



Product Specification

产品规格承认书

Customer Code 客户代码: _____

Customer Part Number 客户产品料号: _____

Coincell Battery cell Model. 科恩瑟尔电芯型号: _____

INR21700-45EC

Coincell Battery Model. 科恩瑟尔成品电池型号: _____

KE21700-6S5P-R002

Coincell Battery Part Number. 科恩瑟尔成品电池料

109-00487-000

Prepared by 制作人	Checked by 审核人	Review by DQA 复核	Approved by 批准人
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Customer Approval 客户承认	Customer Signature/Date 客户签名/日期	Customer Company Stamp 客户公司盖章

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**Revision History****版本履历表**

Revision 版本	Description 内容描述	Issued by 发行人	Approved by 审批人	Date 日期
V1	首次发行 First Release	李永辉	刘军	2023-2-13
V2	寿命更改为 700 次 Cycle life changed to 700 cycles	李永辉	刘军	2023-3-7



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1. Scope 概述

This document describes the specification of rechargeable Li-ion battery pack which is designed and manufactured by **Shenzhen Coincell Battery Co., Ltd.**

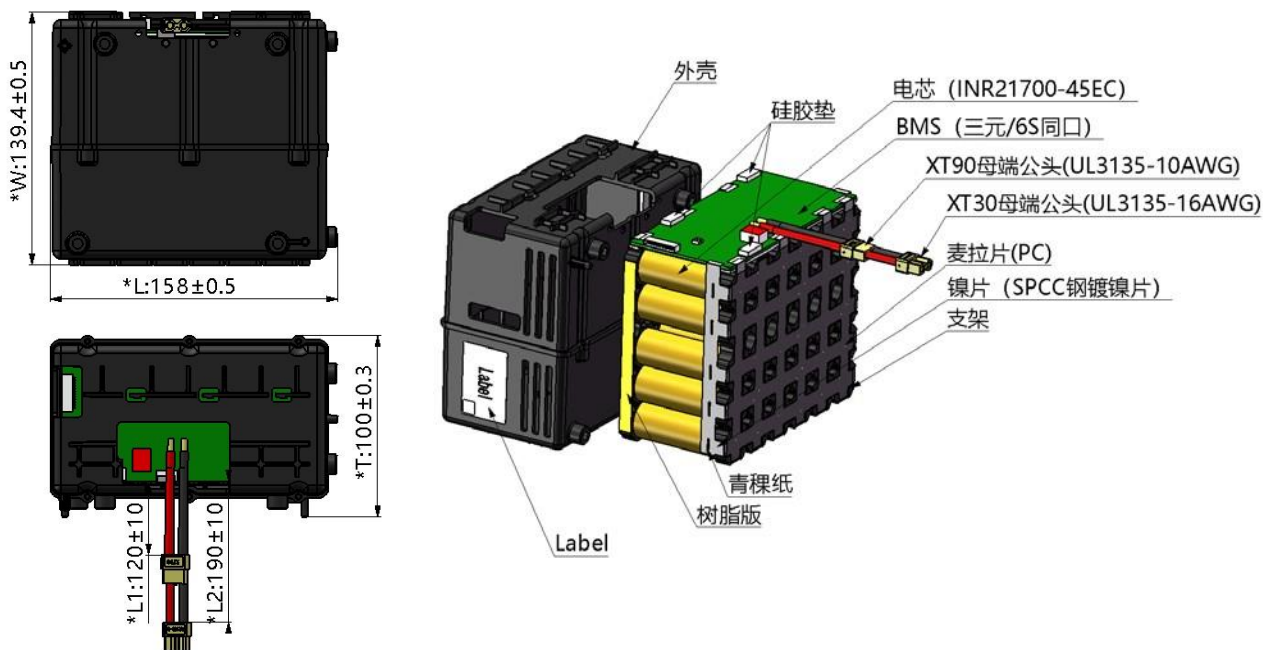
这文件描述由**深圳市科恩瑟尔电池有限公司**设计制造的可充电锂离子电池成品的规格。

2. Battery specification (Temperature=23±3°C, unless otherwise specified)

电池规格 (温度=23±3°C, 除非另有规定) :

