
**Information technology — 130 mm optical
disk cartridges for information
interchange — Capacity: 5,2 Gbytes per
cartridge**

*Technologies de l'information — Cartouches de disques optiques de
130 mm pour l'échange d'informations — Capacité: 5,2 Gbytes par
cartouche*

Contents

Page

Section 1 - General.....	1
1 Scope.....	1
2 Conformance	2
2.1 Optical Disk Cartridge (ODC)	2
2.2 Generating system.....	2
2.3 Receiving system.....	2
2.4 Compatibility statement	2
3 Reference	2
4 Definitions.....	2
4.1 asymmetry.....	3
4.2 band.....	3
4.3 case.....	3
4.4 clamping zone	3
4.5 control track	3
4.6 Cyclic Redundancy Check (CRC).....	3
4.7 defect management.....	3
4.8 direct overwrite	3
4.9 disk reference plane.....	3
4.10 entrance surface.....	3
4.11 Error Correction Code (ECC).....	3
4.12 format.....	3
4.13 hub.....	3
4.14 interleaving.....	3
4.15 Kerr rotation.....	3
4.16 land and groove	3
4.17 logical track.....	3
4.18 mark	3
4.19 mark edge	3
4.20 mark edge recording.....	3
4.21 optical disk	3
4.22 optical disk cartridge (ODC)	3
4.23 physical track	3
4.24 polarization.....	3
4.25 pre-recorded mark	4
4.26 read power.....	4
4.27 recording layer	4
4.28 Reed-Solomon code	4
4.29 space.....	4
4.30 spindle	4
4.31 substrate	4
4.32 track pitch.....	4

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4.33 write-inhibit hole	4
4.34 write once functionality	4
4.35 zone.....	4
5 Conventions and notations.....	4
5.1 Representation of numbers	4
5.2 Names	4
6 List of acronyms	5
7 General description of the optical disk cartridge	5
8 General requirements.....	6
8.1 Environments.....	6
8.1.1 Test environment	6
8.1.2 Operating environment	6
8.1.3 Storage environment.....	6
8.1.4 Transportation.....	7
8.2 Temperature shock.....	7
8.3 Safety requirements	7
8.4 Flammability.....	7
9 Reference Drive	7
9.1 Optical system	7
9.2 Optical beam.....	9
9.3 Read channels	9
9.4 Tracking.....	9
9.5 Rotation of the disk.....	10
Section 2 - Mechanical and physical characteristics.....	10
10 Dimensional and physical characteristics of the case	10
10.1 General description of the case	10
10.2 Relationship of Sides A and B.....	10
10.3 Reference axes and case reference planes.....	10
10.4 Case drawings.....	10
10.5 Dimensions of the case	11
10.5.1 Overall dimensions	11
10.5.2 Location hole	12
10.5.3 Alignment hole	12
10.5.4 Surfaces on Reference Planes P.....	12
10.5.5 Insertion slots and detent features.....	13
10.5.6 Gripper slots	14
10.5.7 Write-inhibit holes	14
10.5.8 Media sensor holes	15
10.5.9 Head and motor window.....	16
10.5.10 Shutter.....	16
10.5.11 Slot for shutter opener	17
10.5.12 Shutter sensor notch.....	17
10.5.13 User label areas.....	18
10.6 Mechanical characteristics.....	18
10.6.1 Materials	18
10.6.2 Mass.....	18
10.6.3 Edge distortion.....	18
10.6.4 Compliance	18
10.6.5 Shutter opening force.....	18
10.7 Drop test	18
11 Dimensional, mechanical and physical characteristics of the disk	19
11.1 General description of the disk	19
11.2 Reference axis and plane of the disk.....	19
11.3 Dimensions of the disk	19
11.3.1 Hub dimension.....	19
11.4 Mechanical characteristics.....	20

11.4.1 Material	21
11.4.2 Mass	21
11.4.3 Moment of inertia	21
11.4.4 Imbalance	21
11.4.5 Axial deflection	21
11.4.6 Axial acceleration	21
11.4.7 Radial runout	21
11.4.8 Radial acceleration	22
11.4.9 Tilt	22
11.5 Optical characteristics	22
11.5.1 Index of refraction	22
11.5.2 Thickness	22
11.5.3 Birefringence	22
11.5.4 Vertical Birefringence	22
11.5.5 Reflectance	23
11.5.5.1 General	23
11.5.5.2 Measured value	23
11.5.5.3 Requirement	23
12 Interface between cartridge and drive	23
12.1 Clamping method	23
12.2 Clamping force	23
12.3 Capture cylinder	23
12.4 Disk position in the operating condition	24
Section 3 - Format of information	39
13 Track geometry	39
13.1 Track shape	39
13.2 Direction of track spiral	39
13.3 Track pitch	39
13.4 Logical track number	39
13.5 Physical track number	39
14 Track format	39
14.1 Physical track layout	39
14.2 Logical track layout	40
14.3 Radial alignment	40
14.4 Sector number	40
15 Sector format	40
15.1 Sector layout	40
15.2 Sector mark	42
15.3 VFO fields	43
15.4 Address Mark (AM)	44
15.5 ID fields	44
15.6 Postamble (PA)	44
15.7 Transition Area (TA ₁)	45
15.8 Gap	45
15.9 Flag	45
15.10 Auto Laser Power Control (ALPC)	45
15.11 Sync	45
15.12 Data field	46
15.12.1 User data bytes	46
15.12.2 CRC and ECC bytes	46
15.12.3 Bytes for Sector Written Flag (SWF)	46
15.12.4 The bytes following SWF in the Data field of the 1 024-byte and 512-byte sector format	46
15.12.5 Resync bytes	47
15.13 Postamble field (PA ₂)	47
15.14 Buffer field	47
15.15 Transition Area (TA ₂)	47
16 Recording code	47

