Tadiran SL-760

AA lithium-thionyl-chloride primary cell

VERIFIED ENGINEERING FACTS / 43 distinct technical points

Nominal voltage
3.6 V

Continuous limit
100 mA maximum continuous discharge

Host specification boundary
Use the installed host equipment battery specification to confirm voltage, load profile, termination and environmental limits. Nominal capacity alone does not define life at elevated load or cold startup.

Approx. 6 mA load
2.1 Ah to 2 V, catalog curve at +25 C

Cold-condition check
Compare startup voltage with the curve at minimum site temperature.

Load-profile assessment
Record average current, peak current, pulse duration and minimum temperature at the installed equipment. Compare with the source curves and verify voltage under the actual peak load before approving a service-life estimate.

SL-760/P
Pins, catalogue 11 1 07603 00

Termination identification
Photograph both cell ends and the complete marking. Compare the holder polarity, spring/contact geometry and available clearance with the manufacturer termination drawing. Do not choose a suffix from the AA label alone.

Electrical fit
Check host voltage, polarity, startup load and any charge circuit.

Charge-path check
Verify that equipment does not attempt to recharge the primary cell.

Loose-terminal protection
Protect loose terminals from metal objects. Do not force a cell into a holder with a different contact style. Keep cell dry and avoid crush, disassembly, incineration and heating beyond the manufacturer warning.

Record
Note complete cell marking, termination, installation date and loaded voltage.

Storage action
Keep spare cells cool, dry and apart from conductive materials.

Nominal capacity
2.2 Ah at stated reference conditions

Pulse capability
200 mA under applicable conditions

Curve test conditions
The manufacturer performance curves are typical values for cells stored at +25 C for one year. Available capacity changes with load and temperature; evaluate the host device against its minimum useful voltage rather than assuming the nominal 2.2 Ah is always available.

Approx. 2 mA load
2.2 Ah to 2 V, catalog curve at +25 C

Pulse-duty check
Assess pulse amplitude and repetition interval at the host load.

Startup voltage response
The manufacturer shows voltage-response curves after storage. A cell that reads normally at open circuit can sag briefly at startup; use the equipment maker’s approved procedure to test loaded voltage. Do not short or recharge a cell to change its response.

SL-760/PR
Radial pins, catalogue 11 1 07606 00

Safety limits
Do not recharge, disassemble, incinerate, heat above 100 C or expose cell contents to water. Avoid short circuits and follow the original Tadiran safety data sheet and local handling rules.

Physical fit
Compare AA length, diameter and terminal form to the actual holder.

Storage condition
Keep unused cells dry, cool and protected from short circuits.

Contact and polarity inspection
Inspect contacts for corrosion and spring pressure, insert with the correct polarity, secure the cell, then verify it cannot move or short against adjacent hardware.

Status check
Confirm the host battery/fault indicator reports a healthy state.

Cold start
Repeat the start test at representative site temperature if needed.

Disposal
Segregate used cells and follow applicable local battery rules.

Nominal current
2 mA

Operating range
-55 to +85 C, cell-level

Approx. 60 mA load
1.4 Ah to 2 V, catalog curve at +25 C

Approx. 20 mA load
1.8 Ah to 2 V, catalog curve at +25 C

Approx. 0.6 mA load
2.2 Ah to 2 V, catalog curve at +25 C

End-voltage check
Use the equipment threshold; catalog capacities are plotted to 2 V.

SL-760/S
Standard contacts, catalogue 11 1 07601 00

SL-760/T
Tags, catalogue 11 1 07602 00

SL-760/PT
Polarized tags, catalogue 11 1 07608 00

Equipment procedure
Use the equipment maker’s battery procedure. Verify the exact offered SL-760 termination and the host equipment’s approved primary-cell type. Isolate the circuit if the equipment procedure requires it.

Environment
Compare cell -55 to +85 C range with the host equipment rating.

Package inspection
Do not install a crushed, leaking or otherwise damaged cell.

Initial inspection
Check polarity, seating and contact integrity before power-up.

Start test
Observe equipment start and measure battery voltage under the highest routine load.

Contact check
Investigate voltage drop across corroded or weak holder contacts.

Loaded-voltage diagnosis
A low loaded voltage can reflect an unsuitable load, cold conditions, poor holder contacts or an exhausted cell. Separate these causes using the equipment procedure; an open-circuit reading alone does not establish a successful replacement.

Manufacturer references: Tadiran Batteries Product Data Catalogue, SL-760 | Tadiran lithium-thionyl-chloride safety data sheet

Technical enquiry
sales13@apterpower.com | +86 18030235313