SLOVENSKI STANDARD

SIST EN 61290-1-3:2006

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Optični ojačevalniki – Preskusne metode – 1-3. del: Parametri moči in ojačenja – Metoda z merilnikom optične moči (EC 61290-1-3:2005)

Optical amplifiers - Test methods - Part 1-3: Power and gain parameters - Optical power meter method (EC 61290-1-3:2005)

ICS 33.180.30

Referenčna številka
SIST EN 61290-1-3:2006(en)

EUROPEAN STANDARD **EN 61290-1-3**

NORME EUROPÉENNE

EUROPÄISCHE NORM December 2005

ICS 33.180.30 Supersedes EN 61290-1-3:1998

English version

Optical amplifiers - Test methods Part 1-3: Power and gain parameters - Optical power meter method

(IEC 61290-1-3:2005)

Amplificateurs optiques - Méthodes d'essai Partie 1-3: Paramètres de puissance optique et de gain - Méthode du wattmètre optique (CEI 61290-1-3:2005)

Prüfverfahren für Lichtwellenleiter-Verstärker Teil 1-3: Optische Leistungs- und Verstärkerparameter - Verfahren mit optischem Leistungsmesser (IEC 61290-1-3:2005)

This European Standard was approved by CENELEC on 2005-10-01. 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.

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 Central Secretariat has the same status as the official versions.

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

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

Ref. No. EN 61290-1-3:2005 E

Foreword

The text of document 86C/673/FDIS, future edition 2 of IEC 61290-1-3, 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 61290-1-3 on 2005-10-01.

This European Standard supersedes EN 61290-1-3:1998.

It includes the following significant changes:

a) optical power and gain parameters are both included;

b) the applicability has been extended to all commercially available optical amplifiers – not just optical fibre amplifiers.

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

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)	2006-08-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2008-10-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61290-1-3:2005 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 60793-1-1	NOTE	Harmonized as EN 60793-1-1:2003 (not modified).
IEC 60825-1	NOTE	Harmonized as EN 60825-1:1994 (not modified).
IEC 60825-2	NOTE	Harmonized as EN 60825-2:2004 (not modified).
IEC 60874-1	NOTE	Harmonized as EN 60874-1:1999 (not modified).
IEC 61290-10-1	NOTE	Harmonized as EN 61290-10-1:2003 (not modified).
IEC 61290-10-2	NOTE	Harmonized as EN 61290-10-2:2003 (not modified).
IEC 61290-10-3	NOTE	Harmonized as EN 61290-10-3:2003 (not modified).

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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 Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60793-1-40 (mod)	- [1)]	Optical fibres Part 1-40: Measurement methods and test procedures – Attenuation	EN 60793-1-40	2003 [2)]
IEC 61291-1	- [3)]	Optical fibre amplifiers Part 1: Generic specification	EN 61291-1	- [3)]

[1)] Undated reference.

[2)] Valid edition at date of issue.

[3)] To be published.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
61290-1-3

Deuxième édition
Second edition
2005-11

Amplificateurs optiques – Méthodes d'essai –

Partie 1-3: Paramètres de puissance et de gain – Méthode du wattmètre optique

Optical amplifiers – Test methods –

Part 1-3: Power and gain parameters – Optical power meter method

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL AMPLIFIERS – TEST METHODS –

Part 1-3: Power and gain parameters – Optical power meter method

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.
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International Standard IEC 61290-1-3 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 1998. It is a technical revision that includes the following significant changes.

a) Optical power and gain parameters are both included in this revision. Therefore, International Standard IEC 61290-2-1 has been withdrawn.
b) The applicability has been extended to all commercially available optical amplifiers – not just optical fiber amplifiers.

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

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

FDIS	Report on voting
86C/673/FDIS	86C/678/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.

IEC 61290 consists of the following parts under the general title *Optical amplifiers – Test methods:*[1)]

Part 1-1: Test methods for gain parameters – Optical spectrum analyzer

Part 1-2: Power and gain parameters – Electrical spectrum analyzer method

Part 1-3: Power and gain parameters – Optical power meter method

Part 2-1: Test methods for optical power parameters – Optical spectrum analyzer

Part 2-2: Test methods for optical power parameters – Electrical spectrum analyzer

Part 2-3: Test methods for optical power parameters – Optical power meter

Part 3: Test methods for noise figure parameters

Part 3-1: Noise figure parameters – Optical spectrum analyzer method

Part 3-2: Test methods for noise figure parameters – Electrical spectrum analyzer method

Part 5-1: Test methods for reflectance parameters – Optical spectrum analyser

Part 5-2: Reflectance parameters – Electrical spectrum analyser method

Part 5-3: Test methods for reflectance parameters – Reflectance tolerance using electrical spectrum analyser

Part 6-1: Test methods for pump leakage parameters – Optical demultiplexer

Part 7-1: Test methods for out-of-band insertion losses – Filtered optical power meter

Part 10-1: Multi-channel parameters – Pulse method using an optical switch and optical spectrum analyzer

Part 10-2: Multi-channel parameters – Pulse method using a gated optical spectrum analyzer

Part 10-3: Multi-channel parameters – Probe methods

Part 11-1: Polarization mode dispersion – Jones matrix eigenanalysis method (JME)

Part 11-2 : Polarization mode dispersion parameter – Poincaré sphere analysis metho

1) The first editions of some of these parts were published under the general title *Optical fibre amplifiers – Basic specification* or *Optical amplifier test methods*.

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

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