



SLOVENSKI STANDARD SIST EN 61753-101-3:2008

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Fibre optic interconnecting devices and passive components performance standard - Part 101-3: Fibre management systems for Category U - Uncontrolled environment (IEC 61753-101-3:2006) **iTeh STANDARD PREVIEW**

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Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil 101-3: Einzelfasermanagementsysteme für die Kategorie U - Unkontrollierte Umgebung (IEC 61753-101-3:2006) standards.iteh.ai/catalog/standards/sist/e20e127d-46a7-43e9-882e-be63af8b55ea/sist-en-61753-101-3-2008

Norme de qualité de fonctionnement des dispositifs d'interconnexion et composants passifs à fibres optiques - Partie 101-3: Systèmes de gestion de fibres pour la Catégorie U - Environnement non contrôlé (CEI 61753-101-3:2006)

Ta slovenski standard je istoveten z: EN 61753-101-3:2008

ICS:

33.180.20 Ú[ç^: [çæ) ^Á æ |æ^Á æ Fibre optic interconnecting devices
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SIST EN 61753-101-3:2008 en,fr

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61753-101-3

August 2008

ICS 33.180.20

English version

**Fibre optic interconnecting devices
and passive components performance standard -
Part 101-3: Fibre management systems for Category U -
Uncontrolled environment
(IEC 61753-101-3:2006)**

Norme de qualité de fonctionnement
des dispositifs d'interconnexion
et composants passifs à fibres optiques -
Partie 101-3: Systèmes de gestion
de fibres pour la Catégorie U -
Environnement non contrôlé
(CEI 61753-101-3:2006)

Lichtwellenleiter -
Verbindungselemente
und passive Bauteile -
Betriebsverhalten -
Teil 101-3:
Einzelfasermanagementsysteme
für die Kategorie U -
Unkontrollierte Umgebung
(IEC 61753-101-3:2006)

[SIST EN 61753-101-3:2008](https://standards.iteh.ai/catalog/standards/sist/e20e127d-46a7-43e9-882e-be63af8b55ea/sist-en-61753-101-3-2008)

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This European Standard was approved by CENELEC on 2008-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 86B/2364/FDIS, future edition 1 of IEC 61753-101-3, prepared by SC 86B, Fibre optic interconnecting devices and passive components, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61753-101-3 on 2008-06-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2009-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61753-101-3:2006 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068-1	NOTE Harmonized as EN 60068-1:1994 (not modified).
IEC 60332	NOTE Harmonized in EN 60332 series (not modified).
IEC 60794-2	NOTE Harmonized as EN 60794-2:2003 (not modified).
IEC 60794-3	NOTE Harmonized as EN 60794-3:2002 (not modified).
IEC 61300	NOTE Harmonized in EN 61300 series (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-64	- ¹⁾	Environmental testing - Part 2: Test methods - Test Fh: Vibration, broad-band random (digital control) and guidance	EN 60068-2-64	1994 ²⁾
IEC 60721-3-1	- ¹⁾	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 1: Storage	EN 60721-3-1	1997 ²⁾
IEC 60721-3-2	- ¹⁾	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 2: Transportation	EN 60721-3-2	1997 ²⁾
IEC 60793-2-50	- ¹⁾	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50 + corr. July	2004 ²⁾ 2004
IEC 61300-1	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance	EN 61300-1	2003 ²⁾
IEC 61300-2-1	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests - Vibration (sinusoidal)	EN 61300-2-1	2003 ²⁾
IEC 61300-2-4	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre/cable retention	EN 61300-2-4	1997 ²⁾
IEC 61300-2-9	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-9: Tests - Shock	EN 61300-2-9	1997 ²⁾
IEC 61300-2-12	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-112: Tests - Impact	EN 61300-2-12	2005 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61300-2-17	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-17: Tests - Cold	EN 61300-2-17	2003 ²⁾
IEC 61300-2-18	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-18: Tests - Dry heat - High temperature endurance	EN 61300-2-18	2005 ²⁾
IEC 61300-2-19	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-19: Tests - Damp heat (steady state)	EN 61300-2-19	2005 ²⁾
IEC 61300-2-22	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature	EN 61300-2-22	2007 ²⁾
IEC 61300-2-33	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-33: Tests - Assembly and disassembly of fibre optic closures	EN 61300-2-33	2007 ²⁾
IEC 61300-2-42	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-42: Tests - Static side load for connectors	EN 61300-2-42	2005 ²⁾
IEC 61300-2-46	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-46: Tests - Damp heat cyclic	EN 61300-2-46	2006 ²⁾
IEC 61300-3-1	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-1: Examinations and measurements - Visual examination	EN 61300-3-1	2005 ²⁾
IEC 61300-3-3	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-3: Examinations and measurements - Active monitoring of changes in attenuation and return loss	EN 61300-3-3	2003 ²⁾
IEC 61300-3-28	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-28: Examinations and measurements - Transient loss	EN 61300-3-28	2002 ²⁾
IEC 61753-1	- ¹⁾	Fibre optic interconnecting devices and passive components performance standard - Part 1: General and guidance for performance standards	EN 61753-1	2007 ²⁾
IEC 62134-1	- ¹⁾	Fibre optic enclosures - Part 1: Generic specification	EN 62134-1	2002 ²⁾

