SLOVENSKI STANDARD
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Optiļ ni ojaļ evalniki ï 4. del: Uporaba z veļ kanali - Ġablona specifikacije izvedbe (IEC 61291-4:2003)*

Optical amplifiers -- Part 4: Multichannel applications - Performance specification template

Lichtwellenleiter-Verstärker -- Teil 4: Mehrkanalanwendungen - Vorlage für Leistungsspezifikationen

Amplificateurs optiques -- Partie 4: Applications aux canaux multiples - Modèle de spécifications de fonctionnement

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English version

Optical amplifiers
Part 4: Multichannel applications - Performance specification template
(IEC 61291-4:2003)

Amplificateurs optiques
Partie 4: Applications
aux canaux multiples -
Modèle de spécifications
de fonctionnement
(CEI 61291-4:2003)

Lichtwellenleiter-Verstärker
Teil 4: Mehrkanalanwendungen -
Vorlage für Leistungsspezifikationen
(IEC 61291-4:2003)

This European Standard was approved by CENELEC on 2003-06-01. 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.

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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

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Foreword

The text of document 86C/518/FDIS, future edition 1 of IEC 61291-4, prepared by SC 86C, Fibre optic systems and active devices, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61291-4 on 2003-06-01.

This standard is to be read in conjunction with EN 61291-1:1998.

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)	2004-03-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2006-06-01

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 is informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61291-4:2003 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 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 61290	Series	Optical fibre amplifiers - Basic specification	EN 61290	Series
IEC 61291-1	- [1)]	Optical fibre amplifiers Part 1: Generic specification	EN 61291-1	1998 [2)]

[1)] Undated reference.

[2)] Valid edition at date of issue.

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Part 4: Multichannel applications – Performance specification template

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL AMPLIFIERS –

Part 4: Multichannel applications – Performance specification template

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 61291-4 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86C/518/FDIS	86C/537/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.

This standard is to be read in conjunction with IEC 61291-1.

The committee has decided that the contents of this publication will remain unchanged until 2008. At this date, the publication will be

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

INTRODUCTION

The technology of optical amplifiers is still rapidly evolving, hence amendments and new editions to this standard can be expected.

Each abbreviation introduced in this International Standard is explained in the text at least the first time it appears. However, for an easier understanding of the whole text, a list of abbreviations used in this International Standard is given in Annex A.

OPTICAL AMPLIFIERS –

Part 4: Multichannel applications – Performance specification template

1 Scope and object

This part of IEC 61291 applies to optical amplifier (OA) devices and sub-systems to be used in multichannel applications.

The object of this specification template is to provide a frame for the preparation of product specifications on the performances of OA devices and sub-systems to be used in multichannel applications.

The product specification writer may add specification parameters and/or groups of specification parameters for particular applications. However, the product specification writer shall not remove specification parameters herein specified.

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 60825-1, *Safety of laser products – Part 1: Equipment classification, requirements and user's guide*

IEC 61290 series, *Optical fibre amplifiers – Basic specification*[1]

IEC 61291-1, *Optical fibre amplifiers – Part 1: Generic specification*

NOTE A list of informative references is given in the bibliography.

3 General remarks

Parameters specified for optical devices are those characterizing the transmission, operation, reliability and environmental properties of the OA device which is seen as a *black box* from a general point of view as defined in generic specification IEC 61291-1.

Each test method (OA test methods, IEC 61290 series) is generally given for the measurement of a group of homogeneous parameters. The grouping of the homogeneous parameters is given in Table 1 of the generic specification, IEC 61291-1, together with the corresponding test method specification number.

Safety characteristics of optical amplifiers described in the present standard are provided in IEC 60825-1.

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[1] The individual parts concerned are referenced in Tables 1, 2 and 3.