

POWER-SONIC LITHIUM CELLS OR BATTERIES

TEST SUMMARY
IN ACCORDANCE WITH SUB-SECTION 38.3 OF UN MANUAL OF TESTS AND CRITERIA

POWER-SONIC CORPORATION

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UN 38.3 CERTIFIED



We herewith confirm that Power Sonic's lithium ion cells and batteries meet the requirements of applicable tests in the UN Manual of Tests and Criteria ST/SG/SC.10/11/Rev.6/Amend.1,Part III, Sub-Section 38.3

UN 38.3 TEST SUMMARY

The UN 38.3 tests were performed by one of the following Test Laboratories. All tests completed strictly followed the UN Manual Test and Criteria, Revision 3 Amendment 1 or subsequent revisions or amendments. Please note each Test Laboratory has been assigned a reference number for traceability matching the laboratory each model was tested.

| Test Labororatory (TL1) | Test Laboratory (TL2) | Test Laboratory (TL3) |
|--|---|---|
| Shenzhen Anbotek Compliance Laboratory Limited East of 4/F., Bldg. A, Hourui No. 3 Industrial Zone Xixiang Street, Bao'an District Shenzhen, Guangdong, China | Shanghai Research Institute of Chemical Industry Testing Centre West Entrance, No.345 East Yun Lin Road, Shanghai, 200062 China | Guangdong Inspection and Quarantine Technology Center Tower B, No. 66 Huacheng Avenue, Zhujiang Xincheng, Guangzhou, China |
| Test Laboratory (TL4) | Test Laboratory (TL5) | |
| Pony Testing International Building 1, No. 66 Jindai Road, Zhongguancun Environmental Protection Park, Haidian District, Beijing, China | Dongguan CTL Electromagnetic Technology Co. Room 107, No.2, Block 1, Area 1, Headquarters Road No.2, Songshanhu Hi-tech Development Zone, Dongguan, Guangdong, P.R. China | |
| | | |

| PERFORMED T | RESULTS | |
|-------------|------------------------|------|
| 38.3.4.1 T1 | Altitude Simulation | PASS |
| 38.3.4.2 T2 | Thermal Test | PASS |
| 38.3.4.3 T3 | Vibration | PASS |
| 38.3.4.4 T4 | Shock | PASS |
| 38.3.4.5 T5 | External Short Circuit | PASS |
| 38.3.4.6 T6 | Impact/Crush | PASS |
| 38.3.4.7 T7 | Overcharge | PASS |
| 38.3.4.8 T8 | Forced Discharge | PASS |



| PRODUCT TEST INFORMATION | | | | | | |
|--------------------------|---|---------------------|-----------|-----------------|-----------|------------------|
| Model Number | Physical Description | Battery Weight (kg) | Wh Rating | Test Laboratory | Pass/Fail | Test Report Date |
| PSL-12200 | Rechargeable Lithium Iron Phosphate Battery | 2.6 kg | 256Wh | TL4 | Pass | 7/1/2015 |
| PSL-12450E | Rechargeable Lithium Iron Phosphate Battery | 5.8 kg | 579Wh | TL4 | Pass | 8/30/2018 |
| PSL-12500 | Rechargeable Lithium Iron Phosphate Battery | 5.9 kg | 640Wh | TL1 | Pass | 9/10/2019 |
| PSL-SH-1260 | Rechargeable Lithium Iron Phosphate Battery | 0.8 kg | 79.36Wh | TL1 | Pass | 5/8/2020 |
| PSL-SH-1270 | Rechargeable Lithium Iron Phosphate Battery | 0.9 kg | 92.16Wh | TL1 | Pass | 5/11/2020 |
| PSL-SH-12110 | Rechargeable Lithium Iron Phosphate Battery | 5.9 kg | 145.92Wh | TL1 | Pass | 5/11/2020 |
| PSL-SC-1270 | Rechargeable Lithium Iron Phosphate Battery | 0.9 kg | 92.16Wh | TL1 | Pass | 5/11/2020 |
| PSL-SC-1290 | Rechargeable Lithium Iron Phosphate Battery | 1.0 kg | 115.2Wh | TL1 | Pass | 5/8/2020 |
| PSL-SC-12100 | Rechargeable Lithium Iron Phosphate Battery | 1.3 kg | 128Wh | TL1 | Pass | 6/26/2019 |
| PSL-SC-12120 | Rechargeable Lithium Iron Phosphate Battery | 1.65 kg | 153.6Wh | TL1 | Pass | 6/11/2020 |
| PSL-SC-12200 | Rechargeable Lithium Iron Phosphate Battery | 2.6 kg | 256Wh | TL1 | Pass | 8/9/2019 |
| PSL-SC-12350 | Rechargeable Lithium Iron Phosphate Battery | 4.4 kg | 448Wh | TL1 | Pass | 8/9/2019 |
| PSL-SC-12500 | Rechargeable Lithium Iron Phosphate Battery | 6.3 kg | 640Wh | TL1 | Pass | 8/9/2019 |
| PSL-SC-12750-G24 | Rechargeable Lithium Iron Phosphate Battery | 9.3 kg | 960Wh | TL1 | Pass | 8/9/2019 |
| PSL-SC-12800-G27 | Rechargeable Lithium Iron Phosphate Battery | 10.1 kg | 1024Wh | TL1 | Pass | 5/8/2020 |
| PSL-SC-121000-G31 | Rechargeable Lithium Iron Phosphate Battery | 12.8 kg | 1280Wh | TL1 | Pass | 5/8/2020 |
| PSL-SC-121250-G31 | Rechargeable Lithium Iron Phosphate Battery | 15.1 kg | 1600Wh | TL1 | Pass | 5/15/2020 |
| PSL-SC-121500-G8D | Rechargeable Lithium Iron Phosphate Battery | 22.1 kg | 1920Wh | TL1 | Pass | 4/24/2020 |
| PSL-SC-122000-G8D | Rechargeable Lithium Iron Phosphate Battery | 24.2 kg | 2560Wh | TL1 | Pass | 8/9/2019 |



