
**Information technology — 120 mm
(4,7 Gbytes per side) and 80 mm
(1,46 Gbytes per side) DVD rewritable
disk (DVD-RAM)**

*Technologies de l'information — Disque DVD réenregistrable
(DVD-RAM) de 120 mm (4,7 Go par face) et 80 mm (1,46 Go par face)*

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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ISO/IEC 17592 was prepared by Ecma International (as ECMA-330) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Information technology — 120 mm (4,7 Gbytes per side) and 80 mm (1,46 Gbytes per side) DVD rewritable disk (DVD-RAM)

Section 1 - General

1 Scope

This International Standard specifies the mechanical, physical and optical characteristics of an optical disk, identified as DVD Rewritable Disk (DVD-RAM), to enable interchange of such disks. It specifies the quality of the recorded signals, the format of the data and the recording method, thereby allowing for information interchange by means of such disks. The data can be written, read and overwritten many times using the phase change method. Two Types are specified that differ only by their diameter of 120 mm and 80 mm, and the resulting difference of capacity.

This International Standard specifies

- two related but different Types of this disk (see clause 7),
- the conditions for conformance,
- the environments in which the disk is to be tested, operated and stored,
- the mechanical, physical and dimensional characteristics of the disk, so as to provide mechanical interchange between data processing systems,
- the format of the information on the disk, including the physical disposition of the tracks and sectors, the error correcting codes and the coding method,
- the characteristics of the signals recorded on the disk, thus enabling data processing systems to read the data from the disk.

This International Standard provides for the interchange of disks between optical disk drives. Together with a standard for volume and file structure, it provides for full data interchange between data processing systems. The optical disks specified by this International Standard may be enclosed in cases according to ISO/IEC 17594 as specified therein.

2 Conformance

2.1 Optical Disk

A claim of conformance with this International Standard shall specify the Type implemented. An optical disk shall be in conformance with this International Standard if it meets all mandatory requirements specified for this Type.

2.2 Generating system

A generating system shall be in conformance with this International Standard if the optical disk it generates is in accordance with 2.1.

2.3 Receiving system

A receiving system shall be in conformance with this International Standard if it is able to handle both Types of optical disk according to 2.1.

3 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.

ISO/IEC 10646-1:2000, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane*

ISO/IEC 17594:2004, *Information technology — Cases for 120 mm and 80 mm DVD-RAM disks*

ECMA-287:2002, *Safety of electronic equipment*