560-BATT LITHIUM-ION BATTERY PACK TEST SUMMARY IN ACCORDANCE WITH SUB-SECTION 38.3 OF MANUAL OF TESTS AND CRITERIA

BATTERY TRANSPORTATION INFORMATION

Name of Model and Product n	nanufacturer.		Battery contract manufacture	r's contact information.	
Item Number: 560-BATT Item Description: Lithium Ion Battery Pack.			Electrochem Automation (Shanghai) Co., LTD. No. 5788 Huaxia (W) Rd. Pudong, Shanghai, P.R. China 201204		
Bayco Products Inc. 1640 Sanden Blvd. Wylie Tx, 75098			Test Report Identification No. RZUN2016-2118	Date of Test Report 05/25/2016	
Name of Test Laboratory. VKAN Certification and Testing No. 3, Tiantaiyi Road, Kaitai Science City, Guangzhou P.R. China Description: Battery Pack for Flash\Work Lig Cell Type: ICR18650-26 V/Capacity/W/H rating: 3.7V / 2 Battery Weight: 0.047 Kgm Testing Requirements: The R supplied by BAYCO PRODUC Section 38.3 of the Fifth Revise Recommendations on the Trans manual of Test and Criteria (ST .2/Section 38.3). The results co requirements of the standard.	ght 2600mAh /9.62Wh echargeable lithium TS INC are tested a d Edition of the port of Dangerous (/SG/AC.10/11/Rev	n Batteries according to Goods, .5/Amend	List of tests conducted and result Test T.1: Altitude Simulation : Test T.2: Thermal Test : Test T.3: Vibration : Test T.4: Shock : Test T.5: External Short Circuit Test T.6: Impact/Crush: Test T7: Overcharge : Test T.8: Forced Discharge : Comments: N/A	P P P P	
Reference to assembled battery testing: Section 38.3	Criteria: Section Recommendations	a 38.3 of the Fifth on the Transport	pn of the manual of Tests and h Revised Edition of the of Dangerous Goods, manual of /Rev.5/Amend .2/Section 38.3).	For air transport only does the battery comply with the 30% State of Charge: Y	
PROE	L DUCT CLASSIFIC	ATION FOR T	RANSPORT (According to UN – 1	DGP)	
UN Classification: UN 3481		Proper Shippin	ng Name: Lithium Ion Batteries (Con	tained in equipment)	
James Conner to the model(smanufacturing applicable tranof the certification of the certification)			t remains valid as long as no changes, n) described in this document, after bein ; facility. The model(s) has (have) been isport regulations and the UN Manual o tion. The model(s) must be packaged, ne country and other international regul	g transported from the classified according to the f Tests and Criteria as of the date labelled, and documented	







NO.1121040718

检测报告

Test Report

样品名称: 充电锂电池组 560-BATT 3. 7V 2600mAh

Name of Sample: Lithium Battery Pack 560-BATT 3.7V 2600mAh

委托单位: 全能电池 (上海)有限公司

Consignor:

