

UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

in accordance with manual of tests and criteria 8th revised edition, subsection 38.3.5

Battery IDENTITY (As Used on Label and List)

Model:	INR18650-28HE
Description:	Lithium ion Battery (Rechargeable), cylindrical 18650-type, blue
Specified data:	3.6 V, 2800 mAh, 10.08 Wh
Dimensions:	Battery: $\Phi 18.5 \times 68.0$ mm Cell: $\Phi 18.5 \times 65.1$ mm
Weight:	Battery: 46.98 g Cell: 46.01 g
Note(s):	Blank spaces are not permitted if any item is not applicable or no information is available, the space must be marked to indicate that.
Article(s):	082.234A - VideoInspector 3DM 082.235A - VideoInspector 3DX (9 mm; 1 m) 082.236A - VideoInspector 3DL 082.237A - VideoInspector Mini 082.238A - VideoInspector XXL 082.240A - VideoFlex G4 Ultra 082.241A - VideoFlex G4 Micro 082.242A - VideoFlex G4 082.243A - VideoFlex G4 XXL 082.244A - VideoFlex G4 Duo 082.245A - VideoFlex G4 ArcView 082.246A - VideoFlex G4 Max 082.247A - VideoFlex G4 Vario 082.248A - VideoFlex G4 Fix

UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

Section 1 - Manufacturer Identification

EU Manufacturer's Name

Umarex GmbH & Co. KG
-Laserliner-
Gut Nierhof 2
59757 Arnsberg
Germany

Laserliner Compliance team:

Phone: +49 2932-9004-266

E-Mail: compliance@laserliner.com

Emergency hotline:

Phone: +(86) 0755-82591330

E-Mail: webmaster@lcs-cert.com

Section 2.1 - Battery name and description

Battery name:	INR18650-28HE
Description:	Lithium ion Battery (Rechargeable), cylindrical 18650-type. Nominal voltage: 3.6 V, Rated capacity: 2800 mAh, Nominal energy: 10.08 Wh. Appearance: Blue cylinder. Limited charge voltage: 4.2 V, End of discharge voltage: 2.5 V. Standard charge current: 1400 mA, End of charge current: 56 mA. Maximum continuous charging current: 1C. Maximum continuous discharge current: 10 A. Dimensions (battery): $\Phi 18.5 \times 68.0$ mm, Weight (battery): 46.98 g.

Section 2.1.a - Battery cells inside the battery

Cell name:	INR18650-28HE (cell)
Description:	Lithium ion cell, cylindrical 18650-type. Nominal voltage: 3.6 V, Rated capacity: 2800 mAh. Limited charge voltage: 4.2 V, End of discharge voltage: 2.5 V. Standard charge current: 1400 mA, End of charge current: 56 mA. Maximum continuous charging current: 1C. Maximum continuous discharge current: 10 A. Dimensions (cell): $\Phi 18.5 \times 65.1$ mm, Weight (cell): 46.01 g.

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.

UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

Section 2.2 - Battery manufacturer:

Name:	Ningbo Hi-Tech Zone CVS Borescope Tech Co., Ltd
Address:	Unit 103, BLK18, Tuspark, East Siming Road, FengHua, Ningbo city, Zhejiang, P.R.China.
Telephone:	0574-88272838
E-Mail:	sales03@cvs-digital.com
Web-Site:	N/A

Section 2.3 - Equipment manufacturer (if the battery is contained in equipment):

Name:	Umarex GmbH & Co. KG, -Laserliner-
Address:	Gut Nierhof 2, 59757 Arnsberg, Germany
Telephone:	+49 (0) 2932 9004 - 0
E-Mail:	compliance@laserliner.com
Web-Site:	https://www.laserliner.com

Section 3 - Test laboratory for the battery:

Name:	Shenzhen LCS Compliance Testing Laboratory Ltd. (CNAS L4595)
Address:	Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	+(86) 0755-82591330
E-Mail:	webmaster@lcs-cert.com
Web-Site:	www.lcs-cert.com

Section 4 - Report ID number and issue date:

Report ID:	LCSA03184283SA
Issue date:	2024.04.16

UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

Section 5 - Type of battery: (mark with "X" where applicable)

Lithium ion battery:	X
Lithium metal battery:	
Lithium combi battery:	

