SLOVENSKI STANDARD

SIST EN 61300-3-1:2006

marec 2006

Naprave za medsebojno povezovanje optičnih kablov in pasivne komponente – Osnovni preskusni in merilni postopki – 3-1. del: Pregledi in meritve – Vizualni pregled (IEC 61300-3-1:2005)

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-1: Examinations and measurements - Visual examination (IEC 61300-3-1:2005)

ICS 33.180.20

Referenčna številka
SIST EN 61300-3-1:2006(en)

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61300-3-1

December 2005

ICS 33.180.20

Supersedes EN 61300-3-1:1997

English version

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures Part 3-1: Examinations and measurements – Visual examination (IEC 61300-3-1:2005)

Dispositifs d'interconnexion et composants passifs à fibres optiques – Méthodes fondamentales d'essais et de mesures
Partie 3-1: Examens et mesures – Examen visuel
(CEI 61300-3-1:2005)

Lichtwellenleiter – Verbindungselemente und passive Bauteile – Grundlegende Prüf- und Messverfahren
Teil 3-1: Untersuchungen und Messungen – Sichtprüfung
(IEC 61300-3-1:2005)

This European Standard was approved by CENELEC on 2005-10-01. 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.

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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 61300-3-1:2005 E

Foreword

The text of document 86B/2172/FDIS, future edition 2 of IEC 61300-3-1, 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 61300-3-1 on 2005-10-01.

This European Standard supersedes EN 61300-3-1:1997.

It constitutes a technical revision on reference methods and equipments for particular parts of the components.

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)	2006-07-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2008-10-01

Endorsement notice

The text of the International Standard IEC 61300-3-1:2005 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61300-1 NOTE Harmonized as EN 61300-1:2003 (not modified).

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
61300-3-1

Deuxième édition
Second edition
2005-09

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

Partie 3-1: Examens et mesures – Examen visuel

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

Part 3-1: Examinations and measurements – Visual examination

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE J

Pour prix, voir catalogue en vigueur
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

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FOREWORD

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International Standard IEC 61300-3-1 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. This second edition constitutes a technical revision on reference methods and equipments for particular parts of the components.

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

FDIS	Report on voting
86B/2172/FDIS	86B/2211/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 61300 consists of the following parts, under the general title *Fibre optic interconnecting devices and passive components – Basic test and measurement procedure*s:

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.

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

Part 3-1: Examinations and measurements – Visual examination

1 Scope

This part of IEC 61300 provides criteria for the visual and mechanical examination of fibre optic piece parts, connectors and passive components. The examination method may be used at any stage of the qualification or quality conformance inspection process, as a stand-alone test, or as required by the relevant specification.

Visual examination of the polished end-face is defined in IEC/PAS 61300-3-35 and does not form part of this document.

2 General description

This standard describes two examination techniques.

a) Method 1: Visual examination of the specimen to ensure that it is of the proper configuration, that the workmanship is satisfactory and that the marking is correct.

b) Method 2: Mechanical examination of the specimen to ensure that the dimensions and mass conform to the relevant specification.

NOTE Ensure the sample is un-energised, i.e. it is not transmitting optical power, prior to undertaking a visual examination.

3 Apparatus

The apparatus shall consist of the following elements.

3.1 Visual examination

Where specified in the relevant specification, visual examination shall be undertaken using an optical magnifier and an illuminator.

3.1.1 Optical magnifier

Use an achromatic lens with a magnification power value between 2× and 5×. An anti-reflection lens coating is recommended, but not mandatory.

3.1.2 Illuminators

Integral or supplementary magnifier illumination may be utilized. Sources shall produce neutral “white light”, temperature-corrected to approximately 3 000 K. Positive ventilation or other illuminator provisions shall prevent deleterious heat transfer to test specimens.