ELECTROCHEM AUTOMATION (SHANGHAI) CO., LTD





扫描全能王 创建

上海化工院检测有限公司 检 测 报 告

Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report

NO. 1121040718

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样品名称	中文 Chinese	TT 3.7V 2600mAh					
Name of Sample	英文 English	Lithium Battery Pack 560-BATT 3.7V 2600mAh					
样品编号 Sample No.			1121040718				
委托单位 Consignor		ELECTRO	全能电池(上海)有限: CHEM AUTOMATION(SHANG				
生产单位 Manufacturer		ELECTRO	全能电池(上海)有限: CHEM AUTOMATION(SHANG				
检测方法 Test method	ST/SG/AC. 10 OF DANGER	联合国《关于危险货物运输的建议书 试验和标准手册》 T/SG/AC.10/11/Rev.6 Amend.1 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3					
判定标准 Criterion	ST/SG/AC. 10. OF DANGER	联合国《关于危险货物运输的建议书 试验和标准手册》 ST/SG/AC.10/11/Rev.6 Amend.1 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3					
样品外观 Appearance		Gree	绿色 圆柱型塑料薄膜的 n Cylinder plastics f				
样品接受日期 Accepted Date	202	1-04-30	检测起迄日期 Test Date	2021-05-17 ~	2021-06-08		
检测项目 Test Items	A	高度模拟;热测试;振动;冲击;外短路;撞击;过充电;强制放电 Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Impact, Overcharge, Force discharge					
检测结论 Conclusion	ST/SG/AC.10 The sample	/11/Rev.6 Amend.1 has passed the tes	F危险货物运输的建改计 38.3标准要求。 t items of UNITED AT Manual of Tests and 生效日期Cat	10.85 Recomm田村ar Criveria SE/SE/AC	ions on the .10/11/Rev.6		
备注 Comment	可充电单电器	5电池Rechargeable;	Single Cell Battery./	-			
委托单位地址		1		邮政编码 Post Code	1		



副总工程师(Vice chief engineer)





上海化工院检测有限公司 检 测 报 告

Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report

NO. 1121040718

2/11

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序号 No.	检测项目名称 Name of Test Items	Standard re	或标准条款号 quirement or The mber of Standard	检测结果 Test Resu		
1	高度模拟 Altitude simulation	准手册》ST/SG/AC. 试验T.1 UN Manual of Test	牧坊运输的建议书 武塔 10/11/Rev.6 Amend.1 s and Criteria v.6 Amend.1 Section	38.3 见附表 1 See Appendix	1 合格 Passed	/
2	热测试 Thermal test	准手用き ST/SG/AC. 试験T.2 UN Manual of Test	针物运输的建议书 试验 10/11/Rev.6 Amend.1 s and Criteria v.6 Amend.1 Section	38.3 见附表 2 See Appendix :	2 合格 Passed	/
3	振动 Vibration	取合因《关于危险》 准手明》ST/SG/AC. 试验T.3 UN Manual of Test:	特別运输的建议 B 記録 10/11/Rev.6 Amend.1 s and Criteria v.6 Amend.1 Section	38.3 见附表 3 See Appendix :	3 合格 Passed	1
4	冲击 Shock	准手册》ST/SG/AC. 试验T.4 UN Manual of Test:	物运输的建议号 试验 10/11/Rev.6 Amend.1 s and Criteria 5.6 Amend.1 Section	38.3 见附表 4 See Appendix 4	1 合格 Passed	1
5	外短路 External short circuit	准手册》ST/SG/AC.1 试验T.5 UN Manual of Tests	物运输的建议15 试验 0/11/Rev.6 Amend.1 : and Criteria .6 Amend.1 Section		; 合格 Passed	1
6	撞击 Impact	准手册》ST/SG/AC.1 试验T.6 UN Manual of Tests	物运输的建议书 试验 0/11/Rev.6 Amend.1 : ; and Criteria ; 6 Amend.1 Section		合格 Passed	1
7	过充电 Overcharge	联合国《关于危险货 准手册》ST/SG/AC.1 试验T.7 UN Manual of Tests	物运输的建议书 试验 0/11/Rev.6 Amend.1 : and Criteria .6 Amend.1 Section		合格 Passed	/
8	强制放电 Forced discharge	联合国《美子充险货物运输的建议号 試験和标 准手册》ST/SG/AC, 10/11/Rev. 6 Amend. 1 38, 3 试验T. 8 UN Manual of Tests and Criteria ST/SG/AC, 10/11/Rev. 6 Amend. 1 Section 38, 3 Test T. 8		ul标 8.3 见附表 8 See Appendix 8	合格 Passed	/
	t测环境条件 st Environment Condition	Am		:21℃-23℃;环境湿/ e:21℃-23℃;Ambie		
A	包检验情况	检测项目 Test Item		/		
	のれて知道です。 Condition	分包实验室 Subcontracted	名称 Name	1	邮编 Post Code	1
		Laboratory	地址 Address	/	电话 Tel	1



