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Fibre optic interconnecting devices and passive components - Performance standard - Part 071-02: Non-connectorized single-mode fibre optic  $1 \times 2$  and  $2 \times 2$  spatial switches for category C - Controlled environments

## ESTI STANDARDI EESSÖNA

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See Eesti standard EVS-EN IEC 61753-071-02:2020 sisaldb Euroopa standardi EN IEC 61753-071-02:2020 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 61753-071-02:2020 consists of the English text of the European standard EN IEC 61753-071-02:2020.
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Supersedes EN 61753-071-2:2014 and all of its  
amendments and corrigenda (if any)

English Version

Fibre optic interconnecting devices and passive components -  
Performance standard - Part 071-02: Non-connectorized single-  
mode fibre optic  $1 \times 2$  and  $2 \times 2$  spatial switches for category C -  
Controlled environments  
(IEC 61753-071-02:2020)

Dispositifs d'interconnexion et composants passifs  
fibroniques - Norme de performance - Partie 071-02:  
Commutateurs spatiaux optiques unimodaux  $1 \times 2$  et  $2 \times 2$   
non connectorisés pour la catégorie C - Environnements  
contrôlés  
(IEC 61753-071-02:2020)

Lichtwellenleiter - Verbindungselemente und passive  
Bauteile - Betriebsverhalten - Teil 071-2: Nicht mit  
Steckverbindern versehene räumliche  $1 \times 2$  und  $2 \times 2$   
Einmodenschalter für die Kategorie C - Kontrollierte  
Umgebung  
(IEC 61753-071-02:2020)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

The text of document 86B/4324/FDIS, future edition 1 of IEC 61753-071-02, 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 IEC 61753-071-02:2020.

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) 2021-07-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-10-27

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The text of the International Standard IEC 61753-071-02:2020 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 61300-3-3	NOTE	Harmonized as EN 61300-3-3
IEC 61300-3-4	NOTE	Harmonized as EN 61300-3-4
IEC 61753-071-2:2014	NOTE	Harmonized as EN 61753-071-2:2014 (not modified)
IEC 61753-1:2018	NOTE	Harmonized as EN IEC 61753-1:2018 (not modified)
IEC 62343-1	NOTE	Harmonized as EN IEC 62343-1

## Annex ZA (normative)

### **Normative references to international publications with their corresponding European publications**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where 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 60068-2-27	2008	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN IEC 60793-2-50	-
IEC 60794-2-50	-	Optical fibre cables - Part 2-50: Indoor optical fibre cables - Family specification for simplex and duplex cables for use in terminated cable assemblies	EN IEC 60794-2-50	-
IEC 60876-1	-	Fibre optic interconnecting devices and passive components - Fibre optic spatial switches - Part 1: Generic specification	EN 60876-1	-
IEC 61300	series	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 or cable retention	EN IEC 61300-2-4	-
IEC 61300-2-5	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-5: Tests - Torsion	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	-	-
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	-
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 dependence of a single-mode fibre optic device	-	-
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	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61300-3-7	-	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	-	-
IEC 61300-3-21	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-21: Examinations and measurements - Switching time	EN IEC 61300-3-21	-
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 61300-3-50	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-50: Examinations and measurements - Crosstalk for optical spatial switches	EN 61300-3-50	-
IEC/TS 62627-09	-	Fibre optic interconnecting devices and passive components - Vocabulary for passive optical devices	-	-

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components –  
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Norme de performance –  
Partie 071-02: Commutateurs spatiaux optiques unimodaux  $1 \times 2$  et  $2 \times 2$   
non connectorisés pour la catégorie C – Environnements contrôlés**



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non connectorisés pour la 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 071-02: Non-connectorized single-mode fibre optic 1 × 2 and  
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This first edition cancels and replaces IEC 61753-071-2 published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 61753-071-2:2014.

- a) addition of performance requirements of repeatability and switching durability;
- b) deleting of performance requirements of directivity;
- c) deleting of test of operational shock;
- d) change of performance requirements of switching time;