SLOVENSKI STANDARD
SIST EN 61753-031-2:2014

01-december-2014

Optični spojni elementi in pasivne komponente - Tehnični standard - 031-2. del: Enorodni valovnodolžinsko neodvisni selektivni razvejilni elementi 1 × N in 2 × N brez konektorjev za kategorijo C - Nadzorovano okolje

Fibre optic interconnecting devices and passive components - Performance standard - Part 031- 2: Non-connectorised single-mode 1×N and 2×N non-wavelength-selective branching devices for Category C - Controlled environment

Ta slovenski standard je istoveten z: **EN 61753-031-2:2014**

ICS:

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SIST EN 61753-031-2:2014 **en**

EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 61753-031-2

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English Version

Fibre optic interconnecting devices and passive components - Performance standard - Part 031-2: Non-connectorized single-mode 1×N and 2×N non-wavelength-selective branching devices for Category C - Controlled environment (IEC 61753-031-2:2014)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Norme de performance - Partie 031-2 : Dispositifs de couplage indépendants de la longueur d'onde 1×N et 2×N en unimodal non-connectorisés pour la catégorie C - Environnement contrôlé (CEI 61753-031-2:2014)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil 031-2: Nicht steckbare wellenlängenunabhängige Einmoden-1×N- und -2×N-Verzweiger für die Kategorie C - Kontrollierte Umgebung (IEC 61753-031-2:2014)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 61753-031-2:2014 E

Foreword

The text of document 86B/3791/FDIS, future edition 1 of IEC 61753-031-2, 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 approved by CENELEC as EN 61753-031-2:2014.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2015-07-08
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-10-08

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Endorsement notice

The text of the International Standard IEC 61753-031-2:2014 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 60875-1	NOTE	Harmonized as EN 60875-1.
IEC 61753-1	NOTE	Harmonized as EN 61753-1.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

Publication	Year	Title	EN/HD	Year
IEC 60793-2-50	2012	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	2013
IEC 61300-2-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests - Vibration (sinusoidal)	EN 61300-2-1	-
IEC 61300-2-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre/cable retention	EN 61300-2-4	-
IEC 61300-2-9	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-9: Tests - Shock	EN 61300-2-9	-
IEC 61300-2-14	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-14: Tests - High optical power	EN 61300-2-14	-
IEC 61300-2-17	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-17: Tests - Cold	EN 61300-2-17	-
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	EN 61300-2-18	-
IEC 61300-2-19	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-19: Tests - Damp heat (steady state)	EN 61300-2-19	-
IEC 61300-2-22	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature	EN 61300-2-22	-

Publication	Year	Title	EN/HD	Year
IEC 61300-2-42	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-42: Tests - Static side load for strain relief	EN 61300-2-42	-
IEC 61300-2-44	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-44: Tests - Flexing of the strain relief of fibre optic devices	EN 61300-2-44	-
IEC 61300-3-2	2009	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-2: Examinations and measurements - Polarization dependent loss in a single-mode fibre optic device	EN 61300-3-2	2009
IEC 61300-3-3	2009	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	2009
IEC 61300-3-6	2008	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-6: Examinations and measurements - Return loss	EN 61300-3-6	2009
IEC 61300-3-7 (mod)	2009	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-7: Examinations and measurements - Wavelength dependence of attenuation and return loss of single mode components	EN 61300-3-7	2012
IEC 61300-3-20	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-20: Examinations and measurements - Directivity of fibre optic branching devices	EN 61300-3-20	-
IEC 61300-3-28	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-28: Examinations and measurements - Transient loss	EN 61300-3-28	-

IEC 61753-031-2

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INTERNATIONAL STANDARD

Fibre optic interconnecting devices and passive components – Performance standard – Part 031-2: Non-connectorized single-mode 1×N and 2×N non-wavelength-selective branching devices for Category C – Controlled environment

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FOREWORD

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International Standard IEC 61753-031-2 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/3791/FDIS	86B/3823/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*:

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

A bilingual version of this publication may be issued at a later date.

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – PERFORMANCE STANDARD –

Part 031-2: Non-connectorized single-mode 1×N and 2×N non-wavelength-selective branching devices for Category C – Controlled environment

1 Scope

This part of IEC 61753 contains the minimum initial tests and measurement requirements and severities which a non-wavelength selective branching device (NWBD) should satisfy in order to be categorized as meeting the requirement of this IEC standard.

The requirements cover balanced bidirectional non-connectorized single-mode 1 × N and 2 × N non wavelength-selective branching devices for use in an IEC Category C environment (N is the number of branching ports), especially but not exclusively used for PON application. For balanced NWBD two attenuation and uniformity performance classes are considered: class A (premium class) which meets more restrictive requirements (i.e. for extended reach PON application) and class B (standard class) for standard application (i.e. normal reach PON application).

The requirements also cover unbalanced bidirectional non-connectorized single-mode, non-wavelength-selective branching devices; however, the specifications of unbalanced branching devices are limited to 1 × 2 and 2 × 2 devices because they are the most commonly used.

2 Normative references

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

IEC 60793-2-50:2012, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

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*

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 – High optical power*

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