



NSAI
Standards

Irish Standard
I.S. EN 61300-2-9:2017

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-9: Tests - Shock

I.S. EN 61300-2-9:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 61300-2-9:2017 is the adopted Irish version of the European Document EN 61300-2-9:2017, Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-9: Tests - Shock

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EUROPEAN STANDARD

EN 61300-2-9

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2017

ICS 33.180.20

Supersedes EN 61300-2-9:2010

English Version

**Fibre optic interconnecting devices and passive components -
Basic test and measurement procedures - Part 2-9: Tests -
Shock
(IEC 61300-2-9:2017)**

Dispositifs d'interconnexion et composants passifs à fibres
optiques - Méthodes fondamentales d'essais et de mesures
- Partie 2-9: Essais - Chocs
(IEC 61300-2-9:2017)

Lichtwellenleiter - Verbindungselemente und passive
Bauelemente - Grundlegende Prüf- und Messverfahren -
Teil 2-9: Prüfungen - Schocken
(IEC 61300-2-9:2017)

This European Standard was approved by CENELEC on 2017-02-10. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

EN 61300-2-9:2017

European foreword

The text of document 86B/3979/CDV, future edition 3 of IEC 61300-2-9, 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 61300-2-9:2017.

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) 2017-11-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-02-10

This document supersedes EN 61300-2-9:2010.

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Endorsement notice

The text of the International Standard IEC 61300-2-9:2017 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 60068-2-27:2008	NOTE	Harmonized as EN 60068-2-27:2009.
IEC 60068-2-47:2005	NOTE	Harmonized as EN 60664-1:2007.
IEC 61300-3-3	NOTE	Harmonized as EN 61300-3-3.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	-	Environmental testing -- Part 1: General and guidance	EN 60068-1	-
IEC 61300-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance	EN 61300-1	-
IEC 61300-3-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 3-1: Examinations and measurements - Visual examination	EN 61300-3-1	-
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	-
ISO 2041	-	Mechanical vibration, shock and condition-monitoring - Vocabulary		-

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IEC 61300-2-9

Edition 3.0 2017-01

INTERNATIONAL STANDARD



**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 2-9: Tests – Shock**





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IEC 61300-2-9

Edition 3.0 2017-01

INTERNATIONAL STANDARD



**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 2-9: Tests – Shock**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-9: Tests – Shock

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61300-2-9 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This third edition cancels and replaces the second edition published in 2010. This edition constitutes a technical revision.

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

- a) inserted clause "Terms and definitions";
- b) added precise descriptions to clause "Apparatus";
- c) added sub clause "Testing" into clause "Procedure";
- d) added "Bibliography".

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

CDV	Report on voting
86B/3979/CDV	86B/4017/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61300 series, published under the general title *Fibre optic interconnecting devices and passive components*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-9: Tests – Shock

1 Scope

This part of IEC 61300 defines a test method to reveal mechanical weakness and/or degradation of fibre optic devices when subjected to repetitive or non-repetitive mechanical shocks. It simulates infrequent repetitive or non-repetitive shocks likely to be encountered in normal service or during transportation.

2 Normative references

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.

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 61300-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General and guidance*

IEC 61300-3-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-1: Examinations and measurements – Visual examination*

IEC 61300-3-28, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-28: Examinations and measurements – Transient loss*

ISO 2041, *Mechanical vibration, shock and condition monitoring – Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 2041 and IEC 60068-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 check point

point located on the fixture, on the table surface of the shock machine, or on the DUT as close as possible to the fixing point and rigidly connected to it

Note 1 to entry A number of check points may be used to ensure the test requirements are satisfied.

Note 2 to entry If the DUT is attached by more than four fixing points, the relevant specification should state the number of fixing points that are to be used as check points.

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