

CT-3P4SIFR26650 Battery Pack Spec

电池包规格书

Model :
型号: CT-3P4SIFR26650

Cell Configuration:
客户代码: _____

Customer P/N:
客户型号: _____

Nominal Voltage:
标称电压: 12.8V

Capacity:
容量: 9Ah

Draft 起草	Checking 审核	Approved 批准	Customer Confirmation 客户确认
Peter			

Revision History 版本记录

Revision 版本	Date 日期	Editor 编著	Contents 内容
A0	2017-11-07	Peter	Draft

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1. Application 应用

T.B.D.

2. Basic Information 基本信息

Description 描述:	Rechargeable LiFePO4 battery pack 可充磷酸铁锂电池包
Cell Type 电芯:	IFR26650 3000mAh
PCM 保护板:	Yes 有
Chemistry 化学成份:	LiFePO4 磷酸铁锂
Cell configuration 电芯配置:	3P4S
Voltage Nominal 标称电压:	12.8V
Capacity Nominal 标称容量:	9.0Ah (0.2C discharge to cut-off voltage 25°C 0.2C 放电到截止电压 25°C)
Rated Capacity 额定容量:	8.8Ah(0.2C discharge to cut-off voltage 25°C 0.2C 放电到截止电压 25°C)
Energy 能量:	115.2Wh
Protection 保护:	A. Over Charge Protection 过充保护 B. Over Discharge Protection 过放保护 C. Over Current Protection 过流保护 D. Short Protection 短路保护

3. Electrical Characters 电气特性

(Battery Pack)

Index. 序号	Items 项目	Parameter 参数
1	Charging Method 充电方式	CC-CV 恒流恒压
2	Charging Voltage 充电电压	14.4±0.09V
3	Max. Charging Current 最大充电电流	3A
4	Max. Discharging Current 最大放电电流	3A
5	Discharging cut-off Voltage 放电结束电压	8V
6	Over Charge Current 过充电流	10~15A
7	Over Discharge Current 过放电流	10~15A
8	Internal Resistance 内阻	<180mOhm
9	Standard Charge Temperature 标准充电工作温度	0~45°C
10	Standard Discharge Temperature 标准放电工作温度	-20~60°C
11	Storage Humidity 存储湿度	50%RH not condensed (无凝结)
12	Storage Temperature 存储温度	0~40°C (≥80% Electric quantity)
13	Weight 重量	About 约 2.0k g

(PCM)

Index · 序号	Items · 项目		Parameter · 参数
1	输入电压/input Voltage	B+/B-间输入电压/input Voltage B+ to B-	-0.3~+24V
2	过充电 Overcharge	保护电压/Detection voltage	3.800±0.050V
3		恢复电压/ Release voltage	3.600±0.050V
4		保护延迟时间/ Detection delay time	≤1500.00mS
5	过放电 Over discharge	保护电压/Detection voltage	2.00±0.08V
6		恢复电压/ Release voltage	2.30±0.10V
7		保护延迟时间/ Detection delay time	≤150.00mS
8	放电过流	放电过流保护电流/Over current	35.0~50.00A
9	Over discharge current	放电过流保护延时/delay time	≤30.00mS
10	短路保护	短路保护延时/ Short detection delay time	100~600uS
11		恢复条件/Release Conditions	断开负载/Cut off load
12	自耗电 Normal current consumption	工作状态自耗电 Normal current consumption of PCM	Max 100.00uA
13	OV 充电/0V charger	是否允许 0V 充电/allowed 0V change	YES
14	建议工作条件 Suggest working conditions	建议最大持续充/放电电流 max continuous charge/discharge current	3A
15		建议工作温度/suggest working temperature	-20°C ~60°C
16	内阻/IR resistance	PCM 内阻/ IR of PCM	≤40.00 mΩ
17	均衡 Balancing Parameters	均衡电压 Balance Voltage	3.60±0.050V
18		均衡电流 Balance Current	65.00~85.0mA
19	PCM 尺寸 The size of final PCM	长度/ The length of final PCM	70.00±0.20mm
20		宽度/ The width of final PCM	50.00±0.15mm
21		厚度/ The thickness of final PCM	MAX:8.00mm

4. Certification 认证

T.B.D.

5. Mechanical Information 结构信息

5.1. Sample Picture 样品照



L (长度) /mm	Max:151.4mm	W (宽度) /mm	Max :65.4mm	H (高度) /mm	Max :93mm
正 极	M8	负 极	M8		

5.2. Drawing of Label 标签图

T.B.D.

5.3. Drawing Packing 包装图

T.B.D.

单独装纸盒; 装箱 (内置防潮袋); 外箱硬朗、无切割、无不相关标签 (如快递单);



PI20160524L1
 TO: ITALY
 C/NO:1/8

(示例)

6. Test Requirements 测试要求

轻微缺陷(Mi) AQL = 1.5; 重要缺陷 (Ma) AQL = 0.5; 致命缺陷(Cr)及全检项 Ac = 0;

除非报价和订单有指定品质等级, 否则默认按 II 级 (Class II) 生产出货。Test according to Quality Class II as default.

