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**Sekundarne celice in baterije, ki vsebujejo alkalne ali druge nekislinske elektrolite  
- Prenosne posamezne ponovno polnljive hermetične celice - 2. del: Nikelj-  
kovinski hidrid**

Secondary cells and batteries containing alkaline or other non-acid electrolytes - Portable sealed rechargeable single cells - Part 2: Nickel-metal hydride

Akkumulatoren und Batterien mit alkalischem oder anderen nichtsäurehaltigen Elektrolyten - Tragbare wiederaufladbare gasdichte Einzelzellen - Teil 2: Nickel-Metallhydrid

Accumulateurs alcalins et autres accumulateurs à électrolyte non-acide - Accumulateurs individuels portables étanches - Partie 2: Nickel-métal hydrure

**Ta slovenski standard je istoveten z: EN 61951-2:2011**

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**ICS:**

29.220.30	Alkalni sekundarni členi in baterije	Alkaline secondary cells and batteries
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**SIST EN 61951-2:2011**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61951-2**

July 2011

ICS 29.220.30

Supersedes EN 61951-2:2003

English version

**Secondary cells and batteries containing alkaline or other non-acid electrolytes -  
Portable sealed rechargeable single cells -  
Part 2: Nickel-metal hydride  
(IEC 61951-2:2011)**

Accumulateurs alcalins et autres  
accumulateurs à électrolyte non acide -  
Accumulateurs individuels portables  
étanches -  
Partie 2: Nickel-métal hydrure  
(CEI 61951-2:2011)

Akkumulatoren und Batterien mit  
alkalischem oder anderen  
nichtsäurehaltigen Elektrolyten -  
Tragbare wiederaufladbare gasdichte  
Einzelzellen -  
Teil 2: Nickel-Metallhydrid  
(IEC 61951-2:2011)

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This European Standard was approved by CENELEC on 2011-06-29. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 21A/484/FDIS, future edition 3 of IEC 61951-2, 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 61951-2 on 2011-06-29.

This European Standard supersedes EN 61951-2:2003.

EN 61951-2:2011 includes the following significant technical changes with respect to EN 61951-2:2003:

- Clause 4: addition of 2 parameters;
- Clause 5: addition of cells type “S” and cells type “T”;
- Subclause 6.1.2: addition of new cylindrical cells;
- Subclause 7.8: addition of a specific test for “S” cells.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2012-03-29
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-06-29

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Annex ZA has been added by CENELEC as [SIST EN 61951-2:2011](https://standards.iteh.ai/catalog/standards/sist/27eab2fb-f5e8-4e78-bd38-76b/sist-en-61951-2-2011)

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## Endorsement notice

The text of the International Standard IEC 61951-2:2011 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 60051 series	NOTE	Harmonized in EN 60051 series.
IEC 61434	NOTE	Harmonized as EN 61434.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-482	-	International Electrotechnical Vocabulary - Part 482: Primary and secondary cells and batteries	-	-
IEC 60086	Series	Primary batteries	EN 60086	Series
IEC 60086-1	2006	Primary batteries - Part 1: General	EN 60086-1 <sup>1)</sup>	2007
IEC 60086-2	2006	Primary batteries - Part 2: Physical and electrical specifications	EN 60086-2 <sup>2)</sup>	2007
IEC 60410	-	Sampling plans and procedures for inspection by attributes	-	-
IEC 61959	-	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Mechanical tests for sealed portable secondary cells and batteries	EN 61959	-
IEC 62133	-	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	EN 62133	-

<sup>1)</sup> EN 60086-1 is superseded by EN 60086-1:2011, which is based on IEC 60086-1:2011.

<sup>2)</sup> EN 60086-2 is superseded by EN 60086-2:2011, which is based on IEC 60086-2:2011.

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IEC 61951-2

Edition 3.0 2011-05

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable sealed rechargeable single cells – Part 2: Nickel-metal hydride**

**Accumulateurs alcalins et autres accumulateurs à électrolyte non acide – Accumulateurs individuels portables étanches – Partie 2: Nickel-métal hydrure**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SECONDARY CELLS AND BATTERIES CONTAINING  
ALKALINE OR OTHER NON-ACID ELECTROLYTES –  
PORTABLE SEALED RECHARGEABLE SINGLE CELLS –**

**Part 2: Nickel-metal hydride**

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 61951-2 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.

This third edition cancels and replaces the second edition published in 2003 of which it constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- clause 4: addition of 2 parameters;
- clause 5: addition of cells type "S" and cells type "T";
- subclause 6.1.2: addition of new cylindrical cells;
- subclause 7.8: addition of a specific test for "S" cells.

The text of this standard is based on the following documents:

FDIS	Report on voting
21A/484/FDIS	21A/487/RVD

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

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

A list of all parts of the IEC 61951 series can be found, under the general title *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable sealed rechargeable single cells*, on the IEC website.

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

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

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# SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES – PORTABLE SEALED RECHARGEABLE SINGLE CELLS –

## Part 2: Nickel-metal hydride

### 1 Scope

This part of IEC 61951 specifies marking, designation, dimensions, tests and requirements for portable sealed nickel-metal hydride, small prismatic, cylindrical and button rechargeable single cells, suitable for use in any orientation.

### 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 60050-482, *International Electrotechnical Vocabulary – Part 482: Primary and secondary cells and batteries*

IEC 60086 (all parts), *Primary batteries*

IEC 60086-1 (2006), *Primary batteries – Part 1: General*

IEC 60086-2 (2006), *Primary batteries – Part 2: Physical and electrical specifications*

IEC 60410, *Sampling plans and procedures for inspection by attributes*

IEC 61959, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Mechanical tests for sealed portable secondary cells and batteries*

IEC 62133, *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*

### 3 Terms and definitions

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

#### 3.1

##### **nominal voltage**

suitable approximate value of voltage used to designate or identify the voltage of a cell or battery

NOTE 1 The nominal voltage of a sealed nickel-metal hydride rechargeable single cell is 1,2 V.

NOTE 2 The nominal voltage of a battery of *n* series connected cells is equal to *n* times the nominal voltage of a single cell.