SLOVENSKI STANDARD

SIST EN 61300-1:2004

september 2004

Povezovalne naprave in pasivne komponente optičnih vlaken – Postopki osnovnega preskušanja in merjenja – 1. del: Splošno in smernice (IEC 61300-1:2003)*

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance (IEC 61300-1:2003)

ICS 33.180.20

Referenčna številka
SIST EN 61300-1:2004(en)

EUROPEAN STANDARD **EN 61300-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM November 2003

ICS 33.180.20 Supersedes EN 61300-1:1997

English version

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures Part 1: General and guidance

(IEC 61300-1:2003)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Méthodes fondamentales d'essais et de mesures
Partie 1: Généralités et guide
(CEI 61300-1:2003)

Lichtwellenleiter-Verbindungselemente und passive Bauteile - Grundlegende Prüf- und Messverfahren
Teil 1: Allgemeines und Leitfaden
(IEC 61300-1:2003)

This European Standard was approved by CENELEC on 2003-11-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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

Ref. No. EN 61300-1:2003 E

Foreword

The text of document 86B/1849/FDIS, future edition 2 of IEC 61300-1, 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 61300-1 on 2003-11-01.

This European Standard supersedes EN 61300-1:1997.

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)	2004-08-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2006-11-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annexes A, B and ZA are normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61300-1:2003 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
IEC 60050-731	- [1]	International Electrotechnical Vocabulary (IEV) Chapter 731: Optical fibre communication	-	-
IEC 60068-2-1	- [1]	Environmental testing Part 2: Tests - Tests A: Cold	EN 60068-2-1	1993 [2]
IEC 60617 database	- [1]	Graphical symbols for diagrams	-	-
IEC 60825-1	- [1]	Safety of laser products Part 1: Equipment classification, requirements and user's guide	EN 60825-1 + corr. February	1994 [2] 1995
IEC 60825-2	- [1]	Part 2: Safety of optical fibre communication systems	EN 60825-2	2000 [2]
IEC 61300-3-1	- [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	1997 [2]
IEC 61315	- [1]	Calibration of fibre optic power meters	EN 61315	1997 [2]
ISO 4288	- [1]	Geometrical Product Specifications (GPS) - Surface texture: Profile method - Rules and procedures for the assessment of surface texture	EN ISO 4288	1997 [2]

[1] Undated reference.

[2] Valid edition at date of issue.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
61300-1

Deuxième édition
Second edition
2003-06

Dispositifs d'interconnexion et composants passifs à fibres optiques – Procédures fondamentales d'essais et de mesures –

Partie 1: Généralités et guide

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –

Part 1: General and guidance

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 1: General and guidance

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 61300-1 has been prepared by subcommittee 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. It constitutes a technical revision.

This bilingual version (2004-07) replaces the English version.

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

FDIS	Report on voting
86B/1849/FDIS	86B/1877/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 French version of this standard has not been voted upon.

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

IEC 61300 consists of the following parts, under the general title: *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures:*

– Part 1: General and guidance
– Part 2: Tests
– Part 3: Examinations and measurements

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.

INTRODUCTION

The publications of the IEC 61300 series contain fundamental information on environmental testing procedures and measurement procedures relating to fibre optic interconnecting devices and passive components. They are intended to be used to achieve uniformity and reproducibility in environmental testing procedures and measurement procedures.

The term "test procedure" refers to procedures commonly known as environmental tests. The expressions "environmental conditioning" and "environmental testing" refer to the environments to which components or equipment may be exposed so that an assessment may be made of their performance under the conditions of use, transport and storage.

The term "measurement procedure" refers to those measurements which are necessary to assess the physical and optical characteristics of a component and may also be used before, during or after a test procedure to measure the effects of environmental conditioning or testing. The return loss and attenuation tests are examples of measurement procedures.

The requirements for the performance of components or equipment subjected to the test and measurement procedures described in this standard are not included. The relevant specification for the device under test defines the allowed performance limits.

When drafting a specification or purchase contract, only those tests should be specified which are necessary for the relevant components or equipment taking into account the technical and economic aspects.

The environmental test procedures are contained in the IEC 61300-2 series and the measurement procedures in the IEC 61300-3 series. Each test or measurement procedure is published as a stand-alone publication so that it may be modified, expanded or cancelled without having an effect on any other test or measurement procedure. However, it should be noted that, where practical, reference is made to other standards as opposed to repeating all or part of already existing standards. As an example, the cold test for fibre optic apparatus refers to IEC 60068-2-1, but it also provides other needed information such as purpose, recommended severities and a list of items to be specified.

Multiple methods may be contained in a test or measurement procedure. As an example, several methods of measuring attenuation are contained in the attenuation measurement procedure.

If more than one method is contained in a test or measurement procedure, the reference method is identified.