No.	Item 项目	Parameters 参数	
1	Battery pack model 电池成品型号	KE21700-6S5P-R002	
2	Combination mode 组合方式	6S5P	
3	Rated capacity 额定容量	22500mAh	
	Minimum capacity 最小容量	21800mAh	
4	Nominal voltage 标称电压	22.2V	
5	Shipment voltage 出货电压	21~23V	
6	Charge ending voltage 充电限制电压	25.2V	
7	Discharge ending voltage 放电截止电压	17.4V	
8	Pack Impedance 内阻	≤50mΩ (AC/1000HZ)	Note: The ex-factory less than 6 months, and the number of cycles is less than 30 times 备注: 出厂时间小于 6 个月, 循环次数小于 30 次
9	Battery weight 电池重量 (packed)	Approx . 2500g	
10	Standard charge current 标准充电电流	0.5C(11250mA)	
11	Standard discharge current 标准放电电流	0.2C(4500mA)	
12	Max constant charging current 最大连续充电电流	22500mA	(T≥10°C)
13	Max constant discharging current 最大连续放电电流	22500mA	(T≥0°C)
14	Operating temperature 工作温度范围	Charge 充电: 0~45°C Discharge 放电: -20~60°C	
15	Cycles life 循环寿命 (RT: 25±3°C) (0.5C charge to 25.2V, 1 C discharge to 17.4V)	700 次充放电后, 电池恢复 80%的初始容量 After 700cycles charge/discharge, battery can recover 80% of its initial capacity	
16	Storage Method 储存方式	3 Month at 0 to 45 °C	Relative humidity 相对湿度: 0~45%RH
		12 Month at 20 to 25 °C	
17	Battery Pairing Requirements 电池配组要求	电压差 5mV, 内阻差≤4mΩ, 容量差≤40mAh	
18	Certification requirement 认证要求	环保: RoHS	
19	Communication mode 通讯方式	RS485	

2.2 Battery packed drawing 电池成品尺寸:



2.3 Label 标贴:



SSSSS: 0~9, A, B, C~Z (0, I不用)
00001~ZZZZZ

YYMD: DATE CODE
YY: 依实际生产年度, 2020用20表示
M: 依实际生产月份 A~L
D: 依实际生产天数 1~9, A~Z (I/O/Q/U不用)

D3: 电池包模组代码
D5: 电源线代码

LX: 固定值, 立讯代码

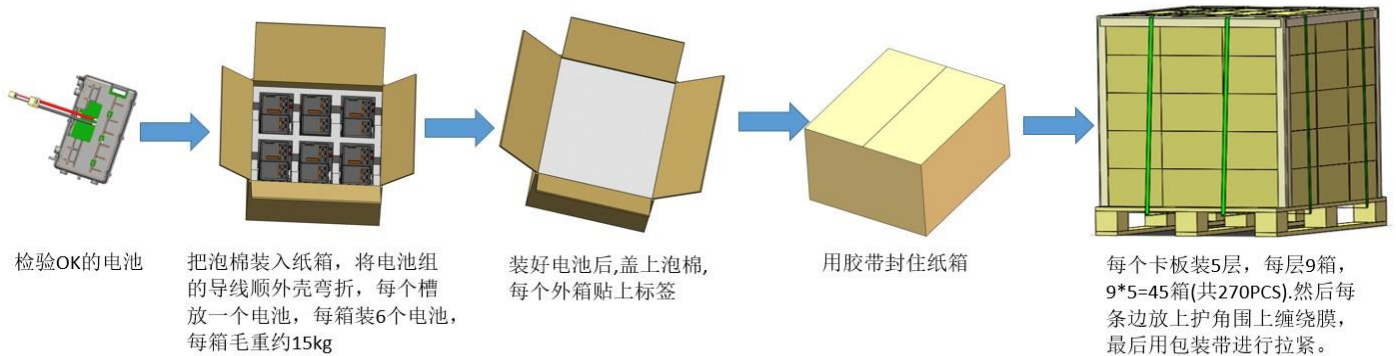
编码规格说明:
1. 条码码制: QR
2. 精度: ≥10mil
3. 行高: 0.42mm
4. 纠错等级: 5

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Code	0	1	2	3	4	5	6	7	8	9	0	1

