

Secondary cells and batteries containing alkaline or other non-acid electrolytes — Secondary lithium cells and batteries for portable applications

The European Standard EN 61960:2004 has the status of a
British Standard

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National foreword

This British Standard is the official English language version of EN 61960:2004. It is identical with IEC 61960:2003. Together with BS EN 61959:2004 and BS EN 62133:2003 it supersedes BS EN 61960-1:2001 and BS EN 61960-2:2002 which will be withdrawn on 1 March 2007.

The UK participation in its preparation was entrusted by Technical Committee PEL/21, Secondary cells and batteries, to Subcommittee PEL/21/1, Secondary cells and batteries containing alkaline and other non-acidic electrolytes, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 18, an inside back cover and a back cover.

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English version

Secondary cells and batteries containing alkaline
or other non-acid electrolytes –
Secondary lithium cells and batteries for portable applications
(IEC 61960:2003)

Accumulateurs alcalins et autres
accumulateurs à électrolyte non acide –
Eléments et batteries d'accumulateurs
au lithium pour applications portables
(CEI 61960:2003)

Akkumulatoren und Batterien
mit alkalischem oder anderen
nichtsäurehaltigen Elektrolyten –
Lithium-Akkumulatoren und -batterien
für tragbare Geräte
(IEC 61960:2003)

This European Standard was approved by CENELEC on 2004-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 21A/391/FDIS, future edition 1 of IEC 61960, prepared by SC 21A, Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC TC 21, Secondary cells and batteries, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61960 on 2004-03-01.

This European Standard, together with EN 61959:2004 and EN 62133:2003, supersedes EN 61960-1:2001 and EN 61960-2:2001.

The following dates were fixed:

- | | | |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2004-12-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2007-03-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61960:2003 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61434	NOTE Harmonized as EN 61434:1996 (not modified).
IEC 61959	NOTE Harmonized as EN 61959:2004 (not modified).
IEC 62133	NOTE Harmonized as EN 62133:2003 (not modified).

CONTENTS

1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Parameter measurement tolerances	7
5	Designation and marking	7
5.1	Cell and battery designation	7
5.2	Cell or battery termination	8
5.3	Marking	8
6	Standard cells	9
7	Electrical tests.....	9
7.1	Charging procedure for test purposes	9
7.2	Discharge performance	9
7.2.1	Discharge performance at 20 °C (rated capacity).....	9
7.2.2	Discharge performance at –20 °C.....	10
7.2.3	High rate discharge performance at 20 °C	10
7.3	Charge (capacity) retention and recovery.....	10
7.4	Charge (capacity) recovery after long term storage	11
7.5	Endurance in cycles	11
7.6	Battery internal resistance	12
7.6.1	Measurement of the internal a.c. resistance	12
7.6.2	Measurement of the internal d.c. resistance	13
7.7	Electrostatic discharge (ESD)	13
7.7.1	Test procedure	13
7.7.2	Acceptance criterion	13
8	Test protocol and conditions for type approval	13
8.1	Test protocol	13
8.2	Conditions for type approval	14
8.2.1	Dimensions.....	14
8.2.2	Electrical tests	14
8.2.3	Conditional type approval.....	14
	Bibliography	17
	Annex ZA (normative) Normative references to international publications with their corresponding European publications	18

SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES – SECONDARY LITHIUM CELLS AND BATTERIES FOR PORTABLE APPLICATIONS

1 Scope

This International Standard specifies performance tests, designations, markings, dimensions and other requirements for secondary lithium single cells and batteries for portable applications.

The objective of this standard is to provide the purchasers and users of secondary lithium cells and batteries with a set of criteria with which they can judge the performance of secondary lithium cells and batteries offered by various manufacturers.

This standard defines a minimum required level of performance and a standardized methodology by which testing is performed and the results of this testing reported to the user. Hence, users will be able to establish the viability of commercially available cells and batteries via the declared specification and thus be able to select the cell or battery best suited for their intended application.

This standard covers secondary lithium cells and batteries with a range of chemistries. Each electrochemical couple has a characteristic voltage range over which it releases its electrical capacity, a characteristic nominal voltage and a characteristic end-of-discharge voltage during discharge. Users of secondary lithium cells and batteries are requested to consult the manufacturer for advice.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-486, *International Electrotechnical Vocabulary (IEV) – Chapter 486: Secondary cells and batteries*

IEC 60051 (all parts), *Direct acting indicating analogue electrical measuring instruments and their accessories*

IEC 60485, *Digital electronic d.c. voltmeters and d.c. electronic analogue-to-digital converters*

IEC 61000-4-2, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 2: Electrostatic discharge immunity test*