

Certificate of UN Test for Lithium-ion Battery Pack



Customer Model : iRobot ABL-D1A
 Global Code : n/a
 Product Name : Lithium Ion Battery Pack

Test Laboratory : Third Party - AnTek Certifications Inc.

Gary Drew, Compliance Specialist III
 Panasonic Industrial Devices Sales Company of America
 3461 Plano Parkway
 The Colony, TX 75056
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[Manufacturer] SUZ
 Sanyo Energy (Suzhou) Co., Ltd.
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We Declare this LI-Ion Battery Pack has passed UN Test.

Manual of Tests and Criteria (38.3 Lithium Batteries)	Test Results	Note	Number of test batteries/cells	
No. Test Item				
T 1 Altitude simulation	Pass		4 small batteries at first cycle, fully charged	4 small batteries after 25 cycles ending fully charged states.
T 2 Thermal test	Pass			
T 3 Vibration	Pass			
T 4 Shock	Pass			
T 5 External short circuit	Pass			
T 6 Crush	Pass	N/A		
T 7 Overcharge	Pass		First cycle, fully charged 4 batteries	After 25 cycles, fully charged 4 batteries.
T 8 Forced discharge	Pass	N/A		

*The test data may contain additional test result other than above table.

Lithium Ion Battery Pack

Item	Nominal value	Notes
Watt-hour rating	26 Whr	
Pack Weight	235 g	
Physical description	Brand & Model: iRobot ABL-D1A	
Lithium equivalent content	2.52 g	

Above test procedures are compliant to the following manual:
 (Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7)
 Effective Date: 2021

Certificate of UN Test for Lithium-ion Battery Pack



Customer Model : ABL-D1
 Global Code : F12432926
 Product Name : 4UR18650A-U005E

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Test Laboratory : Manufacturer

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We Declare this LI-Ion Battery Pack has passed UN Test.

Manual of Tests and Criteria (38.3 Lithium Batteries)	Test Results	Note	Number of test batteries/cells	
No. Test Item				
T 1 Altitude simulation	Pass		4 small batteries at first cycle, fully charged	4 small batteries after 50 cycles ending fully charged states.
T 2 Thermal test	Pass			
T 3 Vibration	Pass			
T 4 Shock	Pass			
T 5 External short circuit	Pass			
T 6 Crush	Pass	N/A		
T 7 Overcharge	Pass		First cycle, fully charged 4 batteries	After 50 cycles, fully charged 4 batteries.
T 8 Forced discharge	Pass	N/A		

*The test data may contain additional test result other than above table.

Item	Nominal value	Note
Watt-hour rating	26 Wh	
Pack Weight	233 g	
Physical description	Li-Ion Battery Pack	
Lithium equivalent content	2.52 g	



Above test procedures are compliant to the following manual:
 (Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6)
 Effective Date: 2017