检测报告-附表1

Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report — Appendix 1

NO. 1121040718

序号 No.	1		质目名称 Test Items	高度模拟 Altitude	simulation			
样品 编号 Sample No.	样品状态 Sample Status	试验前 质量 Mass /g	Before 开路电压 OCV /V	试验 质量 Mass /g	后 After 开路电压 OCV /V	质量损失 Mass Loss /%	剩余电压 Residual OCV /%	其他 现象 Other Even
001	ICYC完全充电 ICYC Fully charged	45.6276	4.16	45.6286	4.16	0.00	100.00	0
002	ICYC完全充电 ICYC Fully charged	45. 5308	4.16	45. 5311	4.16	0.00	100.00	0
003	ICYC完全充电 ICYC Fully charged	45.6384	4.16	45.6393	4.16	0.00	100.00	0
004	ICYC完全充电 ICYC Fully charged	45.6482	4.16	45.6463	4.16	0.00	100.00	0
005	ICYC完全充电 ICYC Fully charged	45. 5135	4.16	45, 5151	4.16	0.00	100.00	0
006	25CYC完全充电 25CYC Fully charged	45. 7871	4.16	45. 7872	4.16	0.00	100.00	0
007	25CYC完全充电 25CYC Fully charged	45. 5619	4.16	45.5624	4.16	0.00	100.00	0
008	25CYC完全充电 25CYC Fully charged	45.6689	4.16	45.6685	4.16	0.00	100.00	0
009	25CYC完全充电 25CYC Fully charged	45.6128	4.16	45.6144	4.16	0.00	100.00	0
010	25CYC完全充电 25CYC Fully charged	45.7323	4.16	45.7321	4.16	0.00	100.00	0
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Note: L-	L-泄漏 V-漏气 D-A Leakage V-Venting D-I ssembly,No Rupture &	Disassembly	裂 F-起火 0 R-Rupture F-I	-无泄漏、 Fire O-No Le	无漏气、无 akage,No Ver	解体、无码 nting,	皮裂、无起	火.



检测报告-附表2

Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report — Appendix 2

NO. 1121040718

序号 No.	2		百名称 Test Items	热测试 Thermal	test			
样品	样品状态	试验前	Before		后 After	质量损失	剩余电压	
编号 Sample No.	Sample Status	质量 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V	Mass Loss /%	Residual OCV /%	现象 Other Event
001	ICYC完全充电 ICYC Fully charged	45. 6286	4.16	45. 6344	4.11	0.00	98.80	0
002	ICYC完全充电 ICYC Fully charged	45. 5311	4.16	45. 5369	4.11	0.00	98.80	0
003	ICYC完全充电 ICYC Fully charged	45. 6393	4, 16	45.6455	4.11	0.00	98.80	0
004	1CYC完全充电 1CYC Fully charged	45. 6463	4.16	45.6543	4.11	0.00	98.80	0
005	1CYC完全充电 1CYC Fully charged	45. 5151	4.16	45.5196	4.11	0.00	98.80	0
006	25CYC完全充电 25CYC Fully charged	45.7872	4.16	45.7929	4.11	0.00	98.80	0
007	25CYC完全充电 25CYC Fully charged	45. 5624	4.16	45. 5688	4.11	0.00	98.80	0
008	25CYC完全充电 25CYC Fully charged	45.6685	4.16	45.6750	4.11	0.00	98.80	0
009	25CYC完全充电 25CYC Fully charged	45.6144	4.16	45.6200	4.11	0.00	98.80	0
010	25CYC完全充电 25CYC Fully charged	45.7321	4.16	45.7383	4.11	0.00	98.80	0
小下空亡	his space intentionally left blank							
	L-泄漏 V-漏气 D-角 Leakage V-Venting D-[2裂、无起	火.



