

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*



Contents		Page
1	Scope	1
2	Conformance	1
2.1	Magnetic tape cartridge	1
2.2	Generating system	1
2.3	Receiving system	1
3	Normative references	1
4	Definitions	2
4.1	Absolute Frame Number (AFN)	2
4.2	algorithm	2
4.3	Area ID	2
4.4	Automatic Track Finding (ATF)	2
4.5	Average Signal Amplitude	2
4.6	azimuth	2
4.7	back surface	2
4.8	byte	2
4.9	cartridge	2
4.10	Channel Bit	2
4.11	Codeword	2
4.12	Data Format ID	2
4.13	End of Data (EOD)	2
4.14	End of Information (EOI)	2
4.15	End of Partition (EOP)	2
4.16	entity	2
4.17	Error Correcting Code (ECC)	2
4.18	flux transition position	2
4.19	flux transition spacing	2
4.20	frame	2
4.21	group	2
4.22	Logical Beginning of Tape (LBOT)	2

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4.23	Logical End of Tape (LEOT)	2
4.24	magnetic tape	3
4.25	master reference	3
4.26	Master Standard Amplitude Calibration Tape	3
4.27	Master Standard Reference Tape	3
4.28	Optimum Recording Field	3
4.29	partition	3
4.30	partition reference	3
4.31	Physical Beginning of Tape (PBOT)	3
4.32	Physical End of Tape (PEOT)	3
4.33	physical recording density	3
4.34	pre-recording condition	3
4.35	processed record	3
4.36	processed record sequence	3
4.37	processing	3
4.38	record	3
4.39	Reference Recording Field	3
4.40	Secondary Standard Amplitude Calibration Tape	3
4.41	Secondary Standard Reference Tape	3
4.42	Separator Mark	3
4.43	Standard Reference Amplitude	4
4.44	tape noise amplitude	4
4.45	Tape Reference Edge	4
4.46	track	4
5	Environment and safety	4
5.1	Testing environment	4
5.2	Operating environment	4
5.3	Storage environment	4
5.4	Transportation	4
5.5	Safety	5
5.6	Flammability	5
Section 2 - Requirements for the case		5
6	Dimensional and mechanical characteristics of the case	5
6.1	General	5
6.2	Overall dimensions	5
6.3	Loading grip	6
6.4	Holding areas	6
6.5	Notches of the lid	6
6.6	Lid dimensions	6
6.7	Optical detection of the beginning and end of tape	7
6.8	Bottom side	8
6.8.1	Locking mechanism of the slider	8
6.8.2	Access holes	9
6.8.3	Recognition, sub-datum and write-inhibit holes	9
6.8.4	Datum holes	10
6.8.5	Access room for tape guides	11
6.8.6	Holes for accessing the hubs	11

6.8.7	Internal structure of the lower half	11
6.8.8	Light path	12
6.8.9	Support areas	13
6.8.10	Datum areas	13
6.8.11	Relationship between support and datum areas and Reference Plane Z	13
6.9	Hubs	13
6.10	Leader and trailer attachment	14
6.11	Interface between the hubs and the drive spindles	14
6.12	Opening of the lid	14
6.13	Release of the hub locking mechanism	14
6.14	Label areas	15
Section 3	- Requirements for the unrecorded tape	26
7	Mechanical, physical and dimensional characteristics of the tape	26
7.1	Materials	26
7.2	Tape length	26
7.2.1	Length of magnetic tape	26
7.2.2	Length of leader and trailer tapes	26
7.3	Tape width	26
7.4	Discontinuities	26
7.5	Total thickness	26
7.6	Longitudinal curvature	26
7.7	Cupping	26
7.8	Coating adhesion	27
7.9	Layer-to-layer adhesion	27
7.10	Tensile Strength	28
7.10.1	Breaking Strength	28
7.10.2	Yield Strength	28
7.11	Residual elongation	28
7.12	Electrical resistance of coated surfaces	28
7.13	Light transmittance of tape	29
8	Magnetic recording characteristics	29
8.1	Optimum recording field	30
8.2	Signal amplitude	30
8.3	Resolution	30
8.4	Overwrite	30
8.4.1	Physical recording densities of 750,6 and 3 002 ftpmm	30
8.4.2	Physical recording densities of 83,4 ftpmm and 1 001 ftpmm	31
8.5	Ease of erasure	31
8.6	Tape quality	31
8.6.1	Missing pulses	31
8.6.2	Missing pulse zone	31
8.7	Signal-to-noise ratio (S/N) characteristic	31

