

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable sealed rechargeable single cells – Part 1: Nickel-cadmium**

**Accumulateurs alcalins et autres accumulateurs à électrolyte non acide – Accumulateurs individuels portables étanches – Partie 1: Nickel-cadmium**



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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE  
CODE PRIX

ICS 29.220.30

ISBN 978-2-8322-1122-9

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SECONDARY CELLS AND BATTERIES CONTAINING  
ALKALINE OR OTHER NON-ACID ELECTROLYTES –  
PORTABLE SEALED RECHARGEABLE SINGLE CELLS –****Part 1: Nickel-cadmium**

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International Standard IEC 61951-1 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 (2003) and its amendment 1 (2005) of which it constitutes a technical revision.

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

- addition of several new cell sizes;
- introduction of a new cell type J;
- creation of Annex A: Capacity of batteries measurement.

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

FDIS	Report on voting
21A/521/FDIS	21A/525/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

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

## Part 1: Nickel-cadmium

### 1 Scope

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

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 – Chapter 482: Primary and secondary cells and batteries*

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

IEC 60086-2, *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 a battery

Note 1 to entry: The nominal voltage of a sealed nickel-cadmium rechargeable single cell: 1,2 V

Note 2 to entry: The nominal voltage of a battery of  $n$  series connected cells is equal to  $n$  times the nominal voltage of a single cell.

[SOURCE: IEC 60050-482:2004, 482-03-31, modified – Addition of Notes 1 and 2 to entry.]