



SLOVENSKI STANDARD SIST EN 61202-1:2009

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Fibre optic interconnecting devices and passive components - Fibre optic isolators - Part 1: Generic specification (IEC 61202-1:2009)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Lichtwellenleiter-Isolatoren - Teil 1: Fachgrundspezifikation (IEC 61202-1:2009)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Isolateurs à fibres optiques - Partie 1: Spécification générique (CEI 61202-1:2009)

Ta slovenski standard je istoveten z: EN 61202-1:2009

ICS:

33.180.20 Ú[ç^: [çæ) ^Á æ] !æ^Á æ Fibre optic interconnecting devices
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61202-1

September 2009

ICS 33.180.20

Supersedes EN 61202-1:2000

English version

**Fibre optic interconnecting devices
and passive components -
Fibre optic isolators -
Part 1: Generic specification
(IEC 61202-1:2009)**

Dispositifs d'interconnexion
et composants passifs à fibres optiques -
Isolateurs à fibres optiques -
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Lichtwellenleiter -
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und passive Bauteile -
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Teil 1: Fachgrundspezifikation
(IEC 61202-1:2009)

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SIST EN 61202-1:2009

This European Standard was approved by CENELEC on 2009-08-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86B/2845/FDIS, future edition 3 of IEC 61202-1, 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 was approved by CENELEC as EN 61202-1 on 2009-08-01.

This European Standard supersedes EN 61202-1:2000.

The specific technical changes with regard to EN 61202-1:2000 are as follows.

- the definitions have been reconsidered;
- environmental category has been deleted from classification;
- the clause relating to quality assessment procedures has been deleted;
- Annexes A and B have been added.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2010-05-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2010-08-01

Annex ZA has been added by CENELEC.

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Endorsement notice

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The text of the International Standard IEC 61202-1:2009 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 referenced documents are indispensable for the application 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 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 60027	Series	Letter symbols to be used in electrical technology	EN 60027	Series
IEC 60050-731	1991	International Electrotechnical Vocabulary (IEV) - Chapter 731: Optical fibre communication	—	—
IEC 60617	Data-base	Graphical symbols for diagrams	—	—
IEC 60695-11-5	2004	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2005
IEC 60825-1	2007	Safety of laser products - Part 1: Equipment classification and requirements	EN 60825-1	2007
IEC 60869-1	— ¹⁾	Fibre optic attenuators - Part 1: Generic specification	EN 60869-1	2000 ²⁾
IEC 60874	Series	Connectors for optical fibres and cables	EN 60874	Series
IEC 61073-1	— ¹⁾	Fibre optic interconnecting devices and passive components - Mechanical splices and fusion splice protectors for optical fibres and cables - Part 1: Generic specification	EN 61073-1	2009 ²⁾
IEC 61300	Series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures	EN 61300	Series
IEC 61754-2	— ¹⁾	Fibre optic connector interfaces - Part 2: Type BFOC/2,5 connector family	EN 61754-2	1997 ²⁾
IEC 61754-4	— ¹⁾	Fibre optic connector interfaces - Part 4: Type SC connector family	EN 61754-4	1997 ²⁾
IEC 61754-13	— ¹⁾	Fibre optic connector interfaces - Part 13: Type FC-PC connector	EN 61754-13	2006 ²⁾
IEC QC 01	— ¹⁾	IEC Quality Assessment System for Electronic Components (IECQ System) - Basic Rules	—	—
IEC QC 001002-3	— ¹⁾	IEC Quality Assessment System for Electronic Components (IECQ) - Rules of Procedure - Part 3: Approval procedures	—	—
IEC Guide 102	— ¹⁾	Electronic components – Specification structures for quality assessment (Qualification approval and capability approval)	—	—

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 129-1	2004	Technical drawings - Indication of dimensions and tolerances - Part 1: General principles	–	–
ISO 286-1	1988	ISO system of limits and fits - Part 1: Bases of tolerances, deviations and fits	EN 20286-1	1993
ISO 1101	– ¹⁾	Geometrical Product Specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out	–	–
ISO 8601	2004	Data elements and interchange formats - Information interchange - Representation of dates and times	–	–

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IEC 61202-1

Edition 3.0 2009-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Fibre optic
isolators –
Part 1: Generic specification**

**Dispositifs d'interconnexion et composants passifs à fibres optiques – Isolateurs
à fibres optiques –
Partie 1: Spécification générique**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING
DEVICES AND PASSIVE COMPONENTS –
FIBRE OPTIC ISOLATORS –**

Part 1: Generic specification

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 61202-1 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 first edition published in 2000. It constitutes a technical revision. The specific technical changes with regard to the previous edition are as follows.

- 1) The definitions have been reconsidered.
- 2) Environmental category has been deleted from classification.
- 3) The clause relating to quality assessment procedures has been deleted.
- 4) Annexes A and B have been added.

Future standards in this series will carry the new general title as cited above.

The text of this standard is based on the following documents:

FDIS	Report on voting
86B/2845/FDIS	86B/2883/RVD

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

A list of all parts of the IEC 61202 series, under the general title: *Fibre optic interconnecting devices and passive components – Fibre optic isolators*, can be found on the IEC website.

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

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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 – FIBRE OPTIC ISOLATORS –

Part 1: Generic specification

1 Scope

This part of IEC 61202 applies to isolators used in the field of fibre optics, all exhibiting the following features:

- they are non-reciprocal optical devices, in which each port is either an optical fibre or fibre optic connector;
- they are passive devices containing no opto-electronic or other transducing elements;
- they have two optical ports for directionally transmitting optical power.

2 Normative references

The following referenced documents are indispensable for the application 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 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60050(731):1991, *International Electrotechnical Vocabulary – Chapter 731: Optical fibre communication*

IEC 60617 (all parts), *Graphical symbols for diagrams*

IEC 60695-11-5:2004, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

IEC 60825-1:2007, *Safety of laser products – Part 1: Equipment classification and requirements*

IEC 60869-1, *Fibre optic attenuators – Part 1: Generic specification*

IEC 60874 (all parts), *Connectors for optical fibres and cables*

IEC 61073-1, *Fibre optic interconnecting devices and passive components – Mechanical splices and fusion splice protectors for optical fibres and cables – Part 1: Generic specification*

IEC 61300 (all parts), *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures*

IEC 61754-2, *Fibre optic connector interfaces – Part 2: Type BFOC/2,5 connector family*

IEC 61754-4, *Fibre optic connector interfaces – Part 4: Type SC connector family*

IEC 61754-13, *Fibre optic connector interfaces – Part 13: Type FC-PC connector*