Section 6 - Battery parameters

Weight of battery	[Gram(gr)]:	46.98 g
Lithium ion Nominal energy	[Watt-hours(Wh)]:	10.08 Wh
Lithium metal content	[Gram(gr)]:	N/A
Lithium combi Nominal energy and Lithium metal content	[Watt-hours(Wh)]: [Gram(gr)]:	N/A

Section 7 - Physical description of battery

Description:	Cylindrical lithium ion battery (18650-type), blue color. Dimensions: $\Phi 18.5 \times 68.0$ mm (battery); $\Phi 18.5 \times 65.1$ mm (cell). Weight: 46.98 g (battery); 46.01 g (cell). Nominal voltage: 3.6 V, Rated capacity: 2800 mAh, Nominal energy: 10.08 Wh. Limited charge voltage: 4.2 V, End of discharge voltage: 2.5 V. Standard charge current: 1400 mA, Maximum continuous charge current: 1C. Maximum continuous discharge current: 10 A, End of charge current: 56 mA. The battery is equipped with red and black wires and a white connector. Label text (partially visible on sample): HICR 18650S/2BHC 2800mAh 15.00A 3.6V 2022111C.
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Section 8 - Battery Model numbers

Model number(s):	INR18650-28HE
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UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

TEST AND RESULTS:

Section 9 - Battery - List of tests conducted and results

Tests	N/A	Pass
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 relevant for cells. See check point 1a and 9a		X
Note: N/A=Not apply.		

Section 9.a - UN 38.3 Test Confirmation for the Cells inside the battery

Cell UN 38.3 Test confirmed	YES	NO
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" YES needs to be ticked.	X	

UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

Section 10 - Reference to assembled battery testing requirements

	Reference is available	YES	N/A
Reference: UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.7/Amend1/Subsection 38.3			

Section 11 - Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto

Reference:	UNITED NATIONS "Manual of Tests and Criteria" (ST/SG/AC.10/11/Rev.7/Amend.1) Subsection 38.3
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ADDITIONAL SUPPLIER QUERY INFORMATION:

Section 12 - Quality management program for manufacturing cells

	YES	NO
Does the manufacturer of the cell/battery manufacture the products based on a documented quality management program according to transport regulations?	X	

Section 13 - Are the following parameters exceeded?

	YES	NO
Lithium ion cell: more than 20 Wh, or Lithium metal cell: more than 1 g Lithium, or Lithium combi battery: more than 1,5 g Lithium and/or more than 10 Wh		X

UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

IF SECTION 13 = YES - THEN SECTION 14 - 16 NEED TO BE ANSWERED

Section 14 - Safety venting device or designed to preclude a violent rupture

	YES	NO
Does each cell incorporates a safety venting device or is designed to preclude a violent rupture under normal conditions of carriage?	X	

Section 15 - Battery - External short circuit protection

	YES	NO
Is each battery equipped with an effective means of preventing external short circuits?	X	

Section 16 - Battery - Reverse current flow protection (not relevant for cells)

	N/A	YES	NO
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.)	X		

BATTERIES INSTALLED IN EQUIPMENT

17. Check point 17 needs to be answered when the batteries are installed in articles:

Section 17.a - Only button cells enclosed?

	YES	NO
Only button cells enclosed?		X

Section 17.b - Number of enclosed batteries (other than button cells) per equipment

Number of batteries:	1
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UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

When the equipment is intentionally active/switched on during transport (e.g. data loggers):

Section 17.c - Active / switched on during transport

	N/A	YES	NO
Confirmation that no dangerous amount of heat is emitted from the equipment	X		

Section 17.d - Fulfills transport standards for EMC according to DO-160

	N/A	YES	NO
Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160	X		

Section 18 - Place / Date of issue

Place of issue:	Arnsberg, Germany
Date of issue:	2026-04-09

Section 19 - Name and Title of the responsible person

Signatory name:	O. Heckmann
Signatory title:	Technical manager
Signature / Stamp	  UMAREX GmbH & Co. KG Gut Nierhof 2 · 59757 Arnsberg Germany

UN38.3 Lithium Ion Battery Test Summary

Document reference LL_UN383-LCSA03184283SA Rev.: 01

Section 20 - Other Information

UN38.3 (original) created:	2024.04.16
UN38.3 (original) Version:	01
	Risk assessment verified on source test report reference
Source report reference:	LCSA03184283SA
Revision:	01
Issue date:	2024.04.16
Disclaimer:	To the best of our knowledge, the information contained herein is accurate. However, no liability is assumed for the accuracy or completeness of the information.