Month	1	2	3	4	5	6	7	8	9	10	11	12
Code	A	B	C	D	E	F	G	H	I	J	K	L

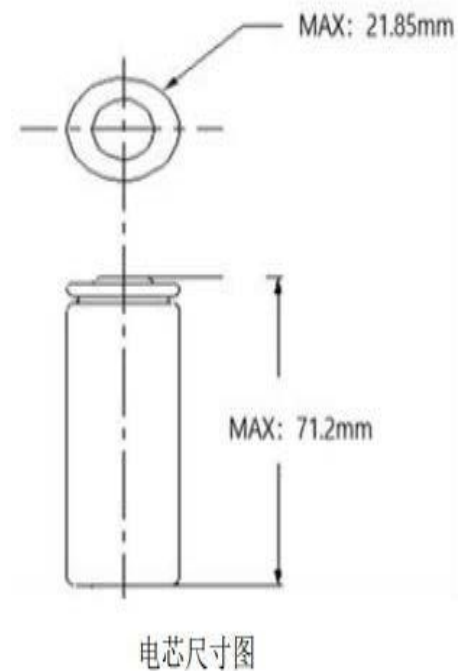
Date	1	2	3	4	5	6	7	8	9	10	11
Code	1	2	3	4	5	6	7	8	9	A	B
Date	12	13	14	15	16	17	18	19	20	21	22
Code	C	D	E	F	G	H	J	K	L	M	N
Date	23	24	25	26	27	28	29	30	31		
Code	P	R	S	T	V	W	X	Y	Z		

2.4 Schematic diagram of packaging 包装示意图:



3. Battery cell specification 电芯规格:

No.	Item 项目	Parameter 参数
1	Cell model 电芯型号	INR21700-45EC
2	Minimal capacity 最小容量 (0.5C discharge current 放电电流)	4400mAh
3	Typical capacity 典型容量 (0.5C discharge current 放电电流)	4500mAh
4	Nominal voltage 标称电压	3.7V
5	Cell charge ending voltage 电芯充电限制电压	4.2±0.02V
6	Cell Impedance 电芯内阻	≤25mΩ
7	Maximum Cell Diameter 电芯最大直径 D	21.85mm
8	Maximum Cell Height 电芯最大高度 H	71.2mm





4. BMS Specification 保护板规格

4.1 BMS Characteristic 保护板特性 (at 25°C)

项目 Items	最小值 Min	典型值 Type	最大值 Max	单位 unit	特殊控制点	
单节过充保护 Cell Voltage Over- Charge Protection	过充保护电压 Over-Charge Voltage Protection (OVP)	4290	4300	4310	mV	/
	过充保护延时 Over-Charge Voltage Protection Delay Time (OV PDT)	4500	5000	5500	mS	/
	过充恢复电压 Over-Charge Voltage Protection Release (OVPR)	4175	4200	4225	mV	/
	过充恢复策略 Over-Charge Recovery policy	The maximum cell voltage is lower than the recovery voltage point 1.最高单体电压低于恢复电压 Capacity below 95% 2. 容量低于 95% Discharge recovery 放电立即恢复				/
	满充电压 Full charge Voltage	4175	4200	4250	mV	单节达到 4.2V, 小电流 1A, 持续 10S; 单节过充 SOC 调整为 100%
	满充恢复电压	4125	4150	4175	mV	3S延时
	过充保护电压 Over-Charge Voltage protection (OVP)	25.65	25.80	25.85	V	/
	过充保护延时 Over-Charge Voltage protection Delay Time (OV PDT)	4500	5000	5500	mS	/
总压过充保护 Total Voltage Over Charge Protection	过充恢复电压 Over-Charge Voltage protection Release (OVPR)	25.15	25.20	25.35	V	/



