
**Information technology — Data interchange
on 130 mm magneto-optical disk
cartridges — Capacity: 9,1 Gbytes per
cartridge**

*Technologies de l'information — Échange de données sur cartouches de
disque optique magnétique de 130 mm — Capacité: 9,1 Gbytes par
cartouche*

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Printed in Switzerland

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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 3.

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.

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

ISO/IEC 22092 was prepared by ECMA (as ECMA-322) 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.

Annexes A to Q form a normative part of this International Standard. Annexes R to AA are for information only.

Information technology - Data interchange on 130 mm magneto-optical disk cartridges - Capacity: 9,1 Gbytes per cartridge

Section 1 - General

1 Scope

This International Standard specifies the mechanical, physical, and optical characteristics of a 130 mm optical disk cartridge (ODC) that employs thermo-magnetic and magneto-optical effects to enable data interchange between such disks.

This International Standard specifies two Types, viz.

- | | |
|----------|---|
| Type R/W | provides for data to be written, read and erased many time over the recording surface(s) of the disk. |
| Type WO | provides for data once written to be read a multiplicity of times. Data shall not be erased nor amended. Multisession (incremental write operations) recording may be performed on type WO disks. |

The disk shall be of the same Type if recorded on both sides, A and B. Each side shall have a nominal capacity of 4,58 Gbytes, irrespective of the Type. The format specifies two sector sizes and allows for emulation of two further sizes.

This International Standard specifies

- the conditions for conformance testing and the Reference Drive;
- the environments in which the cartridges are to be operated and stored;
- the mechanical, physical and dimensional characteristics of the cartridge so as to provide mechanical interchangeability between data processing systems;
- the format of the information on the disk, both embossed and user-written, including the physical disposition of the tracks and sectors, the error correction codes, the modulation methods used;
- the characteristics of the embossed information on the disk;
- the thermo-magnetic and magneto-optical characteristics of the disk, enabling processing systems to write data onto the disk;
- the minimum quality of user-written data on the disk, enabling data processing systems to read data from the disk.

This International Standard provides for interchange between optical disk drives. Together with a standard for volume and file structure it provides for full data interchange between data processing systems.

2 Conformance

2.1 Optical Disk Cartridge (ODC)

An ODC shall be in conformance with this International Standard if it meets all mandatory requirements specified therein.

A claim of conformance with this International Standard shall specify the Type implemented.

2.2 Generating system

A claim of conformance with this International Standard shall specify which of Type(s) of R/W and WO is (are) supported. A system generating an ODC for interchange shall be in conformance with this International Standard if it meets the mandatory requirements of this International Standard for the Type(s) supported.

2.3 Receiving system

A claim of conformance with this International Standard shall specify which Type is implemented.

A system receiving an ODC for interchange shall be in conformance with this International Standard if it is able to process any recording made on the cartridge according to 2.1 on the Type(s) specified.

2.4 Compatibility statement

A claim of conformance with this International Standard shall include a statement listing any other Optical Disk Cartridge Standard supported by the system for which conformance is claimed. This statement shall specify the number of the Standard(s), including, where appropriate, the ODC Type(s), or the Types of side, and whether support includes reading only or both reading and writing.

3 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

IEC 60950-1, *Information technology equipment — Safety — Part 1: General requirements*