17 Formatted Zone.....	48
17.1 General description of the Formatted Zone	48
17.2 Division of the Formatted Zone.....	48
17.2.1 Lead-in Zone.....	50
17.2.2 Manufacturer Zones.....	50
17.2.2.1 Outer Manufacturer Zone	50
17.2.2.2 Inner Manufacturer Zone.....	51
17.2.3 User Zone	51
17.2.4 Reflective Zone.....	51
17.2.5 Control Track Zones	51
17.3 Control Track PEP Zone.....	51
17.3.1 Recording in the PEP Zone.....	52
17.3.2 Format of the tracks of the PEP Zone	52
17.3.2.1 Format of a sector	52
17.3.2.1.1 Preamble field.....	53
17.3.2.1.2 Sync field.....	53
17.3.2.1.3 Sector Number field.....	53
17.3.2.1.4 Data field	53
17.3.2.1.5 CRC	55
17.3.2.2 Summary of the format of the Data field of a sector.....	56
17.4 Control Track SFP Zones	56
17.4.1 Duplicate of the PEP information.....	57
17.4.2 Media information	57
17.4.3 System Information	59
18 Layout of the User Zone	60
18.1 General description of the User Zone	60
18.2 Divisions of the User Zone	60
18.3 User Area.....	61
18.4 Defect Management Areas (DMAs)	66
18.5 Disk Definition Structure (DDS)	67
18.6 Rewritable Zone.....	70
18.6.1 Location	71
18.6.2 Partitioning	71
18.7 Embossed Zone.....	71
18.7.1 Location	71
18.7.2 Partitioning	71
18.7.3 Parity sectors.....	71
18.8 Write Once Zone.....	72
18.8.1 Location	72
18.8.2 Partitioning	72
19 Defect Management in the Rewritable and Write Once Zones.....	72
19.1 Initialization of the disk	72
19.2 Certification.....	73
19.2.1 Slipping Algorithm	73
19.2.2 Linear Replacement Algorithm	73
19.3 Disks not certified.....	73
19.4 Write procedure	74
19.5 Primary Defect List (PDL)	74
19.6 Secondary Defect List (SDL)	75
Section 4 - Characteristics of embossed information.....	76
20 Method of testing.....	76
20.1 Environment	76
20.2 Use of the Reference Drive.....	76
20.2.1 Optics and mechanics	76
20.2.2 Read power	77
20.2.3 Read channels	77
20.2.4 Tracking.....	77
20.3 Definition of signals	77
21 Signal from grooves.....	78

21.1 Cross-track signal.....	79
21.2 Push-pull ratio.....	79
21.3 Divided push-pull signal.....	79
21.4 Phase depth.....	80
21.5 Track location.....	80
22 Signals from Headers.....	80
22.1 Sector Mark Signals.....	80
22.2 VFO signals.....	80
22.3 Address Mark, ID and PA signals.....	81
22.4 Timing jitter.....	81
22.5 Asymmetry.....	81
23 Signals from embossed Recording fields.....	81
23.1 Signal amplitude.....	81
23.2 Asymmetry.....	82
23.3 Timing Jitter.....	82
23.4 Byte Errors.....	82
24 Signals from Control Track PEP marks.....	82
Section 5 - Characteristics of the recording layer.....	83
25 Method of testing.....	83
25.1 Environment.....	83
25.2 Reference Drive.....	83
25.2.1 Optics and mechanics.....	83
25.2.2 Read power.....	83
25.2.3 Read Channel.....	84
25.2.4 Tracking.....	84
25.2.5 Signal detection for testing purposes.....	84
25.3 Write conditions.....	84
25.3.1 Write pulse and power.....	84
25.3.2 Write magnetic field and temperature.....	85
25.3.3 Pulse power determination.....	85
25.3.4 Media power sensitivity.....	85
25.4 Erase conditions.....	86
25.4.1 Erase power.....	86
25.4.2 Erase magnetic field.....	86
25.5 Definition of signals.....	86
26 Magneto-optical characteristics.....	86
26.1 Figure of merit for magneto-optical signal.....	86
26.2 Imbalance of magneto-optical signal.....	86
27 Write characteristics.....	87
27.1 Resolution.....	87
27.2 Narrow-band signal-to-noise ratio (NBSNR).....	87
27.3 Cross-talk ratio.....	88
27.3.1 Rewritable track test method.....	88
27.4 Timing Jitter.....	88
27.5 Media thermal interaction.....	89
28 Erase power determination.....	89
Section 6 - Characteristics of user data.....	90
29 Method of testing.....	90
29.1 Environment.....	90
29.2 Reference Drive.....	90
29.2.1 Optics and mechanics.....	90
29.2.2 Read power.....	90
29.2.3 Read Channel.....	90
29.2.4 Mark Quality.....	91

