

INR14500 — Typical Specifications Overview

3.7 V nominal · 800 mAh class · Ø14 × 50 mm (AA size) · flashlights & AA-form-factor devices

About this document. Typical values for OEM evaluation and fitment reference. Final specifications, tolerances and test conditions are defined by the CMX controlled product datasheet, which is issued with your quotation on request.

Specifications (typical)

Parameter	Specification
Model	INR14500 (CMX-INR14500-800)
Chemistry	Ternary lithium (NCM)
Nominal capacity	800 mAh class @ 0.2C discharge
Capacity grades	680 / 850 / 950 mAh available
Nominal voltage	3.6–3.7 V
Nominal energy	≈ 2.9–3.0 Wh
Dimensions	Ø14 × 50 mm (AA size)
Weight	≈ 19 g
End-of-charge voltage	4.20 V ± 0.05 V (CC-CV)
Maximum charge current	1C (800 mA)
Discharge cut-off voltage	2.75 V
Pulse discharge	3C-class (2.4 A) — pulse only
Continuous discharge	2C-class (1.6 A)
Internal resistance	≤ 70–75 mΩ (AC 1 kHz)
Charge temperature	0–45 °C
Discharge temperature	–20 °C to 60 °C
Cycle life	≥ 70% of initial capacity after 300 cycles
Certifications	UN38.3, MSDS, IEC 62133-2, CB, RoHS

Certifications & compliance

Every production cell ships against the documentation compliance teams ask for first: UN38.3 (UN Manual of Tests and Criteria test summary required for lithium transport by air and sea), MSDS, IEC 62133-2 cell safety compliance, CB report and RoHS declaration.

Safety testing

Production cells of this format are tested for over-discharge, overcharge, external short circuit, drop, heating and crush — all with no fire, no explosion, no leakage. A CID safety vent and optional protection circuit provide overpressure and overcurrent protection inside the sealed steel can.

Documentation with every lot

Per-lot capacity, internal resistance (AC 1 kHz) and open-circuit voltage test data accompany each shipment, so incoming QC starts from data rather than sampling.

Request the controlled datasheet and quotation: sales@cmxbattery.com — response within 24 hours.

CMX Battery · OEM/ODM lithium cell manufacturing · This overview is not a controlled document; the controlled product datasheet supersedes it where values differ.