| PRODUCT TEST INFORMATION | | | | | | |
|--------------------------|---|---------------------|-----------|-----------------|-----------|------------------|
| Model Number | Physical Description | Battery Weight (kg) | Wh Rating | Test Laboratory | Pass/Fail | Test Report Date |
| PSL-SC-122600-G8D | Rechargeable Lithium Iron Phosphate Battery | 34.2 kg | 3328Wh | TL1 | Pass | 8/9/2019 |
| PSL-SC-123000-G8D | Rechargeable Lithium Iron Phosphate Battery | 35.3 kg | 3840Wh | TL1 | Pass | 4/24/2020 |
| PSL-BTC-1290 | Rechargeable Lithium Iron Phosphate Battery | 1.2 kg | 115Wh | TL4 | Pass | 1/17/2020 |
| PSL-BTC-12120 | Rechargeable Lithium Iron Phosphate Battery | 1.6 kg | 153.6Wh | TL4 | Pass | 1/17/2020 |
| PSL-BTP-24100 | Rechargeable Lithium Iron Phosphate Battery | 2.75 kg | 280Wh | TL4 | Pass | 3/6/2020 |
| PSL-BTP-12200 | Rechargeable Lithium Iron Phosphate Battery | 3.0 kg | 256Wh | TL4 | Pass | 2/28/2020 |
| PSL-BTP-12500 | Rechargeable Lithium Iron Phosphate Battery | 6.5 kg | 640Wh | TL4 | Pass | 2/28/2020 |
| PSL-BTP-12750 | Rechargeable Lithium Iron Phosphate Battery | 9.8 kg | 960Wh | TL4 | Pass | 2/28/2020 |
| PSL-BTP-121000 | Rechargeable Lithium Iron Phosphate Battery | 14.7 kg | 1280Wh | TL4 | Pass | 2/28/2020 |
| PSL-BTP-121250 | Rechargeable Lithium Iron Phosphate Battery | 15.0 kg | 1600Wh | TL4 | Pass | 3/5/2020 |
| PSL-BTP-121500 | Rechargeable Lithium Iron Phosphate Battery | 20.2 kg | 1920Wh | TL4 | Pass | 2/28/2020 |
| PSL-BTP-122000 | Rechargeable Lithium Iron Phosphate Battery | 24.8 kg | 2560Wh | TL4 | Pass | 3/16/2020 |
| PSL-BTP-123000 | Rechargeable Lithium Iron Phosphate Battery | 37.7 kg | 3840Wh | TL4 | Pass | 2/28/2020 |
| PSL-BTP-24500 | Rechargeable Lithium Iron Phosphate Battery | 1.3 kg | 128Wh | TL4 | Pass | 2/28/2020 |
| PSL-FP-IFR18650EC | Lithium Iron Phosphate Cylindrical Cell | 0.04 kg | 4.8Wh | TL4 | Pass | 1/23/2014 |
| PSL-FP-IFR18650PC | Lithium Iron Phosphate Cylindrical Cell | 0.04 kg | 3.52Wh | TL2 | Pass | 3/9/2013 |
| PSL-FP-IFR26650PC | Lithium Iron Phosphate Cylindrical Cell | 0.085 kg | 8.4Wh | TL2 | Pass | 3/9/2013 |
| PSL-FP-IFR26650EC | Lithium Iron Phosphate Cylindrical Cell | 0.085 kg | 10.88Wh | TL4 | Pass | 9/29/2018 |



