

SLOVENSKI STANDARD SIST EN 61291-2:2012

01-maj-2012

Nadomešča:

SIST EN 61291-2:2007

Optični ojačevalniki - 2. del: Digitalne aplikacije - Specifikacijska predloga delovanja (IEC 61291-2:2012)

Optical amplifiers - Part 2: Digital applications - Performance specification template (IEC 61291-2:2012)

Lichtwellenleiter-Verstärker - Teil 2: Digitale Anwendungen Vorlage für Betriebsverhaltensspezifikationen (IEC 61291-2:2012)

Amplificateurs optiques - Partie 2: Applications numériques - Modèles de spécifications de performances (CE+6/1294+2:2012) talog/standards/sist/56260693-a65f-4fa8-9222-86c756a0e42f/sist-en-61291-2-2012

Ta slovenski standard je istoveten z: EN 61291-2:2012

ICS:

33.180.30 Optični ojačevalniki Optic amplifiers

SIST EN 61291-2:2012 en

SIST EN 61291-2:2012

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61291-2:2012 https://standards.iteh.ai/catalog/standards/sist/56260693-a65f-4fa8-9222-86c756a0e42f/sist-en-61291-2-2012

EUROPEAN STANDARD

EN 61291-2

NORME EUROPÉENNE EUROPÄISCHE NORM

March 2012

ICS 33.180.30

Supersedes EN 61291-2:2007

English version

Optical amplifiers Part 2: Digital applications Performance specification template

(IEC 61291-2:2012)

Amplificateurs optiques -Partie 2: Applications numériques -Modèles de spécifications de performances (CEI 61291-2:2012) Lichtwellenleiter-Verstärker -Teil 2: Digitale Anwendungen -Vorlage für Betriebsverhaltensspezifikationen (IEC 61291-2:2012)

iTeh STANDARD PREVIEW (standards.iteh.ai)

This European Standard was approved by CENELEC on 2012-02-14. 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 sixt/56260693-a65f-4fa8-9222-

86c756a0e42f/sist-en-61291-2-2012

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86C/1018/CDV, future edition 3 of IEC 61291-2, 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 approved by CENELEC as EN 61291-2:2012.

The following dates are fixed:

latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement
 latest date by which the national standards conflicting with the

This document supersedes EN 61291-2:2007.

document have to be withdrawn

EN 61291-2:2012 constitutes a minor update through clarification that the scope is for single channel optical amplifiers, and that pump leakage parameters do not apply to semiconductor optical amplifiers.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN]/shall not/be held responsible for identifying any or all such patent rights.

(standards.iteh.ai)

Endorsement notice

The text of the International Standard IEO 61291-2:2012 was approved by CENELEC as a European Standard without any modification. 86c756a0c42f/sist-en-61291-2-2012

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

IEC 61280 series NOTE Harmonized in EN 61280 series.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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>	EN/HD	<u>Year</u>
IEC 60825-1	1993	Safety of laser products - Part 1: Equipment classification, requirements and user's guide	EN 60825-1 ¹⁾ s + A11	1994 1996
IEC 61290	Series	Optical amplifiers - Test methods	EN 61290	Series
IEC 61291-1	-	Optical amplifiers - Part 1: Generic specification	EN 61291-1	-
IEC 61291-5-2	-	Optical amplifiers - Part 5-2: Qualification specifications - Reliability qualification for optical fibre	EN 61291-5-2	-
IEC Guide 107	iTe	amplifiers Electromagnetic compatibility - Guide to the drafting of electromagnetic compatibility publications	<u>W</u>	-

SIST EN 61291-2:2012

https://standards.iteh.ai/catalog/standards/sist/56260693-a65f-4fa8-9222-86c756a0e42f/sist-en-61291-2-2012

 $^{^{1)}\,\}mathrm{EN}$ 60825-1 is superseded by EN 62471:2008, which is based on IEC 62471:2006.

SIST EN 61291-2:2012

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61291-2:2012 https://standards.iteh.ai/catalog/standards/sist/56260693-a65f-4fa8-9222-86c756a0e42f/sist-en-61291-2-2012



IEC 61291-2

Edition 3.0 2012-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Optical amplifiers iTeh STANDARD PREVIEW

Part 2: Digital applications — Performance specification template

Amplificateurs optiques – SISTEN 61291-2:2012

Partie 2: Applications numériques - Modèle de spécifications de performances

86c756a0e42f/sist-en-61291-2-2012

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX

L

ICS 33.180.30 ISBN 978-2-88912-858-7

Warning! Make sure that you obtained this publication from an authorized distributor.

Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

-2-

CONTENTS

FO	REWORD	3
INT	RODUCTION	5
1	Scope and object	6
2	Normative references	6
3	Terms, definitions and abbreviated terms	6
	3.1 Terms and definitions	6
	3.2 Abbreviated terms	6
4	Product specification worksheet for power amplifiers	7
5	Product specification worksheet for pre-amplifiers	8
6	Product specification worksheet for line amplifiers	9
7	Electromagnetic compatibility (EMC) requirements	10
Bib	liography	11
	ole 1 – Minimum list of relevant parameters of power amplifiers to be specified for ital applications	7
Tab digi	ole 2 – Minimum list of relevant parameters of pre-amplifiers to be specified for ital applications	8
Tab digi	ital applications ole 3 – Minimum list of relevant parameters of line amplifiers to be specified for ital applications (standards:iten:ai)	9

<u>SIST EN 61291-2:2012</u> https://standards.iteh.ai/catalog/standards/sist/56260693-a65f-4fa8-9222-86c756a0e42f/sist-en-61291-2-2012

INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL AMPLIFIERS -

Part 2: Digital applications – Performance specification template

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.
- 2) The formal decisions or agreements of 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 IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter
- https://standards.itch.ai/catalog/standards/sist/56260693-a65f-4fa8-9222
 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61291-2 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:

CDV	Report on voting	
86C/1018/CDV	86C/1039/RVC	

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 third edition cancels and replaces the second edition published in 2007 and constitutes a minor update through clarification that the scope is for single channel optical amplifiers, and that pump leakage parameters do not apply to semiconductor optical amplifiers.