



**SLOVENSKI STANDARD**  
**SIST EN 61314-1:1997**  
**01-december-1997**

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**Fibre optic fan-outs - Part 1: Generic specification (IEC 1314-1:1995)**

Fibre optic fan-outs -- Part 1: Generic specification

Aufteiler für Lichtwellenleiter - Teil 1: Fachgrundspezifikation

Systèmes d'éclatement pour fibres et câbles optiques -- Partie 1: Spécification générique

**Ta slovenski standard je istoveten z: EN 61314-1:1997**

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**ICS:**

33.180.20      Ú[ ç^: [ çæ) ^Á æ | æ^Á æ      Fibre optic interconnecting  
[ ] cã } æç|æ } æ      devices

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61314-1**

May 1997

ICS 33.180.20

English version

**Fibre optic fan-outs**  
**Part 1: Generic specification**  
(IEC 1314-1:1995)

Systèmes d'éclatement pour fibres  
et câbles optiques  
Partie 1: Spécification générique  
(CEI 1314-1:1995)

Abzweiger für Lichtwellenleiter  
Teil 1: Fachgrundspezifikation  
(IEC 1314-1:1995)

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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.

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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 the International Standard IEC 1314-1:1995, prepared by SC 86B, Fibre optic interconnecting devices and passive components, of IEC TC 86, Fibre optics, was submitted to the formal vote and was approved by CENELEC as EN 61314-1 on 1997-03-11 without any modification.

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) 1998-03-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 1998-03-01

Annexes designated "normative" are part of the body of the standard.  
Annexes designated "informative" are given for information only.  
In this standard, annex ZA is normative and annex A informative.  
Annex ZA has been added by CENELEC.

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### Endorsement notice

The text of the International Standard IEC 1314-1:1995 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

Normative references to international publications  
with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 QC 001001	1986	Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
IEC QC 001002	1986	Rules of procedure of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
IEC 27.	series	Letter symbols to be used in electrical technology	HD 245	series
IEC 50(731)	1991	International Electrotechnical Vocabulary (IEV) Chapter 731: Optical fibre communication	-	-
IEC 68-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1 <sup>1)</sup>	1994
IEC 410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 419	1973	Guide for the inclusion of lot-by-lot and periodic inspection procedures in specifications for electronic components (or parts)	-	-
IEC 617	series	Graphical symbols for diagrams	EN 60617	series
IEC 695-2-2	1991	Fire hazard testing Part 2: Test methods Section 2: Needle-flame test	EN 60695-2-2	1994
IEC 793-1	1992	Optical fibres Part 1: Generic specification	-	-
IEC 794-1	1993	Optical fibre cables - Part 1: Generic specification	-	-

1) EN 60068-1 includes the corrigendum October 1988 and A1:1992 to IEC 68-1.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 874-1	1993	Connectors for optical fibres and cables Part 1: Generic specification	-	-
IEC 875-1	1992	Fibre optic branching devices Part 1: Generic specification	-	-
ISO 129	1985	Technical drawings - Dimensioning General principles, definitions, methods of execution and special indications	-	-
ISO 286-1	1988	ISO system of limits and fits Part 1: Bases of tolerances, deviations and fits	EN 20286-1	1993
ISO 370	1975	Toleranced dimensions - Conversion from inches into millimetres and vice versa	-	-
ISO 1101	1983	Technical drawings - Geometrical tolerancing - Tolerancing of form, orientation, location and run-out - Generalities, definitions, symbols, indications on drawings	-	-
ISO 8601	1988	Data elements and interchange formats Information interchange - Representation of dates and times	EN 28601	1992

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Systemes d'éclatement pour fibres  
et câbles optiques –

Partie 1:  
Spécification générique

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Fibre optic fan-outs –

Part 1: [SIST EN 61314-1:1997](https://standards.iteh.ai/standards/61314-1-1997)

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Generic specification

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International Electrotechnical Commission  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## FIBRE OPTIC FAN-OUTS –

## Part 1: Generic specification

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. 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. The 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 the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

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International Standard IEC 1314-1 has been prepared by sub-committee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

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

DIS	Report on voting
86B(CO)182	86B/576/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.

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).

Annex A is for information only.

## FIBRE OPTIC FAN-OUTS –

### Part 1: Generic specification

#### 1 General

##### 1.1 Scope

This specification applies to fibre optic fan-outs. It includes:

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

##### 1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of IEC 1314-1. At the time of publication, the editions indicated were valid. All normative documents are subject to revision and parties to agreements based on IEC 1314-1 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

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References made to a specific clause or subclause of a standard include all subclauses to the reference unless otherwise specified.

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IEC QC 001001: 1986, *Basic Rules of the IEC Quality Assessment System for Electronic Components (IECQ)*

IEC QC 001002: 1986, *Rules of Procedure of the IEC Quality Assessment System for Electronic Components (IECQ)*

IEC 27, *Letter symbols to be used in electrical technology*

IEC 50(731): 1991, *International Electrotechnical Vocabulary (IEV) – Chapter 731: Optical fibre communication*

IEC 68-1: 1988, *Environmental testing – Part 1: General and guidance*

IEC 410: 1973, *Sampling plans and procedures for inspection by attributes*

IEC 419: 1973, *Guide for the inclusion of lot-by-lot and periodic inspection procedures in specifications for electronic components (or parts)*

IEC 617: *Graphical symbols for diagrams*

IEC 695-2-2: 1991, *Fire hazard testing – Part 2: Test methods – Section 2: Needle-flame test*

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IEC 793-1: 1992, *Optical fibres – Part 1: Generic specification*

IEC 794-1: 1993, *Optical fibre cables – Part 1: Generic specification*

IEC 874-1: 1993, *Connectors for optical fibres and cables – Part 1: Generic specification*

IEC 875-1: 1992, *Fibre optic branching devices – Part 1: Generic specification*

ISO 129: 1985, *Technical drawings – Dimensioning – General principles, definitions, methods of execution and special indications*

ISO 286-1: 1988, *ISO system of limits and fits – Part 1: Bases of tolerances, deviations and fits*

ISO 370: 1975, *Toleranced dimensions – Conversion from inches into millimetres and vice versa*

ISO 1101: 1983, *Technical drawings – Geometrical tolerancing – Tolerancing of form, orientation, location and run-out – Generalities, definitions, symbols, indications on drawings*

ISO 8601: 1988, *Data elements and interchange formats – Information interchange – Representation of dates and times*

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### 1.3 Definitions

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For the purpose of this specification, the following definitions apply. They also apply to all detail specifications written to this specification. The relevant definitions of IEC 50(731) also apply; however, the definitions of this specification prevail.

**1.3.1 fan-out:** Passive component providing a transition from multifibre cable unit to individual fibres or cables having at least one fibre or cable end connectorized.

The transition structure provides fibre and cable anchoring and may contain splices.

## 2 Requirements

The requirements for fibre optic fan-outs covered by this specification are specified in this clause and in the detail specification.

### 2.1 Classification

Fibre optic fan-outs are classified by the following categories:

- type;