SLOVENSKI STANDARD
SIST EN 61753-087-6:2012

01-junij-2012

Optični spojni elementi in pasivne komponente - Tehnični standard - 087-6. del: Naprave brez konektorjev za širokopasovni valovni multipleks (WWDM) za enorodni dvosmerni 1310 nm navzgornji in 1490 nm navzdolnji prenos za kategorijo O - Nenadzorovano okolje (IEC 61753-087-6:2012)

Fibre optic interconnecting devices and passive components - Performance standard - Part 087-6: Non-connectorised single-mode bidirectional 1310 nm upstream and 1490 nm downstream WWDM devices for category O - Uncontrolled environment (IEC 61753-087-6:2012)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil 087-6: Nicht mit Steckverbindern versehene bidirektionale 1310-nm-upstream- und 1490 -nm-downstream-Einmoden-WWDM-Bauteile für die Kategorie O - Unkontrollierte Umgebung (IEC 61753-087-6:2012)

Dispositifs d’interconnexion et composants passifs à fibres optiques - Norme de performance - Partie 087-6 : Dispositifs WWDM unimodaux non connectorisés bidirectionnels 1 310 nm en voie montante et 1 490 nm en voie descendante pour la catégorie O - Environnement non contrôlé (CEI 61753-087-6:2012)

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English version

Fibre optic interconnecting devices and passive components - Performance standard - Part 087-6: Non-connectorised single-mode bidirectional 1310 nm upstream and 1490 nm downstream WWDM devices for category O - Uncontrolled environment

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Dispositifs d'interconnexion et composants passifs à fibres optiques - Norme de performance - Partie 087-6 : Dispositifs WWDM unimodaux non connectorisés bidirectionnels 1 310 nm en voie montante et 1 490 nm en voie descendante pour la catégorie O - Environnement non contrôlé

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil 087-6: Nicht mit Steckverbindern versehene bidirektionale 1310-nm-upstream- und 1490-nm-downstream-Einmoden-WWDM-Bauteile für die Kategorie O - Unkontrollierte Umgebung

(IEC 61753-087-6:2012)

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Foreword

The text of document 86B/3256/CDV, future edition 1 of IEC 61753-087-6, 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 61753-087-6:2012.

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)	2012-12-27
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2015-03-27

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Endorsement notice

The text of the International Standard IEC 61753-087-6:2012 was approved by CENELEC as a European Standard without any modification.

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

Publication	Year	Title	EN/HD	Year
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	-
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 61300-2-5	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-5: Tests - Torsion	EN 61300-2-5	-
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 - Optical power handling and damage threshold characterization	EN 61300-2-14	-
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	-
IEC 61300-2-42	-	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	-
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	-

Publication	Year	Title	EN/HD	Year
IEC 61300-2-48	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-48: Tests - Temperature-humidity cycling	EN 61300-2-48	-
IEC 61300-3-2	-	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	-
IEC 61300-3-6	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-6: Examinations and measurements - Return loss	EN 61300-3-6	-
IEC 61300-3-7 (mod)	-	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	-
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 61753-1	-	Fibre optic interconnecting devices and passive components performance standard - Part 1: General and guidance for performance standards	EN 61753-1	-
IEC 62074-1	-	Fibre optic interconnecting devices and passive components - Fibre optic WDM devices - Part 1: Generic specification	EN 62074-1	-

IEC 61753-087-6

Edition 1.0 2012-02

INTERNATIONAL STANDARD

Fibre optic interconnecting devices and passive components – Performance standard – Part 087-6: Non-connectorised single-mode bidirectional 1 310 nm upstream and 1 490 nm downstream WWDM devices for category O – Uncontrolled environment

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FOREWORD

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International Standard IEC 61753-087-6 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:

CDV	Report on voting
86B/3256/CDV	86B/3328/RVC

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.

A list of all parts of IEC 61753 series, under the general title *Fibre optic interconnecting devices and passive components – Performance standard*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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
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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – PERFORMANCE STANDARD –

Part 087-6: Non-connectorised single-mode bidirectional 1 310 nm upstream and 1 490 nm downstream WWDM devices for category O – Uncontrolled environment

1 Scope

This part of IEC 61753 contains the minimum initial performance, test and measurement requirements and severities which a fibre optic pigtailed 1 310 nm upstream and 1 490 nm downstream wide wavelength division multiplexing (WWDM) passive optical network (PON) device must satisfy in order to be categorized as meeting the requirements of category O (uncontrolled environments), as defined in Annex A of IEC 61753-1.

Annex B of this standard provides information concerning the function of the 1 310 nm upstream and 1 490 nm downstream WWDM.

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

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 – Optical power handling and damage threshold characterization*

IEC 61300-2-19, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-19: Tests – Damp heat (steady state)*

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