29.2.5 Channel bit clock	91
29.2.6 Binary-to-digital converters	91
29.2.7 Error correction	91
29.2.8 Tracking	91
30 Minimum quality of a sector	91
30.1 Headers	92
30.1.1 Sector Mark	92
30.1.2 ID fields	92
30.2 User-written data	92
30.2.1 Recording field	92
30.2.2 Byte errors	92
30.2.3 Asymmetry	92
30.2.4 Timing jitter	92
31 Data interchange requirements	92
31.1 Tracking	92
31.2 User-written data	92
31.3 Embossed data	92
31.4 Quality of disk	92
Annexes	93
A - Air cleanliness class 100 000	93
B - Edge distortion test	94
C - Compliance test	96
D - Test method for measuring the adsorbent force of the hub	98
E - CRC for ID fields	100
F - Interleave, CRC, ECC, Resync for the data field	101
G - Determination of Resync pattern	110
H - Read Channel for measuring jitter	115
J - Timing jitter measuring procedure	116
K - Definition of write pulse shape	118
L - Measurement of figure of merit	120
M - Implementation Independent Mark Quality Determination (IIMQD) for the interchange of recorded media	121
N - Requirements for interchange	124
P - Measurement implementation for Cross-track signal	126
Q - Asymmetry measuring definition	127
R - Office environment	129
S - Derivation of the operating climatic environment	130
T - Transportation	135
U - Sector retirement guidelines	136
V - Track deviation measurement	137

W - Values to be implemented in existing and future standards 141

X - Measurement of the vertical birefringence of the substrate 142

Y - Guidelines for the use of Type WO and WO-DOW ODCs 144

Z - Laser power calibration for evaluation of media power sensitivity..... 145

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 15286 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 23, *Optical disk cartridges for information interchange*.

Annexes A to Q form an integral part of this International Standard. Annexes R to Z are for information only.

Information technology - 130 mm optical disk cartridges for information interchange - Capacity: 5,2 Gbytes per cartridge

Section 1 - General

1 Scope

This International Standard specifies the characteristics of a series of related 130 mm optical disk cartridges (ODCs) by using a number of Type designations.

A disk has two sides, called Side A and Side B. Each side can have a nominal capacity of 2,6 Gbytes.

Type R/W	provides for data to be written, read and erased many times over the recording surface of the corresponding disk side, using the thermo-magnetic and magneto-optical effects.
Type P-ROM	provides for a part of the disk surface to be pre-recorded and reproduced by stamping or other means. This part of the disk is read without recourse to the magneto-optical effect. All parts which are not pre-recorded provide for data to meet the requirements of Type R/W.
Type O-ROM	provides for the whole of the disk surface to be pre-recorded and reproduced by stamping or other means. The corresponding disk sides are read without recourse to the magneto-optical effect.
Type DOW	provides for data to be written and read many times over the recording surface of the corresponding disk side, using the direct overwrite thermo-magnetic and magneto-optical effects requiring a single external magnetic field.
Type P-DOW	provides for a part of the disk surface to be pre-recorded and reproduced by stamping or other means. This part of the disk is read without recourse to the magneto-optical effect. All parts which are not pre-recorded provide for data to meet the requirements of Type DOW.
Type WO	provides write once, read multiple functionality using the thermo-magnetic and magneto-optical effects.
Type WO-DOW	provides write once, read multiple functionality using the direct overwrite thermo-magnetic and magneto-optical effects.

In addition, for each Type, this International Standard provides for cartridges containing a disk with a sector size of 512 bytes, cartridges containing a disk with a sector size of 1 024 bytes and cartridges containing a disk with a sector size of 2 048 bytes. All sectors of a disk are the same size.

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 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(s) implemented.

2.2 Generating system

A claim of conformance with this International Standard shall specify which of Types R/W, DOW, P-ROM, P-DOW, O-ROM, WO and WO-DOW 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 Standard for the Type(s) supported.

2.3 Receiving system

A claim of conformance with this International Standard shall specify which Type(s) is(are) supported.

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 International 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 standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was 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 edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60950:1991, *Safety of information technology equipment*.