项目 Items	最小值 Min	典型值 Type	最大值 Max	单位 unit	特殊控制点	
单体过放保护 Cell Voltage Over Discharge Protection	过放电保护电压 Over-Discharge Voltage Protection (UVP)	2850	2900	2950	mV	SOC 0%对应点
	过放电保护延时 Over-Discharge Voltage Protection Delay Time (UVPDT)	4500	5000	5500	mS	/
	过放电恢复电压 Over-Discharge Voltage Protection Release (UVPR)	2950	3000	3050	mV	/
	过放电恢复策略 Over-Discharge Recovery Policy	Charge recovery 充电恢复				/
	放电截止电压(SOC 1%对应点) End-off voltage	2980	3000	3020	mV	SOC 3%对应点
	总压过放保护 Total Voltage Over Discharge Protection	过放电保护电压 Over-Discharge Voltage Protection (UVP)	17.20	17.40	17.65	V
过放电保护延时 Over-Discharge Voltage Protection Delay Time (UVPDT)		4500	5000	5500	mS	/
过放电恢复电压 Over-Discharge Voltage Protection Release (UVPR)		17.50	18.00	18.50	V	/
充电过流保护 Over Charge Current protection	充电过流保护电流 Over-Current Charge protection (OCDP)	23.0	25.0	27.0	A	/
	充电过流保护延时 Over-Current Charge Protection Delay Time (OCPDT)	4500	5000	5500	mS	/
	充电过流保护恢复 Over-Current Charge Protection Release	1. 放电立即恢复 Discharge Restore				/
	一级放电过流保护电流 First Over Protection current	35.0	40.00	45.0	A	30S自恢复
放电过流保护	一级放电过流保护延时	4500	5000	5500	mS	/



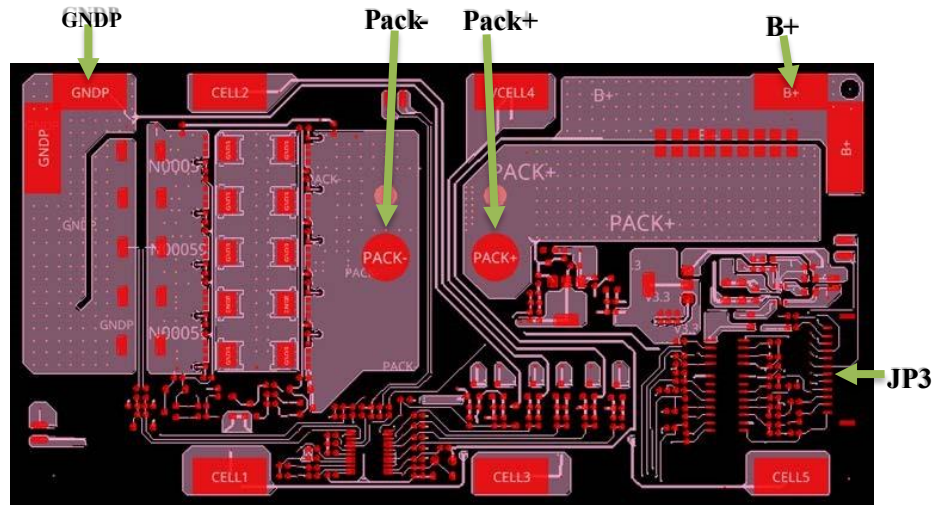
Over Discharge Current Protection	First Over Protection Delay Time					
	二级放电过流保护电流 Second Over Protection Current	40.0	45.0	50.0	A	30S自恢复
	二级放电过流保护延时 Second Over Protection delay time	2500	3000	3500	mS	/
	放电过流保护恢复 Over- Discharge Charge Protection Release	1. 充电立即恢复 1. Charge Restore				/
故障电芯电压 Faulty cell voltage	/	< 2.0		> 4.35	V	持续5S
短路保护 Short Circuit Protection	短路保护电流 Short Circuit Current Protection	/	100	/	A	/
	短路保护延时 Short Circuit Current Protection Delay Time	≤500			uS	/
	短路保护恢复 Short Circuit Protection Release	无法恢复				/
温度保护 Temperature Protection	MOS 高温保护 MOS Over Temperature Protection	/	/	/	℃	保护延时 1S/恢复 延时 1S Protection delay: 1s / recovery delay: 1s
	MOS 高温恢复 MOS Over Temperature Recovery	/	/	/	℃	
	放电高温保护 Discharging High Temperature Protection	58	60	62	℃	
	放电高温恢复 Discharging High Temperature Protection Release	48	50	52	℃	
	放电低温保护 Discharging Low Temperature Protection	-8	-12	-10	℃	
	放电低温恢复 Discharging Low Temperature Protection Release	-7	-5	-3	℃	
	充电高温保护 Charging High Temperature Protection	58	60	62	℃	
	充电高温恢复 Charging High Temperature	48	50	52	℃	



