

Lithium battery test summary

in accordance with sub-section 38.3 of Manual of Tests and Criteria

- (a) Name of battery manufacturer – Solarwatt GmbH
- (b) Battery manufacturer´s contact information –

Solarwatt GmbH
Maria-Reiche-Straße 2a
01109 Dresden / Germany
T: +49-351-8895-0
F: +49-351-8895-100
Email: info@solarwatt.com
Internet: solarwatt.de
- (c) Contact information of the test laboratory –

CTC advanced GmbH
Untertuerkheimer Strasse 6 – 10
66117 Saarbruecken / Germany
T + 49-681-5-98-0
F + 49-681-5-98-9075
Email: mail@ctcadvanced.com
Internet: ctcadvanced.com
- (d) Test report identification number – 1-1091/20-01-02
- (e) Date of test report – 2021.01.25
- (f) Description of battery –
 - (i) Lithium ion or lithium metall battery – Lithium-ion battery
 - (ii) Mass – 25kg
 - (iii) Watt-hour rating – 2700Wh
 - (iv) Physical description of the battery –
Lithium-ion battery in metal enclosure. Battery terminals are without voltage during transport.
 - (v) Model number - Battery flex pack

(g) List of tests conducted and results (i.e., pass/fail) –


Nr.:	Test procedure	Test Description	Conducted:	Verdict:	For details refer to:
01	Test T.1	<i>Test T.1 Altitude Simulation This test simulates air transport under low-pressure conditions.</i>	<input checked="" type="checkbox"/>	P	Clause 38.3.4.1
02	Test T.2	<i>Test T.2: Thermal test This test assesses cell and battery seal integrity and internal electrical connections. The test is conducted using rapid and extreme temperature changes.</i>	<input checked="" type="checkbox"/>	P	Clause 38.3.4.2
03	Test T.3	<i>Test T.3: Vibration This test simulates Vibration during transport.</i>	<input checked="" type="checkbox"/>	P	Clause 38.3.4.3
04	Test T.4	<i>Test T.4: Shock This test simulates possible impacts during transport.</i>	<input checked="" type="checkbox"/>	P	Clause 38.3.4.4
05	Test T.5	<i>Test T.5: External short circuit This test simulates an external short circuit</i>	<input checked="" type="checkbox"/>	P	Clause 38.3.4.5
06	Test T.6	<i>Test T.6: Impact/ Crush These tests simulate mechanical abuse from an impact or crush that may result in an internal short circuit.</i>	<input type="checkbox"/>	N/A	Clause 38.3.4.6
07	Test T.7	<i>Test T.7: Overcharge This test evaluates the ability of a rechargeable battery to withstand an overcharge condition.</i>	<input type="checkbox"/>	N/A <i>Not applicable. Battery is a component only to be used in equipment, therefore not subject of T.7 acc. to Clause 38.3.3, d</i>	Clause 38.3.4.7
08	Test T.8	<i>Test T.8: Forced discharge This test evaluates the ability of a primary or a rechargeable cell to withstand a forced discharge condition.</i>	<input type="checkbox"/>	N/A	Clause 38.3.4.8

(h) Reference to assembled battery testing requirements, if applicable – not applicable

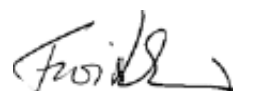
(i) Reference to the revised edition of the Manual Tests and Criteria used – United Nations, Recommendations of the Transport of Dangerous Goods, „Manual of Tests and Criteria“ Rev. 6 and Amend. 1

(j) Signature

Dresden, 29.01.2021



Detlef Neuhaus
Geschäftsführung (CEO)



Dr. Armin Froitzheim
Geschäftsführung (CTO)