# **UN38.3** Lithium Ion Battery Test Summary



Version: 1.1

# Revision date: November 11, 2019

# 1.0 Products covered by this Test Summary

Model Number	Description	Notes
	UPS: SRT1000UXI-LI (contains no battery)	
SRTL1000RMXLI	XBP: XBP48RM1U-LI	
	UPS: SRT1000UXI-NCLI (contains no battery)	
SRTL1000RMXLI-NC	XBP: XBP48RM1U-LI	
	UPS: SRT1500UXI-LI (contains no battery)	
SRTL1500RMXLI	XBP: XBP48RM1U-LI	
	UPS: SRT1500UXI-NCLI (contains no battery)	
SRTL1500RMXLI-NC	XBP: XBP48RM1U-LI	
	UPS: SRT2200UXI-LI (contains no battery)	
SRTL2200RMXLI	XBP: XBP48RM1U2-LI	
	UPS: SRT2200UXI-NCLI (contains no battery)	
SRTL2200RMXLI-NC	XBP: XBP48RM1U2-LI	
	UPS: SRT3000UXI-LI (contains no battery)	
SRTL3000RMXLI	XBP: XBP48RM1U2-LI	
	UPS: SRT3000UXI-NCLI (contains no battery)	
SRTL3000RMXLI-NC	XBP: XBP48RM1U2-LI	

### **Physical Description of Products**

Each product listed product consists of two separately boxed items – the uninterruptible power supply (UPS) that does not contain a battery and an external battery pack (XBP) that is the portion of the product subject to this requirement. The XBP48RM1U-LI and XBP48RM1U2-LI are substantially equivalent.

### 1.1 Batteries in Products

#	Model Number	Description	Notes
1	XBP48RM1U-LI	APC Smart-UPS 48V 585 Wh LI Battery Pack	
2	XBP48RM1U2-LI	APC Smart-UPS 48V 3KW, 600Wh LI Battery Pack	

### 1.2 Cells in Batteries

#	Model Number	Description	Notes
3	LG 18650 HD2	LG 18650 HD2 2000mAh Cylindrical Cell	
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# 2.0 Manufacturers of Cells/Batteries

# 2.1 Battery Maker #1

Name	Address	Phone	Website
Inventus Power., Inc. (ICC Electronics	No.23, Shangguan Road, Qingxi Town, Dong Guan City, Guangdong, P.R. China		
(Dongguan) Ltd. / Fabricators International)	P.R. China		
NOTES:			

# 2.1 Battery Maker #2

Name	Address	Phone	Website
Inventus Power., Inc. (ICC Electronics (Dongguan) Ltd. / Fabricators International)	No.23, Shangguan Road, Qingxi Town, Dong Guan City, Guangdong, P.R. China		
NOTES:			

# 2.1 Cell Maker #3

Name	Address	Phone	Website
LG CHEM	20 YOIDO-DONG YOUNGDUNGPO- GU, SEOUL 150-721, KOREA		http://www.lgchem.com
NOTES:			

# **3.0 Test Laboratories of Cells / Batteries**

# 3.1 Test for Battery #1

Name		Address	Phone	Website
Vkan Certification & Testing Co., Ltd.		No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, P.R. China	+020 32293888	http://www.cvc.org.cn
Test ID No:	RXUN201	17-0886	·	
Date:	March 21	1, 2017		
NOTES:				

	Lithium Ion Cell		Lithium Metal Cell
XXX	Lithium Ion Battery		Lithium Metal Battery

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# 3.1 Test for Battery #2

Name		Address	Phone	Website
Vkan Certification & Testing Co., Ltd.		No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, P.R. China	+020 32293888	http://www.cvc.org.cn
Test ID No:	UN2017-2248-1			
Date:	October 8	8, 2018		
NOTES:				

	Lithium Ion Cell		Lithium Metal Cell
XXX	Lithium Ion Battery		Lithium Metal Battery

# 4.0 Parameters of Cells/Batteries

# 4.1 Test for Battery #1

Parameters	Cell	Battery
Mass in gram (g)	48	12,000.00
Lithium ion Indicate watt-hour rating (Wh)	0.73	613.2
Lithium metal Indicate lithium metal content in gram (g)	N/A	N/A

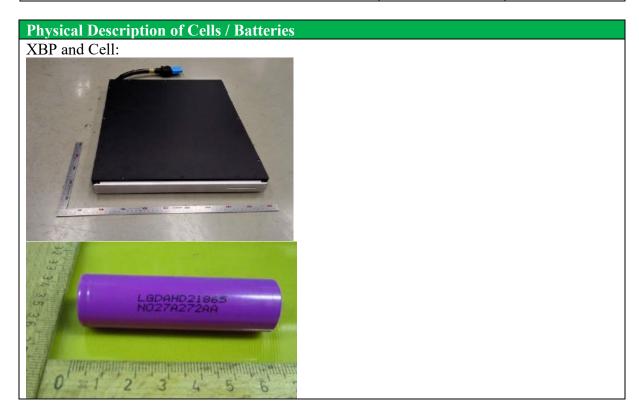
# XBP and Cell: LGDAHD21865 NO27A272AA

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# 4.1 Test for Battery #2

Parameters	Cell	Battery
Mass in gram (g)	48	13,000.00
Lithium ion Indicate watt-hour rating (Wh)	7.3	604.8
Lithium metal Indicate lithium metal content in gram (g)	N/A	N/A



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# 5.0 List of tests conducted and results

Test	Pass	Fail	N/A
T1 – Altitude simulation	Х		
T2 – Thermal Tests	Х		
T3 – Vibration	Х		
T4 – Shock	X		
T5 – External Short Circuit	Χ		
T6 – Impact - for cylindrical cells having a diameter of at least 18mm. See Section 6.0	Χ		
T6 – Crush - for prismatic cells, pouch cells, button cells and cylindrical cells having a diameter of less than 18mm. See Section 6.0			Х
T7 – Overcharge	Х		
T8 – Forced Discharge	Х		

# 6.0 UN38.3 Test Conformation for the Cells inside the battery:

	Cell UN 38.3 Test Confirmed (Yes or No)
When no separate document for the cells is provided, this confirms that the cells inside the battery have successfully passed the UN	
38.3 test. In this case under section 5.0 the T6 and T8 must be marked as "passed" and here under section 6.0 "Cell UN 38.3 Test confirmed" needs to be Yes.	YES

# 7.0 Reference to assembled battery testing requirements

Not Applicable
XXX

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# 8.0 Reference to the edition on the Manual of Tests and Criteria applied

ST/SG/AC.10/11/Rev.5/Amend.1

Recommendations on the Transport of Dangerous Goods:

Manual of Tests and Criteria, Part III, Sub-Section 38.3

Lithium metal and lithium ion batteries

**United Nations** 

9.0 Manufacture of the cell / battery is in accordance with quality management system as required by the regulations:

Schneider Electric certifies that all articles described in this Test Survey are in compliance with all applicable Schneider Electric Product Specifications, Manufacturing Processes, Quality Control Testing, Quality Plan per ISO9001: 2008, and Environmental guidelines.

Company Seal

### 10.0 Certification

Company: Schneider Electric – Secure Power Division

Signature:

Authorized representative:

Saynond/ Exottefr

Raymond P. Lizotte, Jr. Director, Sustainability Office EMAIL: raymond.lizotte@SE.com

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Date of compilation: November 11, 2019

Place of expertise: Schneider Electric Andover R&D Center

Andover, MA 01810

**United States** 

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# 11.0 Attachments

NONE

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