检测报告-附表3

Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report — Appendix 3

NO. 1121040718

序号 No.	3		质目名称 Test Items	振动 Vibration	n			
样品 编号 Sample No.	样品状态 Sample Status	试验前 质量 Mass /g	了 Before 开路电压 OCV /V	试验/ 质量 Mass /g	后 After 开路电压 OCV /V	质量损失 Mass Loss /%	剩余电压 Residual OCV /%	其他 现象 Other Even
001	1CYC完全充电 1CYC Fully charged	45.6344	4.11	45. 6279	4.11	0.01	100.00	0
002	1CYC完全充电 1CYC Fully charged	45. 5369	4.11	45. 5297	4.11	0.02	100.00	0
003	1CYC完全充电 1CYC Fully charged	45.6455	4.11	45.6393	4.11	0.01	100.00	0
004	ICYC完全充电 ICYC Fully charged	45. 6543	4.11	45.6474	4.11	0.02	100.00	0
005	ICYC完全充电 ICYC Fully charged	45. 5196	4.11	45. 5122	4.11	0.02	100.00	0
006	25CYC完全充电 25CYC Fully charged	45. 7929	4.11	45. 7870	4.11	0.01	100.00	0
007	25CYC完全充电 25CYC Fully charged	45. 5688	4.11	45. 5617	4.11	0.02	100.00	0
008	25CYC完全充电 25CYC Fully charged	45.6750	4.11	45.6683	4.11	0.01	100.00	0
009	25CYC完全充电 25CYC Fully charged	45. 6200	4.11	45.6130	4.11	0.02	100.00	0
010	25CYC完全充电 25CYC Fully charged	45.7383	4.11	45.7312	4.11	0.02	100.00	0
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	L-泄漏 V-漏气 D-#							

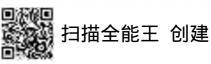


检测报告-附表4

Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report — Appendix 4

NO. 1121040718

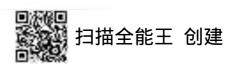
序号 No. 4		检测项目名称 Name of Test Items		冲市 Shock					
样品 编号 Sample No.	样品状态 Sample Status	试验前 质量 Mass /g	Before 开路电压 OCV /V	试验/ 质量 Mass /g	后 After 开路电压 OCV /V	质量损失 Mass Loss /%	剩余电压 Residual OCV /%	其他 现象 Other Event	
001	ICYC完全充电 ICYC Fully charged	45. 6279	4.11	45.6310	4.11	0.00	100.00	0	
002	ICYC完全充电 ICYC Fully charged	45. 5297	4.11	45. 5335	4.11	0.00	100.00	0	
003	ICYC完全充电 ICYC Fully charged	45. 6393	4.11	45.6409	4.11	0.00	100.00	0	
004	ICYC完全充电 ICYC Fully charged	45. 6474	4.11	45.6508	4.11	0.00	100.00	0	
005	ICYC完全充电 ICYC Fully charged	45. 5122	4.11	45. 5155	4.11	0.00	100.00	0	
006	25CYC完全充电 25CYC Fully charged	45. 7870	4.11	45. 7903	4.11	0.00	100.00	0	
007	25CYC完全充电 25CYC Fully charged	45. 5617	4.11	45. 5646	4.11	0.00	100.00	0	
008	25CYC完全充电 25CYC Fully charged	45.6683	4.11	45.6718	4.11	0.00	100.00	0	
009	25CYC完全充电 25CYC Fully charged	45.6130	4.11	45.6157	4.11	0.00	100.00	0	
010	25CYC完全充电 25CYC Fully charged	45.7312	4.11	45.7341	4.11	0.00	100.00	0	
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Note: L-	L-泄漏 V-漏气 D-fi Leakage V-Venting D-f ssembly,No Rupture &	Disassembly					破裂、无起	火.	



