

# INTERNATIONAL STANDARD

# ISO/IEC 14840

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## **Information technology — 12,65 mm wide magnetic tape cartridge for information interchange — Helical scan recording — Data-D3-1 format**

*Technologies de l'information — Cartouche de bande magnétique de  
12,65 mm de large pour l'échange d'information — Enregistrement par  
balayage en spirale — Format de données-D3-1*



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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. 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.

International Standard ISO/IEC 14840 was prepared by ECMA (as Standard ECMA-210) 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 D, F, G, J, M and N form an integral part of this International Standard. Annexes E, H, K, L and P are for information only.



# Information technology - 12,65 mm wide magnetic tape cartridge for information interchange - Helical scan recording - Data-D3-1 format

## Section 1 - General

### 1 Scope

This International Standard specifies the physical and magnetic characteristics of a magnetic tape cartridge, using magnetic tape 12,65 mm wide, so as to provide physical interchangeability of such cartridges. It also specifies the quality of the recorded signals, the recording method and the recorded format, thereby allowing data interchange between drives by means of such magnetic tape cartridges.

This International Standard specifies three types of cartridge which, for the purposes of this International Standard, are referred to as Type A, Type B and Type C.

For Type A, the magnetic tape has a nominal length of 91 m and a nominal capacity of 10 GBytes.

For Type B, the magnetic tape has a nominal length of 204 m and a nominal capacity of 25 GBytes.

For Type C, the magnetic tape has a nominal length of 392 m and a nominal capacity of 50 GBytes.

Together with a Standard for Volume and File Structure this International Standard provides for full data interchange between data processing systems.

### 2 Conformance

#### 2.1 Magnetic tape cartridge

A claim of conformance with this International Standard shall specify the Type of the cartridge. It shall be in conformance with this International Standard if

- the cartridge meets all the requirements of clause 4 and clauses 7 to 10
- the recording on the tape meets the requirements of clauses 11 to 16
- for each recorded Packet the algorithm used for processing the data therein, if the recorded data has been processed, has been registered and the registered identification is included in Byte 13 of the Packet ID of this Packet (see 11.2.2)

#### 2.2 Generating system

A system generating a magnetic tape cartridge for interchange shall be entitled to claim conformance with this International Standard if all the recordings that it makes, on all three Types of cartridge, meet the mandatory requirements of this International Standard. A claim of conformance shall state whether or not one, or more, registered algorithm(s) is (are) implemented and, if so, the registered number(s) of (all) the implemented algorithm(s).

#### 2.3 Receiving system

A system receiving a magnetic tape cartridge for interchange shall be entitled to claim conformance with this Standard if it is able to handle any recording made on the tape according to this International Standard, and for all three Types.

A claim of conformance shall state whether or not one, or more, registered algorithm(s) is (are) implemented and, if so, the registered number(s) of (all) the implemented algorithm(s).

### 3 Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

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ISO 1001:1986	<i>Information processing - File structure and labelling of magnetic tapes for information interchange.</i>
ISO 1302:1992	<i>Technical drawings - Method of indicating surface texture.</i>
ISO 683-13:1986	<i>Heat-treatable steels, alloy steels and free-cutting steels - Part 13: Wrought stainless steels.</i>
ISO/IEC 11576:1994	<i>Information technology - Procedure for the registration of algorithms for the lossless compression of data.</i>
IEC 950:1995	<i>Safety of information technology equipment, including electrical business equipment.</i>