

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
Li-ion battery
1a. Name/Description of the cells inside the battery
ZEC 18650

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	Dongguan Zhechang Industry Co.,Ltd.
Address	Building 2, No.18, Jiangnan West Street, Xiagang, Chang'an Town,Dongguan City, Guangdong Province
Phone	0769-85348900
Email	zecfeb@zhechangcn.com
Website	www.zhechangcn.com

2a. Manufacturer of the equipment (if the battery is contained in equipment)	
Name	Technaxx Deutschland GmbH & Co. KG
Address	Konrad-Zuse-Ring 16-18, 61137 Schöneck
Phone	+49 6187 20092 0
Email	support@technaxx.de
Website	Technaxx.de

3. Test laboratory of battery	
Name	Shenzhen Lionaces Technology Co., Ltd.
Address	301, Building B6, Junfeng Industrial Zone, Yonghe Road, Heping Community, Fuhai street, Baoan, Shenzhen, Guangdong, China
Phone	0755-28280690
Email	service@lionaces.com
Website	www.lionaces.com

4. ID-number and date			
Unique test report identification number	LA2022B1193011U	Date of test report	2022-12-17

DESCRIPTION OF BATTERY

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

6. Parameters	
Mass in gram (g):	46.9g
Lithium ion: Indicate watt-hour rating (Wh):	7.4Wh
Lithium metal: Indicate lithium metal content in gram (g):	15.6g
Lithium hybrid: Indicate lithium metal content in gram (g) and watt-hour rating (Wh):	12.5g, 7.4Wh

7. Physical description of battery

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8. Model numbers

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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		X	
9 List the tests conducted and results-T10 Text		X	

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		Cell UN 38.3 Test NOT confirmed	
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10. Reference to assembled battery testing requirements

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

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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 to preclude a violent rupture under normal conditions of carriage?	Yes	X	no		
15. Is each battery equipped with an effective means of preventing external short circuits?	Yes	X	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	X	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					
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
2025-02-11	P. Pekcan 	Technaxx Deutschland GmbH & Co.KG Konrad-Zuse-Ring 16-18 61137 Schöneck-Kilianstädten Fon +49 (0)6187 / 200 92-0 • Fax -16