Irish Standard
I.S. EN 62496-3:2011

Optical circuit boards -- Part 3: Performance standards - General and guidance (IEC 62496-3:2011 (EQV))

I.S. EN 62496-3:2011

Incorporating amendments/corrigenda issued since publication:

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English version

Optical circuit boards - Part 3: Performance standards - General and guidance

(IEC 62496-3:2011)

Cartes à circuits optiques - Partie 3: Normes de performance - Généralités et guide (CEI 62496-3:2011)

Optische Leiterplatten - Teil 3: Betriebsverhalten - Allgemeines und Leitfaden (IEC 62496-3:2011)

This European Standard was approved by CENELEC on 2011-02-16. 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.

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CENELEC

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

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Foreword

The text of document 86/380/FDIS, future edition 1 of IEC 62496-3, prepared by IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62496-3 on 2011-02-16.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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)	2011-11-16
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-02-16

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62496-3:2011 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 60068-2-27	NOTE	Harmonized as EN 60068-2-27.
IEC 60068-2-32	NOTE	Harmonized as EN 60068-2-32.
IEC 61300 series	NOTE	Harmonized in EN 61300 series (not modified).
IEC 61751	NOTE	Harmonized as EN 61751.
IEC 62005 series	NOTE	Harmonized in EN 62005 series (not modified).
IEC 60529	NOTE	Harmonized as EN 60529.

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.

Publication	Year	Title	EN/HD	Year
IEC 61300-2-18	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-18: Tests - Dry heat - High temperature endurance	EN 61300-2-18	-
IEC 61300-2-19	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-19: Tests - Damp heat (steady state)	EN 61300-2-19	-
IEC 61300-2-22	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature	EN 61300-2-22	-
IEC 61753-1	-	Fibre optic interconnecting devices and passive components performance standard - Part 1: General and guidance for performance standards	EN 61753-1	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL CIRCUIT BOARDS –

Part 3: Performance standards – General and guidance

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 62496-3 has been prepared by IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86/380/FDIS	86/387/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 62496 series, under the general title *Optical circuit boards*, 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 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.

INTRODUCTION

Performance standards define standard electro-optical performance under a set of prescribed conditions and contain a series or a set of tests and measurements (which may or may not be grouped into a specific schedule) with clearly defined conditions, severities and pass/fail criteria. The tests are intended to be run as an initial design verification to prove the product's ability to satisfy the requirements of a specific application, market sector or user group.

The following clauses in this part of IEC 62496 contain those sets of performance criteria that have been standardized for international use. A product that has been shown to meet all the requirements of a performance standard may be declared as complying with that performance standard.

Products from one manufacturer that are tested to a performance standard will operate together within the bounds of the criteria set by the performance standard. There is however no guarantee that products from different suppliers having the same standard interface, which have been independently tested to a performance standard, will meet the same levels of optical performance when mated together as those supplied by one manufacturer.

Compliance with a performance standard demonstrates that a product has passed a design verification test; it is not a guarantee of lifetime assured performance or reliability. Both service life tests and reliability testing must be the subject of a separate test schedule where the tests and severities selected are such that they are truly representative of the requirements of these test programmes. Consistency of manufacture should be maintained using a recognized quality assurance programme, while the reliability of the product should be evaluated using the procedures recommended in IEC 62005 series and IEC 61751.

When possible, tests and measurements should be selected from the IEC 61300 series. Where this is not possible, the required test method should be attached as an annex to the performance standard.