

LITHIUM BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

IN ACCORDANCE WITH SUB-SECTION 38.3

OF MANUAL OF TESTS AND CRITERIA

1. Name/Description of battery
IRN21700-48 / rechargeable lithium ion battery
1a. Name/Description of the cells inside the battery
rechargeable lithium ion cell

The test summary of the cells inside the battery must either be presented or under checkpoint 9 and 9a it must be confirmed that the UN 38.3 test summary for the cells is available.

2. Manufacturer of battery	
Name	Zigong Joinsun Technology Co.,Ltd
Address	6-45 Xinyuan Road,Yantan District,Zigong City,Sichuan Province
Phone	+ 86 (755) 28010506
Email	info@redwaypower.com
Website	https://www.redwaypower.com/

2a. Manufacturer of the equipment (if the battery is contained in equipment)	
Name	Zhuhai iSmart Digital Co.,Ltd
Address	Room 101, Building 28, Xianggong Road 29, Xiangzhou District, Zhuhai, 519000, China
Phone	0086-756-8335033
Email	sales3@ismartcity.com.cn
Website	

3. Test laboratory of battery	
Name	Guangzhou CPUP Certification Technology Service Co., Ltd
Address	Room C101/C102/C103/C104,No.9, Hengji Road, Yunxing ZhukengShigiao Street, Panyu District, Guangzhou, Guangdong, China
Phone	+86-020 3112 7037
Email	info@cp-up.com
Website	www.cp-up.com

4. ID-number and date			
Unique test report identification number	ZGJX20230613UN01	Date of test report	2023-07-12

DESCRIPTION OF BATTERY

5. Mark the type of battery with an "X"					
X	Lithium ion battery		Lithium metal battery		Lithium hybrid battery

6. Parameters	
Mass in gram (g):	69
Lithium ion: Indicate watt-hour rating (Wh):	17.3
Lithium metal: Indicate lithium metal content in gram (g):	
Lithium hybrid: Indicate lithium metal content in gram (g) and watt-hour rating (Wh):	

7. Physical description of battery
Appearance: cylinder

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8. Model numbers
IRN21700-48

TESTS AND RESULTS

9. List of tests conducted and results - Mark N/A, pass or fail with an "X"	N/A	Pass	Fail
T1 - Altitude simulation		X	
T2 - Thermal Test		X	
T3 – Vibration		X	
T4 – Shock		X	
T5 - External Short Circuit		X	
T6 - Impact - for cylindrical cells having a diameter of at least 18 mm See check point 1a and 9a.		X	
T6 - Crush - for prismatic cells, pouch cells, button cells and cylindrical cells having a diameter of less than 18 mm. See check point 1a and 9a.	X		
T7 – Overcharge	X		
T8 - Forced Discharge, only valid for cells. See check point 1a and 9a.		X	
9 List the tests conducted and results-T9 Text			
9 List the tests conducted and results-T10 Text			

9a. UN 38.3 Test Confirmation for the Cells inside the battery When no separate document for the cells is provided, this confirms that the cells inside the battery (see checkpoint 1.a.) have successfully passed the UN 38.3 test. In this case under checkpoint 9 the T.6 and T.8 must be marked as „passed“ and here under 9.a. „Cell UN 38.3 Test confirmed“ needs to be ticked.	Cell UN 38.3 Test confirmed	X	Cell UN 38.3 Test NOT confirmed	
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10. Reference to assembled battery testing requirements			
	Altitude simulation, Thermal test, Vibration, Shock, External sort circuit, Impact, Overcharge. Forced discharge	N/A	

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

ADDITIONAL SUPPLIER INQUIRY

12. Quality management system for manufacturing batteries Does the manufacturer of the battery manufacture the products based on a documented quality management system according to transport regulations?	yes	X	no	
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13. Are the following parameters exceeded? Lithium ion battery: more than 100 Wh Lithium metal battery: more than 2 g Lithium Lithium hybrid Battery: more than 1,5 g Lithium and/or more than 10 Wh	yes		no	X
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Check point 14 – 16 need to be answered when 13 has been ticked "YES":				
14. Does each battery incorporates a safety venting device or is designed	Yes		no	

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to preclude a violent rupture under normal conditions of carriage?					
15. Is each battery equipped with an effective means of preventing external short circuits?		Yes		No	
16. 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.)?		N/A	Yes	No	

17. Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion batteries and lithium polymer batteries					
State of Charge (SoC) max. 30 %	N/A	Yes	X	No	

BATTERIES INSTALLED IN EQUIPMENT

18. Check point 18 needs to be answered when the batteries are installed in articles:					
18.a) Only button cells enclosed?	Yes		No	X	
18.b) Number of enclosed batteries per equipment					2
When the equipment is intentionally active/switched on during transport e.g. data loggers:					
18.c) Confirmation that no dangerous amount of heat is emitted from the equipment	N/A	Yes	X	No	
18.d) Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160	N/A	Yes	X	No	

19. Place, Date	20. Title, Surname, First name and signature	21. Company stamp
13.11.2024	CEO Pekcan Pascal 	Technaxx Deutschland GmbH & Co.KG Konrad-Zuse-Ring 16-18 61137 Schöneck-Kilianstädten Fon +49 (0)6187 / 200 92-0 • Fax -16