	Protection Release					
	充电低温保护 Charging Low Temperature Protection	-8	-12	-10	℃	
	充电低温恢复 Charging Low Protection Release	-7	-5	-3	℃	
均衡电压 Balanced Voltage	均衡开启电压 Balanced Opening Voltage	3.85	3.90	3.95	V	/
	均衡开启压差 Balanced Opening Voltage different	-	≥50	-	mV	/
	均衡关闭压差 Equalizing closing differential pressure	-	≤30	-	mV	/
	均衡电流 Balanced Opening Current	130±10			mA	
	均衡方式 Balanced Opening Mode	Passive Balance被动均衡				
	<p>Equalization on conditions (all must be met): 1) charging state; 2) All cell voltages are between 3.9v-4.2v; 3) Maximum and minimum cell voltage difference ≥ 50mV; Equalization off condition (any one is satisfied): 1) non charging state; 2) The cell voltage is outside 3.9v-4.2v; 3) Maximum and minimum cell voltage difference ≤ 30mV;</p> <p>均衡开启条件 (必须都满足) : 1)充电状态; 2)所有电芯电压在3.9V-4.2V之间; 3)最高最低电芯压差 ≥50mV; 均衡关闭条件 (任一满足) : 1)非充电状态; 2)电芯电压在3.9V-4.2V之外; 3)最高最低电芯压差 ≤30mV;</p>					
最大持续电流 Max Continuous Current	最大持续充电电流 Max Continuous Charge Current	-	-	19	A	/
	最大持续放电电流 Max Continuous Discharge Current	-	-	22.5	A	/
空载内阻 impedance		-	-	20	mΩ	/
SOC 线性度误差 SOC linearity error	≤5%					/
电流采集精度 Current accuracy	3%					/

4.2 Port definition and connection 端口定义及连接图

端口名称	定义说明	
B+	接电池组正极	
GNDP	接电池组负极	
Pack+	连接充放电正极	
Pack-	连接充放电负极	
JP3	1	VCC
	2	DSG GD
	3	CHG GD
	4	INT GD
	5	SDA GD
	6	SCK GD
	7	NTC3+
	8	PRE CHG GD
	9	WAKEUP SENSE
	10	UI WAKEUP EN
	11	SWITCH OUT
	12	GNDD





5. Bill of Material (BOM) 物料清单

5.1 Battery Pack BOM 电池成品主要物料清单

No.	Material 物料	Description 描述	Quantity 用量	Manufactured 制造商
1	Cell 电芯	INR21700-45EC	30	BTW
2	BMS 保护板	M6S5P-21700-R002-BMS/带通讯	1	/
3	电芯支架/外壳	专用上下支架/外壳	1 套	/
4	Tab 镍片	专用镍片 镀镍钢 厚 0.2mm	1 套	/
5	Leadwire 端子线	XT30 母端公壳:3135/16AWG/加磁环	1	/
6	Leadwire 端子线	XT90 母端公壳:3135/10AWG	1	/

6. Environmental characteristics 环境特性

No.	Test item 测试项目	Test Method 测试方法	Pass Criteria 合格标准
1	Charged Storage Characteristics 荷电保持能力	Battery is fully charged by standard charge process. Battery idle at 25±3°C for 28days. At 25±3°C, Battery is discharged battery by 0.2C until 17.4V. 电池按标准充电流程满充电。在 25±3°C 放置 28 天。在 25±3°C 电池按 0.2C 放电到 17.4V.	Remain capacity ≥ standard capacity *90% 剩余容量≥标称容量 *90%



7. Safety Test安全测试

Coincell battery can meet several international safety standards. Below is part of safety tests which are referred to international standard.

