



SLOVENSKI STANDARD

SIST EN 61314-1:2012

01-maj-2012

Nadomešča:
SIST EN 61314-1:2009

Optični spojni elementi in pasivne komponente - Izhodne zmogljivosti optičnih vlaken - 1. del: Rodovna specifikacija (IEC 61314-1:2011)

Fibre optic interconnecting devices and passive components - Fibre optic fan-outs - Part 1: Generic specification (IEC 61314-1:2011)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Lichtwellenleiteraufteiler - Teil 1: Fachgrundspezifikation (IEC 61314-1:2011)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Systèmes d'éclatement pour fibres optiques - Partie 1: Spécification générique (CEI 61314-1:2011)

Ta slovenski standard je istoveten z: EN 61314-1:2012

ICS:

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices
-----------	---------------------------------------	-------------------------------------

SIST EN 61314-1:2012

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 61314-1:2012

<https://standards.iteh.ai/catalog/standards/sist/694dacac-ee13-433b-bc47-84ca0e519721/sist-en-61314-1-2012>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61314-1

March 2012

ICS 33.180.20

Supersedes EN 61314-1:2009

English version

**Fibre optic interconnecting devices and passive components -
Fibre optic fan-outs -
Part 1: Generic specification
(IEC 61314-1:2011)**

Dispositifs d'interconnexion et composants
passifs à fibres optiques -
Systèmes d'éclatement pour fibres
optiques -
Partie 1: Spécification générique
(CEI 61314-1:2011)

Lichtwellenleiter -
Verbindungselemente und passive
Bauteile -
Lichtwellenleiterteile -
Teil 1: Fachgrundspezifikation
(IEC 61314-1:2011)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This European Standard was approved by CENELEC on 2011-12-29. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, 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, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86B/3270/FDIS, future edition 4 of IEC 61314-1, 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 approved by CENELEC as EN 61314-1:2012.

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) 2012-09-29
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2012-12-29

This document supersedes EN 61314-1:2009.

The specific technical changes from EN 61314-1:2009 are to reconsider a drawing showing the relationship between EN 60874, EN 61753, EN 61754 series of standards, and updating the normative references.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

(standards.iteh.ai)

Endorsement notice

SIST EN 61314-1:2012

The text of the International Standard IEC 61314-1:2011 was approved by CENELEC as a European Standard without any modification. 84ca0e519721/sist-en-61314-1-2012

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- | | | |
|--------------------|------|----------------------------------|
| IEC 60793-1 series | NOTE | Harmonized in EN 60793-1 series. |
| IEC 60869-1 | NOTE | Harmonized as EN 60869-1. |

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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	Series	Letter symbols to be used in electrical technology	-	-
IEC 60050-731	-	International Electrotechnical Vocabulary (IEV) - Chapter 731: Optical fibre communication	-	-
IEC 60617	Data-base	Graphical symbols for diagrams	-	-
IEC 60695-11-5	-	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	-
IEC 60793-1-1	-	Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance	EN 60793-1-1	-
IEC 60794-1-1	-	Optical fibre cables - Part 1-1: Generic specification - General	EN 60794-1-1	-
IEC 60825-1	-	Safety of laser products - Part 1: Equipment classification and requirements	EN 60825-1	-
IEC 60869-1	-	Fibre optic attenuators - Part 1: Generic specification	EN 60869-1	-
IEC 60874-1	-	Fibre optic interconnecting devices and passive components - Connectors for optical fibres and cables - Part 1: Generic specification	EN 60874-1	-
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	EN 61073-1	-
IEC 61300	Series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures	EN 61300	Series
IEC 61753	Series	Fibre optic interconnecting devices and passive components performance standard	EN 61753	Series
IEC/TR 61930	-	Fibre optic graphical symbology	-	-
IEC/TR 61931	-	Fibre optic - Terminology	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC Guide 102	-	Electronic components - Specification structures for quality assessment (Qualification approval and capability approval)	-	-
IECQ QC 001002-3	-	IEC Quality Assessment System for Electronic-Components (IECQ) - Rules of Procedure - Part 3: Approval procedures		-
ISO 129	-	Technical drawings - Dimensioning - General - principles, definitions, methods of execution and special indications		-
ISO 286-1	-	ISO system of limits and fits - Part 1: Bases of tolerances, deviations and fits	EN ISO 286-1	-
ISO 1101	-	Geometrical Product Specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out	EN ISO 1101	-
ISO 8601	-	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 61314-1:2012](https://standards.iteh.ai/catalog/standards/sist/694dacac-ee13-433b-bc47-84ca0e519721/sist-en-61314-1-2012)