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

61753-101-3

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First edition
2006-10

**Norme de qualité de fonctionnement
des dispositifs d'interconnexion et
composants passifs à fibres optiques –**

Partie 101-3:

**isteh STANDARD PREVIEW
de fibres pour la Catégorie U –
Environnement non contrôlé
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**Fibre optic interconnecting devices and
passive components performance standard –**

Part 101-3:

**Fibre management systems for Category U –
Uncontrolled environment**

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International Electrotechnical Commission, 3, rue de Varembe, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**FIBRE OPTIC INTERCONNECTING DEVICES
AND PASSIVE COMPONENTS PERFORMANCE STANDARD –**

**Part 101-3: Fibre management systems
for Category U – Uncontrolled environment**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61753-100-3 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

The text of this standard is based on the following documents:

FDIS	Report on voting
86B/2364/FDIS	86B/2403/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 61753 consists of the following parts, under the general title *Fibre optic interconnecting devices and passive components performance standard*:¹

- Part 1-1: General and guidance – Interconnecting devices (connectors)
- Part 2-1: Fibre optic connectors terminated on single-mode fibre for category U – Uncontrolled environment
- Part 2-3: Non-connectorised single-mode 1×N and 2×N non-wavelength-selective branching devices for Category U – Uncontrolled environment
- Part 021-2: Fibre optic connectors terminated on single-mode fibre to category C – Controlled environment
- Part 022-2: Fibre optic connectors terminated on multimode fibre for category C – Controlled environment
- Part 051-3: Single-mode fibre, plug-style fixed attenuators for Category U – Uncontrolled environment
- Part 053-3: Continuously variable attenuators for category U – Uncontrolled environment
- Part 061-3: Single mode fibre optic pigtailed style isolators for category U – Uncontrolled environment
- Part 091-3: Single mode fibre optic pigtailed style circulators for category U – Uncontrolled environment
- Part 101-2: Fibre management systems for Category C – Controlled environment
- Part 101-3: Fibre management systems for Category U – Uncontrolled environment

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

1 Other parts of IEC 61753 are currently in preparation or under consideration.

INTRODUCTION

This Performance Standard for fibre management systems defines the requirements for standard optical performance under a set of specified conditions. This standard contains a series or a set of tests and measurements with clearly stated conditions, severities and pass/fail criteria. The series of tests, commonly referred to as an operating service environment or performance category, is intended to be a basis to prove the product's ability to satisfy the requirements of a specific application, market sector or user group.

A product that has been shown to meet all the requirements of this performance standard may be declared as complying with this performance standard. Products having the same classification from one manufacturer that satisfy this performance standard, will operate within the boundaries set by the performance standard. There is no guarantee that products from different manufacturers, having the same classification and which conform to the same performance standard, will provide an equivalent level of performance when they are used together.

Conformance with IEC environmental policy according to IEC Guide 109 and concerning the need to reduce the impacts on the natural environment of fibre management system products during all phases of their life – from acquiring materials to manufacturing, distribution, use, and end-of-life treatment (i.e. re-use, recycling and disposal) – is indicated within each product specification.

Conformance to a performance standard demonstrates that a product has passed a design verification test. It is not a guarantee of lifetime assured performance or reliability. Reliability testing must be the subject of a separate test schedule, where the tests and severities selected are such that they are truly representative of the requirements of this reliability test programme. Consistency of manufacture should be maintained using a recognised Quality Assurance programme whilst the reliability of a product should be evaluated using the procedures recommended in IEC 62005.

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Tests and measurements should be selected from the IEC 61300 series.

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS PERFORMANCE STANDARD –

Part 101-3: Fibre management systems for Category U – Uncontrolled environment

1 Scope

This part of IEC 61753 deals with performance standards for parts of fibre management systems. It defines those tests and severities which form the performance or general operating service environment, and identifies those tests which are considered to be product specific. Test and severity details are given.

This part of IEC 61753 contains the minimum test and measurement severities which a specific product must satisfy in order to be categorised as meeting the IEC standard, Category U – Uncontrolled environment, as defined in Annex A of IEC 61753-1. More severe requirements may be agreed between the customer and the supplier.

A product performance standard will contain a combination of those tests and measurements that are common to all products, for a particular service environment or performance category, and those that are considered specific to that particular product in that environment.

iTech STANDARD PREVIEW

2 Normative references (standards.iteh.ai)

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-64, *Environmental testing, Part 2: Tests methods – Test Fh: Vibration, broad-band random (digital control) and guidance*

IEC 60721-3-1, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 1: Storage.*

IEC 60721-3-2, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 2: Transportation.*

IEC 60793-2-50, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

IEC 61300-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General and guidance*

IEC 61300-2-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-1: Tests – Vibration (sinusoidal)*

IEC 61300-2-4 *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-4: Tests – Fibre/cable retention*