## **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
	APC Smart-UPS Li-Ion, Short Depth 500VA, 120V	UBP8A04AC1,
SCL500RM1NC	with Network Management Card	911-7010
	APC Smart-UPS C Lithium Ion, Short Depth 500VA,	UBP8A04AC1,
SCL500RM1UC	120V with SmartConnect	911-7010
	APC Smart-UPS C Lithium Ion, Short Depth 500VA,	UBP8A04AC1,
SCL500RM1UNC	120V with Network Management Card	911-7010
	APC Smart-UPS C Lithium Ion, Short Depth 500VA,	UBP8A04AC1,
SCL500RMI1U	230V	911-7010
	APC Smart-UPS C Lithium Ion, Short Depth 500VA,	UBP8A04AC1,
SCL500RMI1UC	230V with SmartConnect	911-7010
	APC Smart-UPS C Lithium Ion, Short Depth 500VA,	UBP8A04AC1,
SCL500RMI1UNC	230V with Network Card	911-7010
	APC Smart-UPS Lithium Ion, Short Depth 400VA,	1SCH8A04AC1SA2,
SCL400RMJ1U	100V	911-6032

#### **Physical Description of Products**

Each product consists of an Uninterruptible Power Supply (UPS) that contains a battery pack containing lithium ion battery cells.

#### 1.1 Batteries in Products

#	Model Number	Description	Notes
1	UBP8A04AC1,	Rechargeable Lithium-ion Battery Pack, 3.2Ah /	
	911-7010	46.08Wh	
2	1SCH8A04AC1SA2,	Rechargeable Lithium-ion Battery Pack, 3.2Ah /	
	911-6032	46.08Wh	

#### 1.2 Cells in Batteries

#	Model Number	Description	Notes
3	UBP18650VTC4	Sony   Murata VTC4 18650 2100mAh 30A Battery	
4			

#### 2.0 Manufacturers of Cells/Batteries

#### 2.1 Battery/Cell Maker #1

Name	Address	Phone	Website	
STL TECHNOLOGY CO.,	806 NO.1, WEST 15TH STREET	+886-2-	http://www.stl-	
LTD.	K.E.P.Z. KAOHSIUNG, TAIWAN,	26987603	tech.com/	
	R.O.C			
NOTES: UBP8A04AC1 and 1SCH8A04AC1SA2 are the same battery pack that is labeled differently.				

**UN38.3 Test Report Summary** 

Version: 1.1

## 2.1 Battery/Cell Maker #2

Name	Address	Phone	Website	
STL TECHNOLOGY CO.,	806 NO.1, WEST 15TH STREET	+886-2-	http://www.stl-	
LTD.	K.E.P.Z. KAOHSIUNG, TAIWAN,	26987603	tech.com/	
	R.O.C			
NOTES: UBP8A04AC1 and 1SCH8A04AC1SA2 are the same battery pack that is labeled differently.				

## 2.1 Battery/Cell Maker #3

Name	Address	Phone	Website
Tohoku Murata	1-1 Shimosugishita, Takakura,	+81-24-955-	https://www.murata.com/en-
Manufacturing Co.,	Hiwada-machi, Koriyama-shi,	7770	global/group/tohokumurata
Ltd.	Fukushima, 963-0531 Japan		
NOTES:			

# 3.0 Test Laboratories of Cells / Batteries

## 3.1 Battery/Cell Maker #1

Name Address		Address	Phone	Website	
STL TECHNOLOGY CO.,		806 NO.1, WEST 15TH STREET	+886-2-	http://www.stl-	
LTD.		K.E.P.Z. KAOHSIUNG, TAIWAN,	26987603	tech.com/	
		R.O.C			
Test ID No:	STL180200	TL1802002			
Date: September 7, 2018					
NOTES: UBP8A04AC1 and 1SCH8A04AC1SA2 are the same battery pack that is labeled differently.					

	Lithium Ion Cell		Lithium Metal Cell
XX	Lithium Ion Battery		Lithium Metal Battery

## 3.1 Battery/Cell Maker #2

Name Address		Phone	Website		
STL TECHNOL	STL TECHNOLOGY CO., 806 NO.1, WEST 15TH STREET		+886-2-	http://www.stl-	
LTD.		K.E.P.Z. KAOHSIUNG, TAIWAN,	26987603	tech.com/	
		R.O.C			
Test ID No:	STL180200	TL1802002			
Date: September 7, 2018					
NOTES: UBP8A04AC1 and 1SCH8A04AC1SA2 are the same battery pack that is labeled differently.					
				·	

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

UN38.3 Test Report Summary

Version: 1.1

#### 3.1 Battery/Cell Maker #3

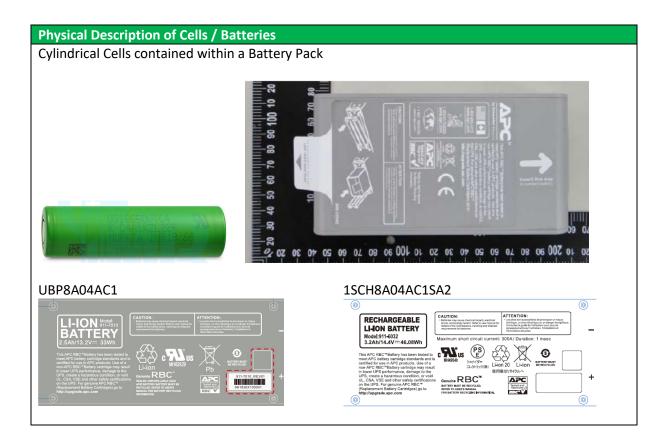
Name		Address	Phone	Website
Tohoku Murata		1-1 Shimosugishita,	+81-24-955-	https://www.murata.com/en-
Manufacturing Co.,		Takakura, Hiwada-machi,	7770	global/group/tohokumurata
Ltd.		Koriyama-shi, Fukushima,		
		963-0531 Japan		
Test ID No:	Test ID No: QA-7227			
Date:	Date: September 01, 2017			
NOTES:				

XX	Lithium Ion Cell
	Lithium Ion Battery

	Lithium Metal Cell
•	Lithium Metal Battery

# 4.0 Parameters of Cells/Batteries

Parameters	Cell	Battery
Mass in gram (g)	48.0	641.0
Lithium ion Indicate watt-hour rating (Wh)	8	46.08
Lithium metal Indicate lithium metal content in gram (g)	N/A	N/A



**UN38.3 Test Report Summary** 

Version: 1.1

#### 5.0 List of tests conducted and results

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

## 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
21/2
N/A

#### 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

**UN38.3 Test Report Summary** 

Version: 1.1

# 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:

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** 

UN38.3 Test Report Summary

Version: 1.1