深圳市科恩瑟尔电池有限公司的电池能达到多个国际电池安全标准。以下是部分安全测试项目。

No	Test item 测试项目	Test Method 测试方法	Criteria 标准
1	Constant Humidity and Temperature test 恒定湿热测试	Battery cell is fully charged by standard charge process. Then, battery cell is put into chamber with constant humidity(90~95%) and temperature (40±2°C) for 48hrs. After test, battery idle for 2hrs at 23±3°C and discharge by 0.2C to 17.4V. 电池按标准充电流程满充电。之后电池放在恒温箱 48 小时, 湿度为 90~95%和温度为 40±2°C。测试后, 电池在 25±3°C下搁置 2 小时 以 0.5C 放电至 17.4V。	No fire, No leakage, No explosion 无起火, 无漏液, 无爆炸
2	Overcharge Test 过充电测试	Battery cell is fully charged by standard charge process. Then, the battery is charged by 3.0C rate constant current and voltage to 4.6V for 7hrs. 电芯按标准充电流程满充电。之后电芯用 3C 4.6V(单节)恒流恒压充电 7 小时。	No fire, No explosion 无起火, 无爆炸
3	Over discharge Test 过放电测试	At 25±3°C, Battery is discharged by 0.5C until 17.4V. And then Battery is connected the load with 30Ω to discharge for 7hours. 电池在 25±3°C 用 0.5C 放电到 17.4V。之后电池连接 30Ω 负载放电 7 小时。	No fire, No explosion 无起火, 无爆炸
4	Short test 短路测试	Battery cell is fully charged by standard charge process. Then, battery cell anode and cathode connected to 80±20mΩ load for 1hour. 电芯按标准充电流程满充电。电芯的正负极连接到 80±20mΩ 负载 1 小时。	No fire, No explosion The Temperature of the Battery surface not exceeded than 150°C 无起火, 无爆炸, 表面温度≤150°C
5	Projectile Test 焚烧测试	Battery cell is fully charged by standard charge process. Battery cell is placed on the screen which is to be constructed by steel wire mesh. The screen is mounted above the burner. And eight-sided covered wire cage is to be placed over the battery cell. Battery cell is to be heated and remain on the screen until it	No part of an exploding cell shall penetrate the wire screen. 电芯的任何部分不得穿出此八面铝网。

		<p>explodes or has been ignited or burned out.</p> <p>电芯按标准充电流程满充电。</p> <p>将电芯放在钢丝网上，钢丝网下有燃烧器和钢丝网被八面铝网盖住。电芯在钢丝网上被加热直到电芯爆炸或被点燃或完全烧毁。</p>	
6	Drop Test 掉落测试	<p>Battery cell is fully charged by standard charge process.</p> <p>Battery cell is free fall from a height of 1m on the cement floor, from X-axis、Y-axis positive and negative direction. Each direction is free fall 1 time.</p> <p>电芯按标准充电流程满充电。</p> <p>电芯从 1 米高处自由跌落到水泥地板上，从 X 轴、Y 轴的正负方向，每个方向自由跌落一次。</p>	<p>No fire, No explosion</p> <p>无起火，无爆炸</p>
7	Crush test 挤压测试	<p>Battery cell is fully charged by standard charge process.</p> <p>The battery cell is to be crushed with its longitudinal axis parallel to the surfaces of crushing apparatus.</p> <p>The surfaces are to be bought in contact with cell and the crushing is to be continued until an applied force of 13±1kN is reached. Once the maximum force has been obtained, it is to be released.</p> <p>电芯按标准充电流程满充电。</p> <p>电芯的纵向跟平面金属板间平行，持续施加 13±1kN 的压力挤压，直到压力达到 13±1kN 时停止并释放压力。</p>	<p>No fire, No explosion</p> <p>无起火，无爆炸</p>
8	Shock test 加速度冲击测试	<p>Battery cell is fully charged by standard charge process.</p> <p>Battery cell is secured to the testing machine by means of a rigid mount which will support all mounting surfaces of the battery cell. The battery cell is subjected to a total of two shocks of equal magnitude. The shocks are to be applied in each of two mutually perpendicular directions. For each shock the battery cell is accelerated in such a manner that during the initial 3ms the minimum average acceleration is 75g. The peak acceleration shall be between 125 g and 175 g. Battery cell is tested at 20±5°C</p> <p>电芯按标准充电流程满充电。在环境温度下，将电芯分别按二个轴向固定在测试台面上，前 3ms 内平均加速度最少达到 75g (g 为重力加速度)，峰值加速度达 125g 至 175g。电芯测试温度为 20±5°C</p>	<p>No fire, No explosion,</p> <p>无起火，无爆炸</p>

**8. Performance and Test Criteria 电池性能和测试标准****8.1 Standard Test Criteria 标准测试标准**

If test criteria is not defined, test should be done under the below standard test criteria.

