

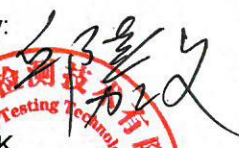



UN38.3 Lithium Battery Test Summary

<p>(a) Name of product Kona Micro IoT Gateway</p>	<p>(b) Product manufacturer's contact information</p>
<p>(c) Name of the test laboratory Refer to attached Battery Test Summary</p>	<p>TEKTELIC Communications Inc. 7657 10th St. NE, Calgary, AB Canada, T2E 8X2</p>
<p>(d) Unique test report identification number Refer to attached Battery Test Summary</p>	<p>1.403.338.6900 info@tektelic.com www.tektelic.com</p>
<p>(e) Date of test report Refer to attached Battery Test Summary</p>	<p>(f) Description of cell or battery Shenzhen BetterPower Battery Co. model BPI-18650 2600mAh 7.2V 2S1P Refer to attached Battery Test Summary</p>
<p>(g) List of tests conducted Refer to attached Battery Test Summary</p>	<p>(h) Reference to assembled battery testing requirements Refer to attached Battery Test Summary</p>
<p>(i) Reference edition of the Manual of Tests and Criteria Refer to attached Battery Test Summary</p>	<p>(j) Signature with name and title of signatory Refer to attached Battery Test Summary</p>
<p>Identification number of this document T0005281_TS</p>	<p>Date of release for this document Dec. 11, 2019</p>



Manufacturer 制造商	Shenzhen BetterPower Battery Co., Ltd 深圳市倍特力电池有限公司	
Address of manufacturer 制造商地址	No.11 Building Tongfu Village Industrial Park, Dalang LongHua New District SHENZHEN, GUANGDONG 518109 CHINA 深圳市龙华新区大浪街道石凹同富村工业园 11 栋	
Factory 工厂	Shenzhen BetterPower Battery Co., Ltd 深圳市倍特力电池有限公司	
Address of factory 工厂地址	No.11 Building Tongfu Village Industrial Park, Dalang LongHua New District SHENZHEN, GUANGDONG 518109 CHINA 深圳市龙华新区大浪街道石凹同富村工业园 11 栋	
Name of Products 产品名称	Li-ion Battery 锂离子电池	
Model/type reference 型号	BPI-18650	
Trade Mark 商标	BPI	
Tested according to 测试依据: Recommendations on the TRANSPORT OF DANGEROUS GOODS, Manual of Test and Criteria, PART III, section 38.3 Lithium metal and lithium ion batteries, the sixth revised edition (ST/SG/AC.10/11/Rev.6). 联合国《关于危险货物运输的建议书, 试验和标准手册》, 第三部分, 38.3 节锂金属和锂离子电池要求, 第六修订版 (ST/SG/AC.10/11/Rev.6)		
Tests performed 测试项目: Test T.1: Altitude simulation 试验 T.1: 高度模拟 Test T.5: External short circuit 试验 T.5: 外部短路 Test T.2: Thermal Test 试验 T.2: 温度试验 Test T.6: Impact 试验 T.6: 撞击 Test T.3: Vibration 试验 T.3: 振动 Test T.7: Overcharge 试验 T.7: 过度充电 Test T.4: Shock 试验 T.4: 冲击 Test T.8: Forced discharge 试验 T.8: 强制放电		
Test Conclusion 试验结论: The Li-ion Battery submitted by Shenzhen BetterPower Battery Co., Ltd is tested according to the Recommendations on the TRANSPORT OF DANGEROUS GOODS, Manual of Test and Criteria, PART III, section 38.3 Lithium metal and lithium ion batteries, the sixth revised edition (ST/SG/AC.10/11/Rev.6). Test results: PASS 由深圳市倍特力电池有限公司提交的锂离子电池按照联合国《关于危险货物运输的建议书, 试验和标准手册》, 第三部分, 38.3 节锂金属和锂离子电池要求, 第六修订版 (ST/SG/AC.10/11/Rev.6)进行测试。 测试结果: 合格		
Tested by: 主检人: 	Reviewed by: 审核人: 	Approved by: 批准人: 
		Seal of NTEK 报告单位(盖章) 

General product information 通用产品信息:			
Nominal Voltage 标称电压	7.2V	Rated Capacity 额定容量	2600mAh (18.72Wh)
Standard Charging Current 标准充电电流	1300mA	Max. Continuous Charging Current 最大充电电流	2600mA
Limited Charging Voltage 充电限制电压	8.4V	Cut-Off Voltage 放电截止电压	5.5V
Standard Continuous Discharge Current 标准放电电流	1300mA	Max. Continuous Discharge Current 最大放电电流	2600mA
Model number of the cell 内部电芯型号	18650-2600	Number of cells 电芯数量	2 Cells
Connection pattern of cells 电芯连接方式	2 cells in series 2 块电芯串联	Rated Capacity of Cell 电芯额定容量	2600mAh
Cell's Max. Continuous Discharge Current 电芯最大放电电流	2600mA	Appearance 外观	Blue and Prismatic 棱柱形、蓝色
Classification 类别	Small Lithium ion Batteries 小型锂离子电池	Size (T×W×L) 尺寸	19.0mm×37.5mm×70.0 mm

Date of receipt of test item 接收日期	2018-05-18	Completion Date 完成日期	2018-06-27
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Remarks 备注说明: Batteries of A1#-A4# are fully charged at first cycle; Batteries of A5#-A8# are fully charged after 50 cycles; Component cells of A9#-A13# at 50% charged of the design rated capacity at first cycle; Batteries of A14#-A17# are fully charged at first cycle; Batteries of A18#-A21# are fully charged after 50 cycles; Component cells of A22#-A31# are fully discharged at first cycle; Component cells of A32#-A41# are fully discharged after 50 cycles; Test environment condition: Room temperature: 15-25°C; Room humidity: 40-70% 电池 A1#-A4#为首次循环满电状态; 电池 A5#-A8#为 50 个循环后满电状态; 元件电池芯 A9#-A13#为首次循环 50%充电状态; 电池 A14#-A17#为首次循环满电状态; 电池 A18#-A21#为 50 个循环后满电状态; 元件电池芯 A22#-A31#为首次循环完全放电状态;
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