



Lithium Ion Battery Test Summary

LITHIUM CELLS OR BATTERIES TEST SUMMARY IN ACCORDANCE WITH
SUB-SECTION 38.3 OF UN MANUAL OF TESTS AND CRITERIA

Product Manufacturer: PREBENA Wilfried Bornemann GmbH & Co. KG
Seestraße 20 - 26
D- 63679 Schotten
Germany

Telephone: +49 (0)6044 9601 0
Email: info@prebena.com
Web: <https://www.prebena.com>

Lithium Ion cells and Prebena Lithium-Ion-batteries LiHD have been successfully tested and comply with UN Model Regulation, Manual of Test and Criteria, Part III subsection 38.3

| PERFORMED TESTS | | | RESULTS | |
|-----------------|----|------------------------|----------------|----------------|
| | | | Cells | Batteries |
| 38.3.4.1 | T1 | Altitude Simulation | Pass | Pass |
| 38.3.4.2 | T2 | Thermal Test | Pass | Pass |
| 38.3.4.3 | T3 | Vibration | Pass | Pass |
| 38.3.4.4 | T4 | Shock | Pass | Pass |
| 38.3.4.5 | T5 | External Short Circuit | Pass | Pass |
| 38.3.4.6 | T6 | Impact / Crush | Pass | Not applicable |
| 38.3.4.7 | T7 | Overcharge | Not applicable | Pass |
| 38.3.4.8 | T8 | Forced Discharge | Pass | Not applicable |



The UN38.3 tests were performed at least by one of the following test houses and were tested to UN Manual Test and Criteria Revision 3 Amendment 1 or subsequent revisions or amendments.

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| TÜV Rheinland InterCert Kft. Termék üzletág Villamos laboratórium Beke u. 41-43 H-1135 Budapest, Hungary Telephone: +36-1-461-1100 E-Mail: tuv@hu.tuv.com Web: www.tuv.hu | Samsung SDI Safety Center 467, Beonyeong-ro Seobuk-gu, Cheonan-si Chungcheongnam-do, Korea Telephone: +82-41-560-3114 E-Mail: sdimaster@samsung.com Web: www.samsungsdi.com |
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Product Test Information - Cells

| Model number | Physical Description | Weight | Rating | Test report | |
|--------------------------|-------------------------|--------|--------|------------------|------------|
| | | [kg] | [Wh] | number | date |
| Samsung INR-18650-20R | Li-ion cylindrical cell | 0,045 | 7,2 | SDI-UN-150630-03 | 2015-06-30 |
| Samsung INR21700-30T | Li-ion cylindrical cell | 0,070 | 10,8 | SDI-UN-170331-01 | 2017-03-31 |
| Samsung INR21700-40T | Li-ion cylindrical cell | 0,067 | 14,4 | SDI-UN-170306-01 | 2017-03-06 |

Product Test Information - Batteries

| Model number | Physical Description | Weight | Rating | SoC | Test report | | |
|---|--|--------|--------|--------------|--------------|------------|--------------------|
| | | [kg] | [Wh] | [%] | number | date | regulation |
| Prebena AKKU18-5,5-LIHD CAS 637341000 Base 321001180 | Li-Ion, 18 V – 5,5 Ah 5S2P, LiHD | 0,983 | 99,0 | > 20 < 30 | 28246519 001 | 2018-09-17 | UN 3480 UN 3481 |
| Prebena AKKU18-4,0-LIHD CAS 637340000 Base 321001190 | Li-Ion, 18 V – 4,0 Ah 5S1P, LiHD | 0,584 | 72,0 | > 20 < 30 | 28246518 001 | 2018-09-17 | UN 3480 UN 3481 |
| Prebena AKKU18-2,0-LIP CAS 637393000 Base 321001450 | Li-Ion, 18 V – 2,0 Ah 5S1P, LiPower | 0,383 | 36,0 | > 20 < 30 | HU213J99 004 | 2021-05-21 | UN 3480 UN 3481 |

Signature of responsible person of the Company


 Wilfried Bornemann
 GmbH & Co. KG
 Seestraße 20 - 26
 63679 Schotten