如果测试标准没有定义，测试标准会按以下测试完成。

Test Criteria 测试标准	Parameters 参数
Ambient Temperature 环境温度	23±3°C
Relative Humidity 相对湿度	65±20%
Atmospheric pressure 大气压力	86 ~ 106 kPa
Charge 充电	Standard charge process 标准充电流程
Discharge 放电	Standard discharge process 标准放电流程
Delivery Time from Coincell 从科恩瑟尔发出时间	Within 1month 一个月内

8.2 Visual Inspection 外观检查

No crack, no leakage

没有破裂，没有漏液

8.3 Measuring Instrument Standard 测量仪器标准

Instrument 仪器	Standard 标准
Instrument to measure dimension 测试尺寸仪器	Precision scale : 0.01mm 精度: 0.01mm
Voltmeter 伏特计	Internal impedance < 10kΩ/V 内阻 < 10kΩ/V
Ammeter 安培计	Impedance of ammeter and wires < 0.01Ω 安培计和电线内阻 < 0.01Ω
Impedance meter 阻抗计	Impedance is measured by sinusoidal 1kHz AC current 内阻测试用1kHz正弦交流电流

8.4 Standard charge process 标准充电流程

Battery pack is charged by 0.5C constant current at 25±3°C until 25.2V. Then, Battery is charged by constant voltage until current drop to 1A. 在25±3°C，电池成品以0.5C恒流电流充电直到25.2V，电池用恒压充电直到电池电流降到1A。

8.5 Standard discharge process 标准放电流程

Battery pack is discharged by 0.2C continuous current at 25±3°C until the voltage drop to 17.4V. 在25±3°C，电池成品以0.2C连续放电电流放电直到17.4V。

8.6 Maximum charge current 最大充电电流



Battery pack is charged by 22.5A constant current at $25\pm 3^{\circ}\text{C}$ until 25.2V. Then, battery pack is charged by constant voltage at 25.2V until current drop to 1A. 在 $25\pm 3^{\circ}\text{C}$, 电池成品以22.5A恒流电流充电直到25.2V, 电池用恒压充电直到电池电流降到1A。

8.7 Maximum discharge current 最大放电电流

Battery pack is discharged by 22.5A continuous current at $25\pm 3^{\circ}\text{C}$ until the voltage drop to 17.4V. 在 $25\pm 3^{\circ}\text{C}$, 电池成品以22.5A连续放电电流放电直到17.4V。

8.8 Initial impedance 初始内阻值

Battery pack is fully charged by standard charge process.

The impedance of fully charged Battery is tested by AC impedance tester at 1kHz. The initial impedance should be $\leq 50\text{m}\Omega$. 电池成品用标准充电流程充满电。再使用交流阻抗测试仪 (AC 1KHz) 测量初始内阻。电池初始内阻应 $\leq 50\text{m}\Omega$ 。

8.9 Initial capacity 初始容量值

Battery pack is fully charged by standard charge process and then Battery is fully discharged by standard discharge process. The initial capacity is $\geq 21800\text{mAh}$. 电池成品用标准充电流程充满电。电池再用标准放电流程放完电。电池初始容量 $\geq 21800\text{mAh}$ 。

8.10 Cycle life 循环寿命 (RT: $25\pm 3^{\circ}\text{C}$)

Test procedure 测试步骤:

Step 1: Battery pack is charged by 0.5C constant current at $25\pm 3^{\circ}\text{C}$ until 25.2V. Then, Battery is charged by constant voltage at 25.2V until current drop to 1A.

Step 2: Wait for 10mins

Step 3: Battery pack is discharged by 1C continuous current at $25\pm 3^{\circ}\text{C}$ until the voltage drop to 17.4V.

Step 4: Wait for 10mins

Step 5: Repeat step1 to step 4 until discharge capacity is less than 80% of initial battery capacity. Cycle life should be more than or equal to 700cycles.

- 1) 电池成品在 $25\pm 3^{\circ}\text{C}$ 按 0.5C 恒流充电直到 25.2V。再用 25.2V 恒压充电直到充电电流小于 1A。
- 2) 等待 10 分钟
- 3) 电池成品在 $25\pm 3^{\circ}\text{C}$ 按 1C 恒流放电直到 17.4V
- 4) 等待 10 分钟

重复 1) 到 4) , 直到放电容量小于初始容量 80%。循环寿命需要大于等于 700 周。



9. Usage of battery 使用电池

Shenzhen Coincell Battery Co., Ltd. **DO NOT** take responsibility if customer **DO NOT** follow the specification and below instruction using the battery.