| | PRODUCT TEST INFORMATION | | | | | |
|---------------------------|---|---------------------|-----------|-----------------|-----------|------------------|
| Model Number | Physical Description | Battery Weight (kg) | Wh Rating | Test Laboratory | Pass/Fail | Test Report Date |
| PSL-FP- IFP027070180EC | Lithium Iron Phosphate Prismatic Cell | 0.65 kg | 80Wh | TL4 | Pass | 3/27/2017 |
| PSL-FP- IFP30135185EC | Lithium Iron Phosphate Prismatic Cell | 1.4 kg | 160Wh | TL3 | Pass | 5/30/2019 |
| PSL-FP- IFP36130200EC | Lithium Iron Phosphate Prismatic Cell | 1.99 kg | 320Wh | TL3 | Pass | 5/3/2018 |
| PALP-12HY | Rechargeable Lithium Iron Phosphate Battery | 1.2 kg | 48Wh | TL5 | Pass | 5/8/2020 |
| PALP-14AHY | Rechargeable Lithium Iron Phosphate Battery | 1.1 kg | 48Wh | TL5 | Pass | 4/28/2020 |
| PALP-14HY | Rechargeable Lithium Iron Phosphate Battery | 1.1 kg | 48Wh | TL5 | Pass | 4/28/2020 |
| PALP-14LAHY | Rechargeable Lithium Iron Phosphate Battery | 1.1 kg | 48Wh | TL5 | Pass | 7/30/2020 |
| PALP-14LHY | Rechargeable Lithium Iron Phosphate Battery | 1.1 kg | 48Wh | TL5 | Pass | 7/30/2020 |
| PALP-14ZSHY | Rechargeable Lithium Iron Phosphate Battery | 1.2 kg | 48Wh | TL5 | Pass | 4/28/2020 |
| PALP-16HY | Rechargeable Lithium Iron Phosphate Battery | 1.3 kg | 60Wh | TL5 | Pass | 3/19/2020 |
| PALP-20LHY | Rechargeable Lithium Iron Phosphate Battery | 1.4 kg | 72Wh | TL5 | Pass | 3/19/2020 |
| PALP-30LHY | Rechargeable Lithium Iron Phosphate Battery | 2.15 kg | 96Wh | TL1 | Pass | 8/5/2020 |
| PALP-4LHY | Rechargeable Lithium Iron Phosphate Battery | 0.4 kg | 18Wh | TL5 | Pass | 7/30/2020 |
| PALP-50N18LAHY | Rechargeable Lithium Iron Phosphate Battery | 1.7 kg | 96Wh | TL5 | Pass | 4/29/2020 |
| PALP-5LHY | Rechargeable Lithium Iron Phosphate Battery | 0.65 kg | 24Wh | TL5 | Pass | 3/19/2020 |
| PALP-5ZSHY | Rechargeable Lithium Iron Phosphate Battery | 0.59 kg | 24Wh | TL5 | Pass | 3/23/2020 |
| PALP-7AHY | Rechargeable Lithium Iron Phosphate Battery | 0.9 kg | 36Wh | TL5 | Pass | 3/19/2020 |
| PALP-7ZSHY | Rechargeable Lithium Iron Phosphate Battery | 0.65 kg | 24Wh | TL5 | Pass | 3/19/2020 |
| PALP-9HY | Rechargeable Lithium Iron Phosphate Battery | 0.91 kg | 36Wh | TL5 | Pass | 5/8/2020 |
| PALP-C22SHY | Rechargeable Lithium Iron Phosphate Battery | 0.42 kg | 24Wh | TL5 | Pass | 4/24/2019 |



PRODUCT MANUFACTURER **BATTERY MANUFACTURER**

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| Name and Title of Signatory | |
|---|--|
| SignaturePuneet Kalia Operations/Quality Director | |