
Največja obremenitev optičnega vlakna – 1. del: Splošna specifikacija (IEC 61314-1:2005)

Fibre optic fan-outs - Part 1: Generic specification (IEC 61314-1:2005)

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EUROPEAN STANDARD

EN 61314-1

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Fibre optic fan-outs
Part 1: Generic specification
(IEC 61314-1:2005)

Systèmes d'éclatement pour fibres
et câbles optiques
Partie 1: Spécification générique
(CEI 61314-1:2005)

Lichtwellenleiterteiler
Teil 1: Fachgrundspezifikation
(IEC 61314-1:2005)

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This European Standard was approved by CENELEC on 2005-07-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 86B/2107/FDIS, future edition 2 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 was approved by CENELEC as EN 61314-1 on 2005-07-01.

This European Standard supersedes EN 61314-1:1997.

This European Standard introduces a new standardization system of SC 86BXA and safety items.

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) 2006-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2008-07-01

Annex ZA has been added by CENELEC.

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Endorsement notice (standards.iteh.ai)

The text of the International Standard IEC 61314-1:2005 was approved by CENELEC as a European Standard without any modification. [SIST EN 61314-1:2006](https://standards.iteh.ai/catalog/standards/sist/1b7c6ba4-2461-4652-bd8a-2d039f187018?not-noted)

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

IEC 60874-1	NOTE	Harmonized as EN 60874-1:1999 (not modified).
IEC 61753-051-3	NOTE	Harmonized as EN 61753-051-3:2002 (not modified).
IEC 61754-2	NOTE	Harmonized as EN 61754-2:1997 (not modified).
IEC 61754-4	NOTE	Harmonized as EN 61754-4:1997 (not modified).
IEC 61754-13	NOTE	Harmonized as EN 61754-13:1999 (not modified).

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 Where 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	HD 60027	Series
IEC 60050-731	- ¹⁾	International Electrotechnical Vocabulary (IEV) Chapter 731: Optical fibre communication	-	-
IEC 60410	- ¹⁾	Sampling plans and procedures for inspection by attributes	-	-
IEC 60617	database	Graphical symbols for diagrams	-	-
IEC 60695-11-5	- ¹⁾	Fire hazard testing Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2005 ²⁾
IEC 60793-1-1	- ¹⁾	Optical fibres Part 1-1: Measurement methods and test procedures - General and guidance	EN 60793-1-1	2003 ²⁾
IEC 60794-1-1	- ¹⁾	Optical fibre cables Part 1-1: Generic specification – General	EN 60794-1-1	2002 ²⁾
IEC 60825-1	- ¹⁾	Safety of laser products Part 1: Equipment classification, requirements and user's guide	EN 60825-1 + corr. February + A11	1994 ²⁾ 1995 1996
IEC 61073-1	- ¹⁾	Mechanical splices and fusion splice protectors for optical fibres and cables Part 1: Generic specification	EN 61073-1	2000 ²⁾
IEC 61300-1	- ¹⁾	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures Part 1: General and guidance	EN 61300-1	2003 ²⁾

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>
IEC 61300-2	Series	Part 2: Tests	EN 61300-2	Series
IEC 61300-3	Series	Part 3: Examinations and measurements	EN 61300-3	Series
IEC Guide 102	- ¹⁾	Electronic components – Specification structures for quality assessment (Qualification approval and capability approval)	-	-
IEC QC 001001	- ¹⁾	Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
IEC QC 001002	Series	IEC Quality Assessment System for Electronic Components (IECQ) – Rules of procedures	-	-
IEC QC 001002-3	- ¹⁾	Part 3: Approval procedures	-	-
ISO 129-1	- ¹⁾	Technical drawings - Indication of dimensions and tolerances Part 1: General principles	-	-
ISO 286-1	- ¹⁾	ISO system of limits and fits Part 1: Bases of tolerances, deviations and fits	EN 20286-1	1993 ²⁾
ISO 1101	- ¹⁾	Technical drawings - Geometrical tolerancing - Tolerancing of form, orientation, location and run-out - Generalities, definitions, symbols, indications on drawings	-	-
ISO 8601	- ¹⁾	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-

NORME
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Deuxième édition
Second edition
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**Systèmes d'éclatement pour fibres
et câbles optiques –**

**Partie 1:
Spécification générique**

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Fibre (optic fan-outs –

Part 1: [SIST EN 61314-1:2006](https://standards.iteh.ai/catalog/standards/sist/1b7c6ba4-2461-4652-bd8a-2d711020dfb2/sist-en-61314-1-2006)

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Generic specification

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

This second edition cancels and replaces the first edition, published in 1995, and constitutes a technical revision. It introduces a new standardization system of SC86B and safety items.

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

FDIS	Report on voting
86B/2107/FDIS	86B/2133/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.

IEC 61314 consists of the following parts, under the general title *Fibre optic fan-outs*:

Part 1: Generic specification

Part 1-1: Blank detail specification – Environmental categories 1, 2, 3, 5 and 99

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

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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INTRODUCTION

This Part 1 of IEC 61314 is divided into three parts.

The first part: Clauses 1 to 3, comprising the Scope, Normative references and Terms and definitions, contain general information pertaining to this generic specification.

The second part: Clause 4, entitled "Requirements" contains all the requirements to be met by fan-outs covered by this standard, i.e. requirements for classification, the IEC specification system, documentation, materials, workmanship, quality, performance, identification, and packaging.

The third part: Clause 5, entitled "Quality assessment procedures" contains all of the procedures which need to be followed for proper quality assessment of products covered by this standard.

NOTE Test and measurement procedures are described in IEC 61300-1, IEC 61300-2 and IEC 61300-3.

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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 establishes uniform requirements for the following points:

- fibre optic fan-out requirements;
- quality assessment procedures.

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 60410, *Sampling plans and procedures for inspection by attributes*

IEC 60617-DB-2001¹⁾, *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, requirements and user's guide*

IEC 61073-1, *Mechanical splices and fusion splice protectors for optical fibres and cables – Part 1: Generic specification*

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

¹⁾ "DB" refers to the IEC on-line database.