

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 61300-3-7:2021 sisaldab Euroopa standardi EN IEC 61300-3-7:2021 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 61300-3-7:2021 consists of the English text of the European standard EN IEC 61300-3-7:2021.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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English Version

**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 61300-3-7:2021)**

Dispositifs d'interconnexion et composants passifs à fibres  
optiques - Méthodes fondamentales d'essais et de mesures  
- Partie 3-7: Examens et mesurages - Affaiblissement et  
affaiblissement de réflexion des composants unimodaux en  
fonction de la longueur d'onde  
(IEC 61300-3-7:2021)

Lichtwellenleiter - Verbindungselemente und passive  
Bauteile - Grundlegende Prüf- und Messverfahren - Teil 3-  
7: Untersuchungen und Messungen -  
Wellenlängenabhängigkeit von Dämpfung und  
Rückflusssdämpfung von Einmodenbauteilen  
(IEC 61300-3-7:2021)

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## European foreword

The text of document 86B/4337/CDV, future edition 3 of IEC 61300-3-7, 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 61300-3-7:2021.

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- latest date by which the document has to be implemented at national (dop) 2022-08-11 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2022-08-11 document have to be withdrawn

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IEC 61300-3-4 NOTE Harmonized as EN 61300-3-4

IEC 61300-3-6 NOTE Harmonized as EN 61300-3-6

IEC 61300-3-29 NOTE Harmonized as EN 61300-3-29

## 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 60050-731	-	International Electrotechnical Vocabulary (IEV) - Part 731: Optical fibre communication	-	-
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 61755-2-4	-	Fibre optic interconnecting devices and passive components - Connector optical interfaces - Part 2-4: Connection parameters of non-dispersion shifted single-mode physically contacting fibres - Non-angled for reference connection applications	EN 61755-2-4	-
IEC 61755-2-5	-	Fibre optic interconnecting devices and passive components - Connector optical interfaces - Part 2-5: Connection parameters of non-dispersion shifted single-mode physically contacting fibres - Angled for reference connection applications	EN 61755-2-5	-
IEC/TR 61931	-	Fibre optic - Terminology	-	-
IEC 62074-1	-	Fibre optic interconnecting devices and passive components - Fibre optic WDM devices - Part 1: Generic specification	EN 62074-1	-

# INTERNATIONAL STANDARD

**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**



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

ICS 33.180.20

ISBN 978-2-8322-9989-0

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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**

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IEC 61300-3-7 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics. It is an International Standard.

This third edition cancels and replaces the second edition published in 2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) reduction of the number of alternative methods proposed to bring in-line with industry practice;
- b) re-statement of the equations for insertion loss and return loss using logarithmic forms more common in the industry;
- c) additional recommendations with respect to the creation of fibre terminations;

- d) additional discussion on the characterization of the optical sources used in this document;
- e) simplification of bi-directional testing;
- f) removal of separate return loss only measurement procedures.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86B/4337/CDV	86B/4425A/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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