

Izvedbeni standard za povezovalne naprave in pasivne komponente optičnih vlaken – 061-3. del: Pigtailno oblikovani izolatorji enorodnih optičnih vlaken za kategorijo U – Nekontrolirano okolje (IEC 61753-061-3:2004)

Fibre optic interconnecting devices and passive components performance standard - Part 061-3: Single mode fibre optic pigtailed style isolators for category U - Uncontrolled environment (IEC 61753-061-3:2004)

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English version

**Fibre optic interconnecting devices
and passive components performance standard
Part 061-3: Single mode fibre optic pigtailed style isolators
for category U –
Uncontrolled environment
(IEC 61753-061-3:2004)**

Norme de qualité de fonctionnement
des dispositifs d'interconnexion et
composants passifs à fibres optiques
Partie 061-3: Isolateurs à fibre amorce
monomode pour la catégorie U –
Environnement non contrôlé
(CEI 61753-061-3:2004)

Lichtwellenleiter – Verbindungséléments
und passive Bauteile – Betriebsverhalten
Teil 061-3: Einmoden-Lichtwellenleiter-
Isolatoren mit Anschlussfasern
für die Kategorie U –
Unkontrollierte Umgebung
(IEC 61753-061-3:2004)

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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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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/1927/FDIS, future edition 1 of IEC 61753-061-3, 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 61753-061-3 on 2004-09-01.

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) 2005-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-09-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61753-061-3:2004 was approved by CENELEC as a European Standard without any modification.

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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 Where 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 60793-1-1	- 1)	Optical fibres Part 1-1: Measurement methods and test procedures - General and guidance	EN 60793-1-1	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⁾	Part 2-4: Tests - Fibre/cable retention	EN 61300-2-4	1997 ²⁾
IEC 61300-2-5	- ¹⁾	Part 2-5: Tests - Torsion/twist	EN 61300-2-5	2002 ²⁾
IEC 61300-2-9	- ¹⁾	Part 2-9: Tests - Shock	EN 61300-2-9	1997 ²⁾
IEC 61300-2-14	- ¹⁾	Part 2-14: Tests - Maximum input power https://standards.itech.ai/catalog/standards/sist/aa/fbd1e5-1b24-4675-8244-ddb6eb876abb/sist-en-61753-061-3-2005	EN 61300-2-14	1997 ²⁾
IEC 61300-2-17	- ¹⁾	Part 2-17: Tests - Cold	EN 61300-2-17	2003 ²⁾
IEC 61300-2-18	- ¹⁾	Part 2-18: Tests - Dry heat - High temperature endurance	EN 61300-2-18	1997 ²⁾
IEC 61300-2-22	- ¹⁾	Part 2-22: Tests - Change of temperature	EN 61300-2-22	1997 ²⁾
IEC 61300-3-2	- ¹⁾	Part 3-2: Examinations and measurements - Polarization dependence of attenuation in a single-mode fibre optic device	EN 61300-3-2	1999 ²⁾
IEC 61300-3-5	- ¹⁾	Part 3-5: Examinations and measurements - Wavelength dependence of attenuation	EN 61300-3-5	2001 ²⁾
IEC 61300-3-6	- ¹⁾	Part 3-6: Examinations and measurements - Return loss	EN 61300-3-6	2003 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 61300-3-32	- ¹⁾	Part 3-32: Examinations and measurements - Polarisation mode dispersion for passive optical components	-	-
IEC 61753-2-1	- ¹⁾	Fibre optic interconnecting devices and passive components performance standard Part 2-1: Fibre optic connectors terminated on single-mode fibre for category U - Uncontrolled environment	EN 61753-2-1	2000 ²⁾

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

61753-061-3

Première édition
First edition
2004-05

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

Partie 061-3:

**Isolateurs à fibre amorce monomode pour
la catégorie U – Environnement non contrôlé
(standards.iteh.ai)**

Fibre optic interconnecting devices and

passive components performance standard –

Part 061-3:

**Single mode fibre optic pigtailed style isolators
for category U – Uncontrolled environment**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING DEVICES AND
PASSIVE COMPONENTS PERFORMANCE STANDARD –****Part 061-3: Single mode fibre optic pigtailed style isolators
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 61753-061-3 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/1927/FDIS	86B/1964/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 052-3: Single-mode fibre, pigtailed-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

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The committee has decided that the contents of this publication will remain unchanged until 2009. At this date, the publication will be

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- withdrawn; <https://standards.iteh.ai/catalog/standards/sist/aafbd1e5-1b24-4675-8244-41b6b876abb/sist-en-61753-061-3-2005>
- replaced by a revised edition; or
- amended.

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

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS PERFORMANCE STANDARD –

Part 061-3: Single mode fibre optic pigtailed style isolators for category U – Uncontrolled environment

1 Scope

This part of IEC 61753 contains the minimum requirements and severities which a fibre optic isolator shall satisfy in order to be categorised as meeting the requirements of isolator devices used in uncontrolled environments. The requirements cover non-connectorised single mode isolators for category U - Uncontrolled environments.

2 Normative references

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 60793-1-1, *Optical fibres – Part 1-1: Measurement methods and test procedures – General and guidance*

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

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

IEC 61300-2-5, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-5: Tests – Torsion/twist*

IEC 61300-2-9, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-9: Tests – Shock*

IEC 61300-2-14, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-14: Tests – Maximum input power*

IEC 61300-2-17, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-17: Tests – Cold*

IEC 61300-2-18, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-18: Tests – Dry heat – High temperature endurance*

IEC 61300-2-22, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-22: Tests – Change of temperature*