispose of this device only in accordance with local, state, or federal regulations for electronic waste.
- Clean using a soft, dry cloth only. Do not use chemical cleaners, solvents, or detergents. For stubborn deposits, moisten the cloth with warm water.

This device has no user serviceable parts. Do not attempt to open, service, or modify this device.

End of test report