

# 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	
Lithium Battery	TX-28

## Manufacturer of cell

Name	Shenzhen Hangjun Electronic.Co.Ltd
Address	302, 3rd Floor, Building 1, Hekeng Industrial park,Langkou Community, Dalang Office, Longhua New District, Shenzhen
Phone	18127038885
E-Mail	jijun2508@163.com
Website	www.hangjun.net

## 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

Name	Dongguan ZRLK Testing Technology Co., Ltd.
Address	Building D, No.2, Jinyuyuan Mansion, No.18, Industrial West Road, Songshan Lake High-tech Industrial Development Zone, Dongguan, Guangdong, China
Phone	+86-769-26621775
E-Mail	admin@zrklab.com
Website	www.zrklab.com

## ID-number and date

Unique test report identification number	ZKS191200980-1
Date of test report	2020-04-09

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

Lithium ion cell	
Lithium metal cell	X

## Parameters

Mass in gram (g):	
Lithium ion: Indicate watt-hour rating (Wh):	11.84Wh
Lithium metal: Indicate lithium metal content in gram (g):	24.5g

## Physical description of cell

Lithium Battery
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## Model numbers

HJ 405060
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## TESTS AND RESULTS

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	X		
T6 - Crush - for prismatic cells, pouch cells, button cells and cylindrical cells having a diameter of less than 18 mm		X	
T7 - Overcharge		X	
T8 - Forced Discharge		X	

**ADDITIONAL SUPPLIER INQUIRY**

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

**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 to preclude a violent rupture under normal conditions of carriage?	Yes	
Is each cell equipped with an effective means of preventing external short circuits?	Yes	
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.) <b>Not relevant for cells</b>		

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

State of Charge (SoC) max. 30 %	YES	
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**CELLS INSTALLED IN EQUIPMENT**

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

**Please mark the correct column with an X**

	X	
Single Cell or Battery	Build in Cell/ Battery	Over 100Wh
		

Place, Date	Signature	Company stamp and Signature
Frankfurt, 06.07.2020		