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**Optični spojni elementi in pasivne komponente - Tehnični standard - 042-2. del:  
Odsevne naprave OTDR vrste vtič-repek in vtič-vtičnica za kategorijo C -  
Nadzorovana okolja (IEC 61753-042-2:2014)**

Fibre optic interconnecting devices and passive components - Performance standard -  
Part 042-2: Plug-pigtail-style and plug-receptacle-style OTDR reflecting devices for  
category C - Controlled environments (IEC 61753-042-2:2014)

**iTeh STANDARD PREVIEW  
(standard preview)**  
Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil  
042-2: OTDR-Reflektorbauteile (in Steckverbinder-Pigtail- und Steckverbinder-Buchse-  
Bauform für die Kategorie C - Kontrollierte Umgebung (IEC 61753-042-2:2014)

[SIST EN 61753-042-2:2015](https://standards.iteh.ai/catalog/standards/sist/66931cb3-0b0f-4e3a-8fef-61753-042-2:2015)

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Dispositifs d'interconnexion et composants passifs à fibres optiques - Norme de  
performance - Partie 042-2: Dispositifs de réflexion pour OTDR de modèle à fiche-fibre  
amorce et modèle à fiche-embase pour catégorie C - Environnements contrôlés (CEI  
61753-042-2:2014)

**Ta slovenski standard je istoveten z: EN 61753-042-2:2014**

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**ICS:**

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices
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EUROPEAN STANDARD

**EN 61753-042-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2014

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English Version

**Fibre optic interconnecting devices and passive components -  
Performance standard - Part 042-2: Plug-pigtail-style and plug-  
receptacle-style OTDR reflecting devices for category C -  
Controlled environments  
(IEC 61753-042-2:2014)**

Dispositifs d'interconnexion et composants passifs à fibres optiques - Norme de performance - Partie 042-2: Dispositifs de réflexion pour OTDR de modèle à fiche-fibre amorce et modèle à fiche-embase pour catégorie C - Environnements contrôlés  
(CEI 61753-042-2:2014)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil 042-2: OTDR-Reflektorbauteile in Steckverbinder-Pigtail- und Steckverbinder-Buchse-Bauform für die Kategorie C - Kontrollierte Umgebung  
(IEC 61753-042-2:2014)

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Europäisches Komitee für Elektrotechnische Normung

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

## Foreword

The text of document 86B/3709/CDV, future edition 1 of IEC 61753-042-2, 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 61753-042-2:2014.

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) 2015-06-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-09-25

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The text of the International Standard IEC 61753-042-2:2014 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61753-1:2007 NOTE Harmonised as EN 61753-1:2007

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures	EN 61300	series
IEC 61300-1		Fibre optic interconnecting devices and passive components - Basic test and measurement procedures Part 1: General and guidance	EN 61300-1	
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 - Maximum input 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	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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 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	-	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 61300-3-7 (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	-

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IEC 61753-042-2

Edition 1.0 2014-08

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Performance standard –  
Part 042-2: Plug-pigtail-style and plug-receptacle-style OTDR reflecting devices for category C – Controlled environments**

<https://standards.iteh.ai/catalog/standards/sist/66931cb3-0b0f-4e3a-8fef-859215700000/iec-61753-042-2:2015>

**Dispositifs d'interconnexion et composants passifs à fibres optiques – Norme de performance –  
Partie 042-2: Dispositifs de réflexion pour OTDR de modèle à fiche-fibre amorce et modèle à fiche-embase pour catégorie C – Environnements contrôlés**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Part 042-2: Plug-pigtail-style and plug-receptacle-style  
OTDR reflecting devices for category C –  
Controlled environments**

## FOREWORD

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International Standard IEC 61753-042-2 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:

CDV	Report on voting
86B/3709/CDV	86B/3785/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 standards*, can be found on the IEC website.

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.

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

### Part 042-2: Plug-pigtail-style and plug-receptacle-style OTDR reflecting devices for category C – Controlled environments

#### 1 Scope

This part of IEC 61753 contains the minimum initial performance, test and measurement requirements and severities which plug-pigtail style and plug-receptacle style OTDR reflecting devices need to satisfy in order to be categorized as meeting the requirements of category C- Controlled environments, as defined in Annex A of IEC 61753-1:2007 [1]<sup>1</sup>. They are for out-of-band OTDR testing of an optical fibre system.

Annex B of this standard provides information concerning this device.

#### 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 (all parts), *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures*

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*

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*

<sup>1</sup> Numbers in square brackets refer to the Bibliography.