# LITHIUM CELL TEST SUMMARY AND SUPPLIER INQUIRY

IN ACCORDANCE WITH SUB-SECTION 38.3 OF MANUAL OF TESTS AND CRITERIA

Name/Description of cell / modeln o. of Product			
Single cell ion battery	TX-81		
	Manufacturer of cell		
Name	深圳比亚特能源有限公司		
Address	深圳市光明新区光明办事处白花社区第一工业区 8-148 栋四楼		
Phone	86-755-23229807 36697278		
E-Mail	info@bytbattery.com		
Website	https://bytbattery.diytrade.com/		
Manufacturer			
Name	Technaxx Deutschland GmbH & Co. KG		
Address	Kruppstraße 105, 60388 Frankfurt am Main		
Phone	+49 [69] 90 47552 0		
E-Mail	Zentrale@technaxx.de		
Website	http://www.technaxx.de/		
	Test laboratory of cell 电池测试实验室		
Name	深圳安博检测股有限公司		
Address	广东省深圳市宝安区西乡街道后瑞第三工业区 A 栋四楼东		
Phone	86-755-26066126		
E-Mail	service@banbotek.com		
Website	www.anbotek.com		

# ID-number and date

Unique test report identification number	18270BC00046501
Date of test report	2020-03-27

# DESCRIPTION OF CELL ( Mark with an"X")

Lithium ion cell	X	
Lithium metal cell		
Parameters		
Mass in gram (g): 重量(g)		
Lithium ion: Indicate watt-hour rating (Wh):	2.45	

#### Physical description of cell

0.37

Single cell ion battery

Lithium metal: Indicate lithium metal content in gram (g):

#### **Model numbers**

301429

List of tests conducted and results		Pass	Fail
- Mark N/A, pass or fail with an "X"			
T1 - Altitude simulation		Х	
T2 - Thermal Test		Х	
T3 – Vibration		Х	
T4 – Shock		Х	
T5 - External Short Circuit		Х	
T6 - Impact - for cylindrical cells having a diameter of at least 18 mm		Х	
T6 - Crush - for prismatic cells, pouch cells, button cells and cylindrical cells		Х	
having a diameter of less than 18 mm			
T7 – Overcharge		Х	
T8 - Forced Discharge		Х	

# Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto

Mark Yes or no with an "X"	Yes	No
Quality management system for manufacturing cells		
Does the manufacturer of the cell/battery manufacture the products based on a		
documented quality management system according to transport regulations?		
Are the following parameters exceeded?		
Lithium ion cell: more than 20 Wh		
Lithium metal cell: more than 1 g Lithium		

# ADDITIONAL SUPPLIER INQUIRY

# Check point 13 – 15 need to be answered when 12 has been ticked "YES":

Mark Yes or no with an "X"	Yes	No
Does each cell incorporates a safety venting device or is designed	X	
to preclude a violent rupture under normal conditions of carriage?		
Is each cell equipped with an effective means of preventing external short circuits?	Х	
Is each battery containing cells or series of cells connected in parallel		
equipped with effective means as necessary to prevent dangerous reverse		
current flow (e.g. diodes, fuses, etc.) Not relevant for cells		

 Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion cells and lithium polymer cells

 State of Charge (SoC) max. 30 %
 X

#### **CELLS INSTALLED IN EQUIPMENT**

Check point 17 needs to be answered when the cells are installed in articles: Mark	N/A	Pass	Fail
N/A, pass or fail with an "X"			
17c) Only button cells enclosed?	Х		
17b) Number of enclosed cells (other than button cells) per equipment			
When the equipment is intentionally active/switched on during transport e.g. data logge	rs:		
17c) Confirmation that no dangerous amount of heat is emitted from the equipment		Х	
17d)Confirmation that the equipment when transported by air fulfills the defined air		Х	
transport standards for electromagnetic radiation according to DO-160			

Please markt he correct column with an X		
	X	
Single Cell or Battery	Build in Cell/ Battery	Over 100Wh



Place, Date	Signature	<b>Company stamp and Signature</b>
Frankfurt, 10.12.2019	PUL	Technax Deutschland GmbH & Co. KG Kruppstr. 105 60388 Frankfurt a.M. Fon +49(0)69/90 47 55 2-0 Fax -16