INTERNATIONAL STANDARD

ISO/IEC 12248

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Information technology — 3,81 mm wide magnetic tape cartridge for information interchange — Helical scan recording — DATA/DAT-DC format using 60 m and 90 m length tapes

Technologies de l'information — Cartouche de bande magnétique de 3,81 mm de large pour l'échange d'information — Enregistrement par balayage en spirale — Format DATA/DAT-DC utilisant des bandes de 60 m et 90 m de long



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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 12248 was prepared by the European Computer Manufacturers Association (ECMA) (as Standard ECMA-171) 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, D, E, F, G, H, K and M form an integral part of this International Standard. Annexes B, C, J and L are for information only.

Introduction

ISO/IEC have produced a series of International Standards for cassettes and cartridges containing magnetic tapes of different width and characteristics. Of these, the following relate to helical scan recording.

ISO/IEC 10777:1991, 3,81 mm wide magnetic tape cartridge foR information interchange - Helical scan recording - DDS format

ISO/IEC 11319:1993, 8 mm wide magnetic tape cartridge for information interchange - Helical scan recording

ISO/IEC 11321:1992, 3,81 mm wide magnetic tape cartridge for information interchange - Helical scan Recording - DATA/DAT format

ISO/IEC 11557:1992, 3,81 mm wide magnetic tape cartridge for information interchange - Helical scan recording - DDS-DC format using 60 m and 90 m length tapes, 2nd edition

ISO/IEC 12246:1993, 8 mm wide magnetic tape cartridge, dual azimuth format for information interchange - Helical scan recording

ISO/IEC 12247:1993, 3,81 mm wide magnetic tape cartridge for information interchange - Helical scan recording - DDS format using 60 m and 90 m length tapes

Information technology - 3,81 mm wide magnetic tape cartridge for information interchange - Helical scan recording - DATA/DAT-DC format using 60 m and 90 m length tapes

Section 1 - General

1 Scope

This International Standard specifies the physical and magnetic characteristics of a 3,81 mm wide magnetic tape cartridge to enable interchangeability of such cartridges. It also specifies the quality of the recorded signals, the recorded format and the recording method, thereby allowing data interchange between drives by means of such magnetic tape cartridges. The format used is known as DATA/DAT-DC.

This International Standard specifies two types of cartridges which, for the purpose of this International Standard, are referred to as Type A and Type B.

For Type A, the magnetic tape has a nominal thickness of 13 µm and a nominal length of up to 60,5 m.

For Type B, the magnetic tape has a nominal thickness of 9 µm a length of up to 92,0 m.

Information interchange between systems by means of this International Standard also requires the use, at a minimum, of a labelling and file structure and an interchange code which are agreed upon by the interchange parties. It is not within the scope of this International Standard to specify the labelling and file structure, or the interchange code.

2 Conformance

2.1 Magnetic tape cartridge

A tape cartridge shall be in conformance with this International Standard if it meets all mandatory requirements specified herein for either Type A or Type B. The tape requirements shall be satisfied throughout the extent of the tape.

2.2 Generating system

A system generating a magnetic tape cartridge for interchange shall be entitled to claim conformance to this International Standard if all recordings on the tape meet the mandatory requirements of this International Standard. A claim of conformance shall state whether cartridges of Type A or Type B or both are supported.

2.3 Receiving system

A system receiving a magnetic tape cartridge for interchange shall be entitled to claim conformance with this International Standard if it is able to handle any recording made on the tape according to this International Standard. A claim of conformance shall state whether cartridges of Type A or Type B or both are supported.

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 listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/R 527:1966, Plastics - Determination of tensile propertie.s

ISO/IEC 646:1991, Information technology - ISO 7-bit coded character set for information interchange.

ISO 1302:1992, Technical drawings - Method of indicating surface texture.

ISO/IEC 11576:1993, Information technology - Procedure for the registration of algorithms for the lossless compression of data.

IEC 950:1991, Safety of information technology equipment, including electrical business equipment