检测报告-附表5 Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report-Appendix 5

NO. 1121040718

序号 No.	5	检测项目名称 Name of Test Items	外短路 External short circuit
样品编号 Sample No.	样品状态 Sample Status	样品表面最高温度 Max. External Temperature /℃	其他现象 Other Event
001	1CYC完全充电 1CYC Fully charged	107.5	0
002	1CYC完全充电 1CYC Fully charged	108. 2	0
003	1CYC完全充电 1CYC Fully charged	107.6	0
004	ICYC完全充电 ICYC Fully_charged	107.5	o
005	1CYC完全充电 1CYC Fully charged	106. 6	0
006	25CYC完全充电 25CYC Fully charged	108.3	0
007	25CYC完全充电 25CYC Fully charged	107.4	0
008	25CYC完全充电 25CYC Fully charged	106. 9	0
009	25CYC完全充电 25CYC Fully charged	105.8	0
010	25CYC完全充电 25CYC Fully charged	105.9	· 0
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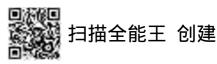


检测报告-附表6 Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report - Appendix 6

NO. 1121040718

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序号 No.	6	检测项目名称 Name of Test Items	撞击 Impact
样品编号 Sample No.	样品状态 Sample Status	样品表面最高温度 Max. External Temperature /℃	其他现象 Other Event
011	1CYC 50%容量 1CYC 50% Capacity	120. 4	O
012	1CYC 50%容量 1CYC 50% Capacity	125. 1	0
013	1CYC 50%容量 1CYC 50% Capacity	126. 5	0
014	1CYC 50%容量 1CYC 50% Capacity	123. 4	0
015	1CYC 50%容量 1CYC 50% Capacity	122. 0	0
016	25CYC 50%容量 25CYC 50% Capacity	131.0	0
017	25CYC 50%容量 25CYC 50% Capacity	126.9	0
018	25CYC 50%洋量 25CYC 50% Capacity	132. 1	0
019	25CYC 50%容量 25CYC 50% Capacity	131.2	0
020	25CYC 50%容量 25CYC 50% Capacity	112.9	0
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检测报告-附表7 Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report—Appendix 7

NO. 1121040718

序号 No.	7	检测项目名称 Name of Test Items	过充电 Overcharge
样品编号 Sample No.	样品状态 Sample Status		其他现象 Other Event
021	1CYC完全充电 1CYC Fully charged		0
022	1CYC完全充电 1CYC Fully charged		0
023	1CYC完全充电 1CYC Fully charged		0
024	1CYC完全充电 1CYC Fully charged		0
025	25CYC完全充电 25CYC Fully charged		0
026	25CYC完全充电 25CYC Fully charged		0
027	25CYC完全充电 25CYC Fully charged		0
028	25CYC完全充电 25CYC Fully charged		0
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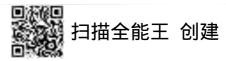


检测报告-附表8 Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report—Appendix 8

NO. 1121040718

序号 No.	8	检测项目名称 Name of Test Items	强制放电 Forced discharge
样品编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
029	1CYC完全放电 1CYC Fully discharged		0
030	1CYC完个放电 1CYC Fully discharged		0
031	1CYC完个放电 1CYC Fully discharged		0
032	1CYC完全放电 1CYC Fully discharged		0
033	1CYC完全放电 1CYC Fully discharged		0
034	1CYC完全放电 1CYC Fully discharged		0
035	1CYC完全放电 1CYC Fully discharged		0
036	1CYC完全放电 1CYC Fully discharged		0
037	1CYC完全放电 1CYC Fully discharged	Same D	0
038	1CYC完全放电 1CYC Fully discharged		0
039	25CYC完全放电 25CYC Fully discharged		0
040	25CYC完全放电 25CYC Fully discharged		0
041	25CYC完个放电 25CYC Fully discharged		0
042	25CYC完全放电 25CYC Fully discharged		0
043	25CYC完全放电 25CYC Fully discharged		0
044	25CYC完全放电 25CYC Fully discharged		0
045	25CYC完全放电 25CYC Fully discharged		0
046	25CYC完全放电 25CYC Fully discharged		0
047	25CYC完全放电 25CYC Fully discharged		0
048	25CYC完全放电 25CYC Fully discharged		0





上海化工院检测有限公司 检测报告-附图 Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report-Appendix

NO. 1121040718 11/11



报告结束