Test Items 测试项	Rang 范围	Defect Class 缺陷 等级	Test Quantity 测试数量			
			Quality Class I	Quality Class II	Quality Class III	
Mechanical 结构	Length 长度	Max. 151.4mm	Ma	AQL(S-1)	AQL(II)	Full 全检
	Width 宽度	Max. 65.4mm	Mi	AQL(S-1)	AQL(II)	Full 全检
	Height 高度	Max. 93mm	Ma	AQL(S-1)	AQL(II)	Full 全检
Basic Function 基本功能	Charging 充电功能	OK / NG	Ma	Full 全检	Full 全检	Full 全检
	Discharging 放电功能	OK / NG	Ma	Full 全检	Full 全检	Full 全检
	Over Current 过电流	10~15A	Cr	Full 全检	Full 全检	Full 全检
	Internal Resistance 内阻	≤180m ohm	Ma	Full 全检	Full 全检	Full 全检
	Short Circuit 短路保护	Recoverable 可自恢复 (OK / NG)	Cr	Full 全检	Full 全检	Full 全检
	Integrated Resistor (if There is) 内置电阻(若有)	-	Ma	Full 全检	Full 全检	Full 全检
	NTC	-	Ma	Full 全检	Full 全检	Full 全检
	Load Voltage 带载电压 (Load ≥ 1mA)	V < Vload < V	Ma	Full 全检	Full 全检	Full 全检
Performance Test 性能测试	Capacity 容量	≥8.8Ah	Ma	AQL(S-1)	AQL(II)	Full 全检
	Over Charge Voltage 过充电电压	3.80 ± 0.05V	Cr	AQL(S-1)	AQL(II)	Full 全检
	Over Discharge Voltage 过放电电压	2.00 ± 0.05V	Ma	AQL(S-1)	AQL(II)	Full 全检
	Welding Test	≥20N	Ma	1pcs/1 machine	1pcs / 4hours * 1machine	1pcs / 2hours * 1machine
Additional Test 附加测试	Cont. Short Test 连续短路测试 (5 times 五次)	OK / NG	Ma	1pcs~1‰	3pcs~1‰	3pcs~1‰
	Fully Charge Test 满充电测试	14.4 ± 0.09V	Ma	AQL(S-1)	Full 全检	Full 全检
	PCM resistance Test PCM 阻抗测试	>1M ohm	Ma	AQL(S-1)	AQL(II)	Full 全检
	PCM High Voltage Test PCM 耐压测试	OK / NG	Ma	1pcs~1‰	3pcs~1‰	3pcs~1‰

7. Caution and prohibition 注意事项

Before using and handling the pack, see carefully attached “Handling Instruction for Rechargeable LiFePO4 battery Pack”. For safety reasons rechargeable batteries are shipped in a low remaining capacity state. Charge before using. New pack is the initialized. If used without full charge and discharge for long time, the accuracy loss occurred. Recover such packs to original performance through repeating Several cycles of full charging and discharging

8. Warranty 保修

Manufacturer will be responsible for replacing the battery pack against defects or poor workmanship for 12 months from the date of shipping. Any other problem caused by malfunction of the equipment or misuse of the battery is battery is not covered under this warranty.

9. Handling Instruction Guide for LiFePO4 Battery(Polymer) Pack 使用指导

10.1. General

Battery packs supplied by CTECHI or CPKD have to be handle carefully according to the specification. Here are some more to be followed.

10.2. Storage of pack

The packs are requested to be stored under the following conditions:

- a. Indoor storage in a cool circumstances without direct sun light on the packs or cartons.
- b. Store batteries in a dry location with low humidity, and a temperature range of - 20 °C to +30 °C. In case of the long term storage
 - a. As long-term storage can accelerate battery self-discharge and lead to the deactivation of the batteries. To minimize the deactivation effect, store battery packs in a temperature range of +10 °C to +30 °C.
 - b. When charging for the first time after long-term storage, deactivation of the packs may have led to decreased capacity. Recover such packs to original performance through repeating several cycles of full charging and discharging.
 - c. When store packs for more than 6 month, charge at least once charring require per 6 months to prevent leakage and deterioration in performance due to self-discharging.

10.3. Charging pack

- a. Use suitable charger with the specified voltage and current. We strongly recommend CTECHI and CPKD smart battery charger. We can recommend the usage or specification of the charger manufacturing. If you want to get the information about it, please contact us.
- b. Never attempt reverse charging. Charring with polarity reversed can cause a reversal in battery polarity, causing gas pressure inside of the battery to rise, which can be lead to leakage of the batteries in the pack.
- c. Avoid overcharging. Repeated overcharging can be lead to deterioration in pack performance. And Over-heat occurred.
- d. Charging efficiency drops at temperatures above 40 °C.

10.4. Protection from unexpected damaged to pack

- a. (+) and/or (-) terminals must not be connected in metal wire, necklace, chains.
- b. Do not drop packs from height in order to prevent them from possible malfunction or damage.
- c. Do not twist or bend packs in order to prevent possible damage.

10.5. For Safety

- a. Do not disassemble packs.
- b. Do not use pack when something abnormal found such as smells, deformation, discoloration, and so on.
- c. Do not re-use Li-ion cells or other parts after removing from the packs.
- d. When the electrolyte leakage occurs, do not touch the liquid.
- e. Once watered, packs may have potential malfunctions. Do not use those packs.
- f. Do not have packs in the hot-temperature (60 °C or more).
- g. Do not put packs into fire.
- h. Do not crush/nail pack.
- i. Do not apply solder directly to packs.