如果客户**没有**按规格书和以下说明使用电池，深圳市科恩瑟尔电池有限公司将**不负**任何责任。

To have good performance of battery, battery should follow this battery specification to use and storage.

Recommend to charge battery every 6months using standard charge process.

To use the battery safe, battery is prohibited to disassemble, drop, heat, burn, soak, crush, shock, short circuit.

Enough insulation inside the customer's end product is required to avoid the short circuit of the battery.

Battery should have enough space to install inside the customer's end product. Please use the maximum dimension of battery cell after cycle life to reserve the space.

To protect the battery, battery should be installed in the customer's end product with strong mechanical strength.

Any movement of the battery in the end product should be avoided.

If battery has any abnormal feature such as battery cannot be charged and discharge, abnormal heat generate, deformation, smelling of electrolyte or leakage, battery should be stopped to use immediately. Battery with smelling of electrolyte or leakage should be placed away from fire. Electrolyte is harmful. If electrolyte is contacted the skin or eyes, please flush electrolyte by purified water and consult doctor.

为了电池保持良好的性能，电池需要按本规格书使用和储存。

建议电池每6个月按标准充电流程充电一次。

为了安全使用电池，电池禁止拆解，掉落，加热，焚烧，浸泡，挤压，撞击，短路。

客户终端产品需要有足够的绝缘，避免电池被短路。

客户终端产品需要有足够的空间组装电池。空间需求请按规格书中循环后的电池成品最大尺寸进行设计。

客户终端产品需要有强力的结构保护电池。

请避免电池在客户终端产品中能移动。

如果电池有异常特征，比方说电池不能充放电，发热异常，变形，有电解液气味或漏液，电池应马上停止使用。

电池有电解液气味或漏液须要远离火种。电解液是有害的。如果电解液接触到皮肤或眼睛，请马上用纯净水冲洗和就医。

10. Warranty 保证期

Shenzhen Coincell Battery Co., Ltd. guarantees the battery at good condition within **12months** when battery is delivered from Coincell factory, Cell should charge with storage more than 6 months.

深圳市科恩瑟尔电池有限公司保证电池从出厂日起**12个月内**功能良好，电池存储时间大于6个月及时充电。



11. Others 其他

11.1 Prohibition of disassembly 禁止拆卸

- 1) Never disassemble the cells The disassembling may generate internal short circuit in the cell, which may cause gassing, firing, explosion, or other problems.
 - 2) Electrolyte is harmful LIP battery should not have liquid from electrolyte flowing, but in case the electrolyte come into contact with the skin, or eyes, physicians shall flush the electrolyte immediately with fresh water and medical advice is to be sought.
- 1) 不要拆卸电池。拆卸电池会发生电池内部短路, 会引起起火、爆炸、有害气体或者其它问题。
- 2) 电解液是有害的万一电解液沾到皮肤、进入眼睛, 应立即用清水冲洗以及求助医生。

11.2 Prohibition of dumping of battery into fire 不要把电池倾倒在火中

Never incinerate nor dispose the cells in fire. These may cause explosion of the cells, which is very Dangerous and is prohibited.

不要焚烧电池, 否则会致电池爆炸, 这很危险, 必须禁止。

11.3 Prohibition of use of damaged battery 禁止使用损坏的电池

The cells might be damaged during shipping by shock. If any abnormal features of the cells are found such as damages in a plastic envelop of the cell, deformation of the cell package, smelling of an electrolyte, an electrolyte leakage and others, the cells shall never be used any more. The Cells with a smell of the electrolyte or a leakage shall be placed away from fire to avoid firing or explosion.

电池可能在出货途中碰撞而受损。如果发现电池有异常, 例如包装损坏、电池包裹变形, 有电解液的味道、发现漏液等等, 不要再使用这些电池。电池如果有电解液的味道或者出现漏液, 电池放置应该远离火源避免起火及爆炸。

10.4 Any other items are not covered in the specification shall be agreed by both parties.

任何本规格书没有包括的事项, 需要双方协议确定。