
Optični ojačevalniki - Preskusne metode - 4-1. del: Prehodni parametri ojačenja - Dvovalovna metoda (IEC 61290-4-1:2011)

Optical amplifiers - Test methods - Part 4-1: Gain transient parameters - Two-wavelength method (IEC 61290-4-1:2011)

Lichtwellenleiter-Verstärker - Prüfverfahren - Teil 4-1: Transiente Verstärkerparameter - Zwei-Wellenlängen Verfahren (IEC 61290-4-1:2011)

Amplificateurs optiques - Méthodes d'essai - Partie 4-1: Paramètres de gain transitoire - Méthode à deux longueurs d'onde (CEI 61290-4-1:2011)

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**Optical amplifiers -
Test methods -
Part 4-1: Gain transient parameters -
Two-wavelength method
(IEC 61290-4-1:2011)**

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

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Foreword

The text of document 86C/956/CDV, future edition 1 of IEC 61290-4-1, 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 61290-4-1:2011.

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) 2012-06-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2014-09-14

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

IEC 61290-1-1	NOTE	Harmonized as EN 61290-1-1.
IEC 61290-1-2	NOTE	Harmonized as EN 61290-1-2.
IEC 61290-1-3	NOTE	Harmonized as EN 61290-1-3.
IEC 61290-3-1	NOTE	Harmonized as EN 61290-3-1.
IEC 61290-3-2	NOTE	Harmonized as EN 61290-3-2.
IEC 61290-4-2	NOTE	Harmonized as EN 61290-4-2.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

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 61291-1	-	Optical amplifiers - Part 1: Generic specification	EN 61291-1	-

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Part 4-1: Gain transient parameters – Two-wavelength method**
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**OPTICAL AMPLIFIERS –
TEST METHODS –**
**Part 4-1: Gain transient parameters –
Two-wavelength method**

FOREWORD

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International Standard IEC 61290-4-1 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/956/CDV	86C/1011/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 of the IEC 61290 series, published under the general title *Optical amplifiers – Test methods* can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the stability 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

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- withdrawn,
- replaced by a revised edition, or
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INTRODUCTION

This part of IEC 61290-4 is devoted to the subject of Optical Amplifiers (OAs). The technology of optical amplifiers is quite new and still emerging; hence amendments and new editions to this standard can be expected.

Each abbreviation introduced in this 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 all abbreviations used in this standard is given in 3.3.

Background information on the transient phenomenon in erbium-doped fibre amplifiers and the consequences on fibre optic systems is provided in Annex A and on slew rate effects in Annex B.

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