



NSAI
Standards

Irish Standard
I.S. EN IEC 61960-4:2020

Secondary cells and batteries containing alkaline or other non-acid electrolytes -
Secondary lithium cells and batteries for portable applications - Part 4: Coin secondary lithium cells, and batteries made from them

I.S. EN IEC 61960-4:2020

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National Foreword

I.S. EN IEC 61960-4:2020 is the adopted Irish version of the European Document EN IEC 61960-4:2020, Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for portable applications - Part 4: Coin secondary lithium cells, and batteries made from them

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EUROPEAN STANDARD

EN IEC 61960-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2020

ICS 29.220.99

English Version

**Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for portable applications - Part 4: Coin secondary lithium cells, and batteries made from them
(IEC 61960-4:2020)**

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide - Accumulateurs au lithium pour applications portables - Partie 4: Éléments et batteries d'accumulateurs boutons au lithium
(IEC 61960-4:2020)

Sekundärzellen und -batterien mit alkalischen oder anderen nichtsäurehaltigen Elektrolyten - Sekundäre Lithiumzellen und -batterien für tragbare Anwendungen - Teil 4: Sekundäre Lithiumknopfzellen und daraus hergestellte Batterien
(IEC 61960-4:2020)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 61960-4:2020 (E)**European foreword**

The text of document 21A/725/FDIS, future edition 1 of IEC 61960-4, 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 approved by CENELEC as EN IEC 61960-4:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-02-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-25

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

IEC 60051 (series)	NOTE	Harmonized as EN 60051 (series)
IEC 60086-1	NOTE	Harmonized as EN 60086-1
IEC 60086-2	NOTE	Harmonized as EN 60086-2
IEC 60086-3	NOTE	Harmonized as EN 60086-3
IEC 60086-4:2019	NOTE	Harmonized as EN IEC 60086-4:2019 (not modified)
IEC 61434	NOTE	Harmonized as EN 61434
IEC 61959	NOTE	Harmonized as EN 61959
IEC 61960-3	NOTE	Harmonized as EN 61960-3
IEC 62133 (series)	NOTE	Harmonized as EN 62133 (series)
IEC 62281	NOTE	Harmonized as EN IEC 62281
IEC 62368-1	NOTE	Harmonized as EN IEC 62368-1

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

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NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-482	2004	International Electrotechnical Vocabulary - Part 482: Primary and secondary cells and batteries	-	-
IEC 62133-2	2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary lithium cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems	EN 62133-2	2017

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IEC 61960-4

Edition 1.0 2020-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Secondary cells and batteries containing alkaline or other non-acid electrolytes –
Secondary lithium cells and batteries for portable applications –
Part 4: Coin secondary lithium cells, and batteries made from them**

**Accumulateurs alcalins et autres accumulateurs à électrolyte non acide –
Accumulateurs au lithium pour applications portables –
Partie 4: Éléments et batteries d'accumulateurs boutons au lithium**



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IEC 61960-4

Edition 1.0 2020-04

INTERNATIONAL STANDARD

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 4: Coin secondary lithium cells, and batteries made from them

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61960-4 has been prepared by subcommittee 21A: Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC technical committee 21: Secondary cells and batteries.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
21A/725/FDIS	21A/726/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61960 series, published under the general title *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium cells and batteries for portable applications*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

Part 4: Coin secondary lithium cells, and batteries made from them

1 Scope

This part of IEC 61960 specifies performance tests, designations, markings, dimensions and other requirements for coin secondary lithium cells and batteries for portable applications and backup power supply such as memory backup applications.

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

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

This document also provides guidelines for designers of equipment using lithium batteries (see Annex A).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60050-482:2004, *International Electrotechnical Vocabulary (IEV) – Part 482: Primary and secondary cells and batteries*

IEC 62133-2:2017, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications – Part 2: Lithium systems*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-482 and the following apply.

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