



**SLOVENSKI STANDARD**  
**SIST EN 62005-1:2002**  
**01-september-2002**

**Reliability of fibre optic interconnecting devices and passive components - Part 1: Introductory guide and definitions (IEC 62005-1:2001)**

Reliability of fibre optic interconnecting devices and passive components -- Part 1: Introductory guide and definitions

Zuverlässigkeit von LWL-Verbindungselementen und passiven Bauelementen -- Teil 1: Einführender Leitfaden und Definitionen

Fiabilité des dispositifs d'interconnexion et des composants passifs à fibres optiques -- Partie 1: Guide d'introduction et définitions

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**Ta slovenski standard je istoveten z: EN 62005-1:2001**

**ICS:**

33.180.20 Ú[ ç^: [ çæ) ^Á æ |æ^Á æ Fibre optic interconnecting devices  
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EUROPEAN STANDARD

**EN 62005-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2001

ICS 33.180.20

English version

**Reliability of fibre optic interconnecting devices and passive components**  
**Part 1: Introductory guide and definitions**  
(IEC 62005-1:2001)

Fiabilité des dispositifs d'interconnexion et  
des composants passifs à fibres optiques  
Partie 1: Guide d'introduction et définitions  
(CEI 62005-1:2001)

Zuverlässigkeit von  
LWL-Verbindungselementen und  
passiven Bauelementen  
Teil 1: Einführender Leitfaden und  
Definitionen  
(IEC 62005-1:2001)

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SIST EN 62005-1:2002

This European Standard was approved by CENELEC on 2001-05-01. 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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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/1437/FDIS, future edition 1 of IEC 62005-1, 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 62005-1 on 2001-05-01.

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) 2002-02-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-05-01

Annexes designated "normative" are part of the body of the standard.

In this standard, annex ZA is normative.

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 62005-1:2001 was approved by CENELEC as a European Standard without any modification.

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

<u>SIST EN 62005-1:2002</u>	
IEC 60721-3-3	NOTE: Harmonized as EN 60721-3-3:1995 (not modified).
IEC 60721-3-4	NOTE: Harmonized as EN 60721-3-4:1995 (not modified).
IEC 61300-2-24	NOTE: Harmonized as EN 61300-2-24:2000 (not modified).

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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 60050-191	1990	International Electrotechnical Vocabulary (IEV) Chapter 191: Dependability and quality of service	-	-
IEC 61300	Series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures	EN 61300	Series

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**62005-1**

Première édition  
First edition  
2001-03

**Fiabilité des dispositifs d'interconnexion  
et des composants passifs à fibres optiques –**

**Partie 1:  
Guide d'introduction et définitions**

**iTeh STANDARD PREVIEW**

**Reliability of fibre optic interconnecting devices  
and passive components –**

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**Part 1:  
Introductory guide and definitions**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

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Pour prix, voir catalogue en vigueur  
For price, see current catalogue

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## RELIABILITY OF FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS –

### Part 1: Introductory guide and definitions

#### 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 co-operation 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 express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, 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.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62005-1 has been prepared by subcommittee 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:

FDIS	Report on voting
86B/1437/FDIS	86B/1496/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 3.

IEC 62005 consists of the following parts under the general title: *Reliability of fibre optic interconnecting devices and passive components*:

- Part 1 Introductory guide and definitions
- Part 2 Quantitative assessment of reliability based on accelerated ageing tests – Temperature and humidity; steady state
- Part 3 Relevant tests for evaluating failure modes and failure mechanisms for passive components
- Part 4 Product screening
- Part 6 The use of field data to determine, specify and improve component reliability
- Part 7 Life-stress modelling

The committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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## INTRODUCTION

When assessing the reliability of a passive optical component, it is important to also note that appropriate definitions of the service environment, expected lifetime and definition of failure need to be applied properly in the context of the product use. Because of many variations in the application and failure criteria, the reader is encouraged to utilize all clauses of this part of IEC 62005 in their proper context. The reader is particularly warned to avoid any oversimplification of reliability by using a single number such as FIT as a basis of comparison, because without the proper full context noted above, such a comparison would be meaningless.

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