

Optical amplifiers - Test methods - Part 4-1: Gain
transient parameters - Two-wavelength method

EESTI STANDARDI EESSÕNA

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English Version

**Optical amplifiers - Test methods -
Part 4-1: Gain transient parameters - Two-wavelength method
(IEC 61290-4-1:2016)**

Amplificateurs optiques - Méthodes d'essai -
Partie 4-1: Paramètres de gain transitoire - Méthode à deux
longueurs d'onde
(IEC 61290-4-1:2016)

Lichtwellenleiter-Verstärker - Prüfverfahren -
Teil 4-1: Transiente Verstärkerparameter - Zwei-
Wellenlängen-Verfahren
(IEC 61290-4-1:2016)

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Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 86C/1347/CDV, future edition 2 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 61290-4-1:2016.

The following dates are fixed:

- latest date by which the document has to be (dop) 2017-07-31
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publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2019-10-31
standards conflicting with the
document have to be withdrawn

This document supersedes EN 61290-4-1:2011.

EN 61290-4-1:2016 includes the following significant technical changes with respect to EN 61290-4-1:2011:

- a) Extended the applicability from only EDFAs to all OFAs;
- b) Updated definitions for consistency with other documents in the EN 61290-4 Series.

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

IEC 61290-1 Series	NOTE	Harmonized as EN 61290-1 Series.
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 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 61291-1	-	Optical amplifiers - Part 1: Generic specification	EN 61291-1	-

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INTRODUCTION

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

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.