Section 4 - Format	32
9 DATA/DAT-DC format	32
9.1 General	32
9.2 Basic Groups	32
9.2.1 Basic Groups for Group Format 0	32
9.2.2 Basic Groups for Group Format 1	34
9.3 Sub-groups	35
9.3.1 G1 Sub-group	35
9.3.2 G2 Sub-group	36
9.3.3 G3 Sub-group	36
9.3.4 G4 Sub-group	37
9.3.5 Main Data Block	42
9.4 Sub-Data area	43
9.4.1 Pack Item No. 1	44
9.4.2 Pack Item No. 2	45
9.4.3 Pack Item No. 3	47
9.4.4 Pack Item No. 4	48
9.4.5 Pack Item No. 5	48
9.4.6 Pack Item No. 6	49
9.4.7 Pack Item No. 7	50
9.4.8 Sub Data Block	50
9.5 Basic Group structure	52
9.5.1 User Data	52
9.5.2 System Data	53
9.5.3 Record ID list	57
9.5.4 Heuristic Recovery Data Area	62
10 Method of recording	62
10.1 Physical recording density	62
10.2 Long-Term average bit cell length	62
10.3 Short-Term average bit cell length	62
10.4 Rate of change	62
10.5 Bit shift	62
10.6 Read signal amplitude	62
10.7 Maximum recorded levels	62
11 Track geometry	63
11.1 Track configuration	63
11.2 Average track pitch	63
11.3 Variations of the track pitch	63
11.4 Track width	64
11.5 Track angle	64
11.6 Track edge linearity	64
11.7 Track length	64
11.8 Ideal tape centreline	64
11.9 Azimuth angles	64

12	Recording of blocks on the tape	64
12.1	Recorded Main Data Block	64
12.2	Recorded Sub Data Block	64
12.3	Margin Blocks, Preamble Blocks and Postamble Blocks	65
12.4	Spacer Blocks	65
13	Format of a track	65
13.1	Track capacity	65
13.2	Positioning accuracy	65
13.3	Tracking scheme	65
14	Group Formats	68
14.1	Group Format 0	68
14.2	Group Format 1	68
14.3	Extended Gap Frames	69
14.3.1	Extended Leading Gap Frames	69
14.3.2	Extended Trailing Gap Frames	69
14.4	Types of Groups	69
14.4.1	Normal Groups	70
14.4.2	Spare Groups	70
14.4.3	Amble Groups	70
14.4.4	Header Groups	70
15	Magnetic tape layout	71
15.1	Load/Unload Area	71
15.2	Lead-in Area	72
15.2.1	Preamble	72
15.2.2	Header	72
15.2.3	Format Parameter Set	74
15.2.4	Master Reference	79
15.2.5	Postamble	84
15.3	Partition	85
15.3.1	Partition Preamble	85
15.3.2	Partition Reference	85
15.3.3	Partition Postamble	96
15.3.4	Partition Data	96
15.3.5	End of Partition (EOP)	96
15.3.6	Unused Area	97
15.4	EOI	97
15.5	Repeated Groups	97
15.6	Repeated Frames within a Normal Group	97
15.7	Relocation of Defective Groups	98
15.8	Appending	98
15.8.1	Seamless appending	98
15.8.2	Non-seamless appending	100
15.9	Overwrite	101

15.9.1	Overlapped track width	102
15.9.2	Non-overlapped track width	102
15.9.3	Rules for overwrite	102
Annexes		
A	Measurement of the light transmittance of the prisms	103
B	Recognition holes	105
C	Means for opening the lid	106
D	Measurement of light transmittance of tape and leaders	107
E	Measurement of Signal-to-Noise Ratio	110
F	Method for determining the nominal and the maximum allowable recorded levels	111
G	Representation of 8-bit bytes by 10-bit pattern	112
H	Measurement of bit shift	118
J	Recommendations for transportation	121
K	Method of measuring track edge linearity	122
L	Read-After-Write	123
M	Data allocation and C3 parity	124

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 properties*.

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*