<https://standards.iteh.ai/catalog/standards/sist/694dacac-ee13-433b-bc47-84ca0e519721/sist-en-61314-1-2012>



IEC 61314-1

Edition 4.0 2011-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Fibre optic fan-outs –
Part 1: Generic specification**

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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

R

ICS 33.180.20

ISBN 978-2-88912-760-3

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	6
4 Requirements	6
4.1 General	6
4.2 Classification.....	6
4.2.1 General	6
4.2.2 Style	7
4.2.3 Arrangement.....	7
4.2.4 Variant	8
4.2.5 Normative reference extensions	8
4.3 Documentation	9
4.3.1 Symbols	9
4.3.2 Specification system.....	9
4.3.3 Drawings	10
4.3.4 Tests and measurements.....	11
4.3.5 Test reports	11
4.3.6 Instructions for use.....	11
4.4 Standardisation system.....	11
4.4.1 Interface standards.....	11
4.4.2 Performance standards.....	12
4.4.3 Optical interface standards.....	12
4.4.4 Reliability documentation.....	13
4.4.5 Interlinking	13
4.5 Design and construction	15
4.5.1 Materials	15
4.5.2 Workmanship.....	15
4.6 Quality	15
4.7 Performance.....	15
4.8 Identification and marking	15
4.8.1 Variant identification number	15
4.8.2 Component marking	16
4.8.3 Package marking.....	16
4.9 Packaging	16
4.10 Storage conditions	16
4.11 Safety	17
Bibliography.....	18
Figure 1 – Pigtail/patchcord fan-out	7
Figure 2 – Semi-compact fan-out	7
Figure 3 – Compact fan-out	7
Figure 4 – Standards	14
Figure 5 – Standards interlink matrix.....	15
Table 1 – Three-level IEC specification structure	9

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING
DEVICES AND PASSIVE COMPONENTS –
FIBRE OPTIC FAN-OUTS –****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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61314-1 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

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

The specific technical changes from the previous edition are to reconsider a drawing showing the relationship between IEC 60874, IEC 61753, IEC 61754 series of standards, and updating the normative references.

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

FDIS	Report on voting
86B/3270/FDIS	86B/3300/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.

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

A list of all parts of IEC 61314 series, under the general title *Fibre optic interconnecting devices and passive components – Fibre optic fan-outs* can be found on the IEC website.

Future standards in this series will carry the general new title as cited above. Titles of existing standards in this series will be updated at the time of the new edition.

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.

ITeH STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 61314-1:2012

<https://standards.iteh.ai/catalog/standards/sist/694dacac-ee13-433b-bc47-84ca0e519721/sist-en-61314-1-2012>

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC FAN-OUTS –

Part 1: Generic specification

1 Scope

This part of IEC 61314 specifies requirements for fan-outs used in the fibre optics field to provide a safe transition from multifibre cable units to individual fibres or cables.

This standard corresponds to QC880000 of IEC Quality Assessment System.

This standard does not cover test and measurement procedures, which are described in IEC 61300 series.

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, *International Electrotechnical Vocabulary – Chapter 731: Optical fibre communication*

IEC 60617, *Graphical symbols for diagrams*

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

IEC 60793-1-1, *Optical fibres – Part 1-1: Measurement methods and test procedures – General and guidance*

IEC 60794-1-1, *Optical fibre cables – Part 1-1: Generic specification – General*

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

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

IEC 60874-1, *Connectors for optical fibres and cables – Part 1: Generic specification*

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*

IEC 61753 (all parts), *Fibre optic interconnecting devices and passive components performance standard*