



SLOVENSKI STANDARD

SIST EN 61291-2:2016

01-september-2016

Nadomešča:
SIST EN 61291-2:2012

Optični ojačevalniki - 2. del: Enokanalne aplikacije - Specifikacijska predloga delovanja (IEC 61291-2:2016)

Optical amplifiers - Part 2: Single channel applications - Performance specification template (IEC 61291-2:2016)

Lichtwellenleiter-Verstärker - Teil 2: Digitale Anwendungen - Vorlage für Betriebsverhaltensspezifikationen (IEC 61291-2:2016)

Amplificateurs optiques - Partie 2: Applications numériques - Modèles de spécifications de performances (IEC 61291-2:2016)

Ta slovenski standard je istoveten z: EN 61291-2:2016

ICS:

33.180.30 Optični ojačevalniki Optic amplifiers

SIST EN 61291-2:2016 en

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EUROPEAN STANDARD

EN 61291-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2016

ICS 33.180.30

Supersedes EN 61291-2:2012

English Version

Optical amplifiers - Part 2: Single channel applications - Performance specification template (IEC 61291-2:2016)

Amplificateurs optiques - Partie 2: Applications numériques
- Modèles de spécifications de performances
(IEC 61291-2:2016)

Lichtwellenleiter-Verstärker - Teil 2: Einzelkanal-
Anwendungen - Vorlage für
Betriebsverhaltensspezifikationen
(IEC 61291-2:2016)

This European Standard was approved by CENELEC on 2016-03-24. 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 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.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 61291-2:2016**European foreword**

The text of document 86C/1318/CDV, future edition 4 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 61291-2:2016.

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 (dop) 2016-12-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-03-24

This document supersedes EN 61291-2:2012.

This edition includes the following significant technical changes with respect to the previous edition:

- a) The title of this standard has been changed from digital application to single channel application.
- b) The scope has been changed. Reflecting the scope change, the titles of Tables have been changed.
- c) Terms and definitions have been revised.
- d) Three tables regarding the minimum list of relevant parameters of power amplifiers, pre-amplifiers and line amplifiers based on semiconductor optical amplifier (SOA) components have been added.
- e) Transient parameters have been added in the minimum list of relevant parameters of pre-amplifiers and line amplifiers based on optical fibre amplifier (OFA) module.”.

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Endorsement notice

The text of the International Standard IEC 61291-2:2016 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:

IEC 61280 (series)	NOTE	Harmonized as EN 61280 (series).
IEC 61291-4	NOTE	Harmonized as EN 61291-4.
IEC 62148-11	NOTE	Harmonized as EN 62148-11.
IEC 62149-1	NOTE	Harmonized as EN 62149-1.
IEC 62149-3	NOTE	Harmonized as EN 62149-3.
IEC 62572-3	NOTE	Harmonized as EN 62572-3.

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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60825-1	-	Safety of laser products -- Part 1: Equipment classification and requirements	EN 60825-1	-
IEC 61000	series	Electromagnetic compatibility (EMC) Electromagnetic compatibility (EMC)	EN 61000	series
IEC 61290-1	series	Optical amplifiers - Test methods - Part 1: Power and gain parameters	EN 61290-1	series
IEC 61290-3	series	Optical amplifiers - Test methods - Part 3: Noise figure parameters	EN 61290-3	series
IEC 61290-4-3		Optical amplifiers - Test methods – Part 4- 3: Power transient parameters – Single channel optical amplifiers in output power control	EN 61290-4-3	
IEC 61290-5	series	Optical amplifiers - Test methods -Part 5: Reflectance Parameters	EN 61290-5	series
IEC 61290-6-1	-	Optical fibre amplifiers - Basic specification -- Part 6-1: Test methods for pump leakage parameters - Optical demultiplexer	EN 61290-6-1	-
IEC 61290-11	series	Optical amplifier - Test methods - Part 11: Polarization mode dispersion parameter	EN 61290-11	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 amplifiers	EN 61291-5-2	-
IEC/TS 62538	2008	Categorization of optical devices	-	-

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IEC 61291-2

Edition 4.0 2016-02

INTERNATIONAL STANDARD

Optical amplifiers **STANDARD PREVIEW**
Part 2: Single channel applications – Performance specification template
(standards.iteh.ai)

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.180.30

ISBN 978-2-8322-3185-2

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL AMPLIFIERS –

**Part 2: Single channel applications –
Performance specification template**

FOREWORD

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International Standard IEC 61291-2 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

This fourth edition cancels and replaces the third edition published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the title of this standard has been changed from digital applications to single channel applications;
- b) the scope has been changed and, as a result, the titles of tables have been changed;
- c) Terms and definitions have been revised;

- d) three tables regarding the minimum list of relevant parameters of power amplifiers, pre-amplifiers and line amplifiers based on semiconductor optical amplifier (SOA) components have been added;
- e) transient parameters have been added in the minimum list of relevant parameters of pre-amplifiers and line amplifiers based on optical fibre amplifier (OFA) module.

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

CDV	Report on voting
86C/1318/CDV	86C/1365/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61291 series, published under the general title *Optical amplifiers*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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.

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A bilingual version of this publication may be issued at a later date.

INTRODUCTION

This International Standard is devoted to the subject of optical amplifiers. The technology of optical amplifiers is still rapidly evolving, hence amendments and new additions to this standard can be expected. Each abbreviation introduced in this standard is generally explained in the text the first time it appears. However, for an easier understanding of the whole text, a list of all abbreviations used in this standard is given in Clause 3.

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