



LITHIUM BATTERY  
TECHNICAL DATASHEET  
**CONFIDENTIAL**

## 1. DOCUMENT TREACABILITY

Revision	Date	Author	Modification
A	09 <sup>st</sup> August 2021	GPO	First release

## 2. BATTERY GENERAL INFORMATION



Battery reference	E103CA00 (Model type E80002)
Associated headlamp reference	DUO S ; DUO RL
Battery commercial name	R2
Architecture	Multi- cell (cylindrical)
Battery technology	Lithium Ion (Li-ion)
IEC61960 classification	21NR19/66
Capacity	3200 mAh
Nominal voltage	7,4 Volts
Power	23,68 Wh
Battery pack dimensions	75 x 65 x 43 millimeters
Battery pack weight	172 grams
Battery pack energy density	716 Wh/l
Cell manufacturer	LG

### 3. BATTERY COMPLIANCE SUMMARY

- IEC 62133-2:2017 :

Tests	Results
Continuous low rate charge	PASS
Vibration	PASS
Incorrect installation	PASS
External short circuit	PASS
Crush	PASS
Overcharge	PASS
Forced discharge	PASS
Continuous charging	PASS
Forced internal short circuit	PASS

<b>Tested by laboratory :</b>	TÜV SUD PSB Pte Ltd 1 science Park Drive 118 221 (SINGAPORE) Tel : +65 6427 4700 ; Mail : <a href="mailto:info.sg@tuvsud.com">info.sg@tuvsud.com</a> <a href="http://www.tuvsud.com/en-sg">www.tuvsud.com/en-sg</a>
<b>Test report number :</b>	SG PSB-BT-02240
<b>Date of issue :</b>	19th Nov 2020

- UL 1642 (Cell):

Tests	Results
Short –Circuit	PASS
Abnormal charging	PASS
Forced-discharged	PASS
Crush	PASS
Impact	PASS
Shock	PASS
Vibration	PASS
Heating	PASS
Temperature cycling	PASS
Low pressure – Altitude simulation	PASS
Projectile	PASS

<b>Tested by laboratory :</b>	UL 202 Carnegie Center, Suite 301 Princeton, New Jersey, 08540 (UNITED-STATES) Tel : +1.609.627.5300 Mail : <a href="mailto:EduNeeringInquiry@ul.com">EduNeeringInquiry@ul.com</a> <a href="https://www.ul.com/">https://www.ul.com/</a>
<b>Test report number :</b>	MH19896-Vol1
<b>Date of issue :</b>	21st August 2014

## 4. BATTERY TRANSPORTATION – UN38.3 COMPLIANCE

---

PETZL's product batteries have been successfully tested and comply with the UN Manual of Test and Criteria, Part III, subsection 38.3, Revision 3, Amendment 1 or any subsequent revision and amendment. Product batteries have been manufactured under a quality management program as specified in 2.9.4 of the UN Model Regulations.

UN38.3 Clause	Tests	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)	Crush	PASS
38.3.4.7 (T7)	Overcharge	PASS
38.3.4.8 (T8)	Forced discharge	PASS

PETZL product cells are rated at 20 Watt-hours or less and batteries are rated at 100 Watt- hours or less. PETZL products meet the requirements for transportation under:

- UN Model Regulations Special Provisions 188 and 230
- International Civil Aviation Organization (ICAO) Technical Instructions and the International Air Transport Association (IATA) Dangerous Goods Regulations Packing Instructions:
  - 965 Section IB or Section II (UN3480, Lithium ion batteries at a state of charge (SOC) not exceeding 30%)
  - 966 Section II (UN3481, Lithium ion batteries packed with equipment)
  - 967 Section II (UN3481, Lithium ion batteries contained in equipment)
- International Maritime Organization (IMO) Special Provisions 188 and 230
- European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) Special Provisions 188 and 230.

## 5. CONTACT INFORMATION

---

Please find your local contact information on the PETZL's website at [www.petzl.com](http://www.petzl.com)