SLOVENSKI STANDARD
SIST EN 61290-1-3:1999

01-maj-1999

Optical fibre amplifiers - Basic specification - Part 1-3: Test methods for gain parameters - Optical power meter (IEC 61290-1-3:1998)

Optical fibre amplifiers - Basic specification - Part 1-3: Test methods for gain parameters - Optical power meter (IEC 61290-1-3:1998)

Lichtwellenleiter-Verstärker - Grundspezifikation -- Teil 1-3: Prüfverfahren für Verstärkungsparameter - Optischer Leistungsmesser

Amplificateurs à fibres optiques - Spécification de base -- Partie 1-3: Méthodes d'essai pour les paramètres de gain - Mesureur de puissance optique

Ta slovenski standard je istoveten z: **EN 61290-1-3:1998**

ICS:

33.180.30	Optiļ ni ojaļ evalniki	Optic amplifiers

SIST EN 61290-1-3:1999 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61290-1-3

August 1998

ICS 33.180.99

English version

Optical fibre amplifiers - Basic specification
Part 1-3: Test methods for gain parameters
Optical power meter
(IEC 61290-1-3:1998)

Amplificateurs à fibres optiques
Spécification de base
Partie 1-3: Méthodes d'essai pour
les paramètres de gain
Mesureur de puissance optique
(CEI 61290-1-3:1998)

Lichtwellenleiter-Verstärker
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Verstärkungsparameter
Optischer Leistungsmesser
(IEC 61290-1-3:1998)

This European Standard was approved by CENELEC on 1998-08-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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 61290-1-3:1998 E

Foreword

The text of document 86C/177/FDIS, future edition 1 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 1998-08-01.

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) 1999-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2001-05-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annex ZA is normative and annexes A and B are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61290-1-3:1998 was approved by CENELEC as a European Standard without any modification.

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

IEC 60825-1	NOTE: Harmonized as EN 60825-1:1994 (not modified) + A11:1996.
IEC 60825-2	NOTE: Harmonized as EN 60825-2:1994 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

Publication	Year	Title	EN/HD	Year
IEC 61291-1	1998	Optical fibre amplifiers Part 1: Generic specification	EN 61291-1	1998

NORME INTERNATIONALE

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Première édition
First edition
1998-05

Amplificateurs à fibres optiques – Spécification de base –

Partie 1-3: Méthodes d'essai pour les paramètres de gain – Mesureur de puissance optique

Optical fibre amplifiers – Basic specification –

Part 1-3: Test methods for gain parameters – Optical power meter

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Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE AMPLIFIERS – BASIC SPECIFICATION –

Part 1-3: Test methods for gain parameters – Optical power meter

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.

3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

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.

It 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/177/FDIS	86C/201/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.

Annexes A and B are for information only.

INTRODUCTION

As far as can be determined, this is the first International Standard on optical fibre amplifiers. The technology of optical fibre amplifiers is quite new and still emerging, hence amendments and new editions to this standard can be expected.

Each abbreviation introduced 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 is given in annex A.

OPTICAL FIBRE AMPLIFIERS – BASIC SPECIFICATION –

Part 1-3: Test methods for gain parameters – Optical power meter

1 Scope and object

This part of IEC 61290 applies to optical fibre amplifiers (OFAs) using active fibres, containing rare-earth dopants, presently commercially available.

The object of this standard is to establish uniform requirements for accurate and reliable measurements, by means of the optical power meter test method, of the following OFA parameters, as defined in clause 3 of IEC 61291-1:

a) small-signal gain;

b) reverse small-signal gain;

c) maximum small-signal gain;

d) maximum small-signal gain wavelength;

e) maximum small-signal gain variation with temperature;

f) small-signal gain wavelength band;

g) small-signal gain wavelength variation;

h) small-signal gain stability;

i) polarization-dependent gain variation.

NOTE – All numerical values followed by (‡) are currently under consideration.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of IEC 61290. At the time of publication, the edition indicated was valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 61290 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 61291-1, — *Optical fibre amplifiers – Part 1: Generic specification* [1)]

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1) To be published.