

Fibre optic active components and devices — Performance standards —

Part 1: General and guidance

The European Standard EN 62149-1:2004 has the status of a British Standard

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National foreword

This British Standard is the official English language version of EN 62149-1:2004. It is identical with IEC 62149-1:2004.

The UK participation in its preparation was entrusted by Technical Committee GEL/86, Fibre optics, to Subcommittee GEL/86/3, Fibre optic systems and active devices, which has the responsibility to:

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- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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**Fibre optic active components and devices -
Performance standards
Part 1: General and guidance
(IEC 62149-1:2004)**

Composants et dispositifs actifs
à fibres optiques -
Normes de fonctionnement
Partie 1 : Généralités et guide
(CEI 62149-1:2004)

Aktive Lichtwellenleiterbauelemente
und -geräte -
Betriebsverhalten
Teil 1: Allgemeines und Leitfaden
(IEC 62149-1:2004)

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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 86C/567/FDIS, future edition 1 of IEC 62149-1, 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 was approved by CENELEC as EN 62149-1 on 2004-02-01.

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- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2007-02-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62149-1:2004 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 61300	NOTE	Harmonized in EN 61300 series (not modified).
IEC 62005	NOTE	Harmonized in EN 62005 series (not modified).

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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 on 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 subsequent parts of this document contain those sets of performance criteria that have been standardised 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 in essence passed a design verification test, it is not a guarantee of lifetime assured performance nor 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 recognised quality assurance programme while the reliability of the product should be evaluated using the procedures recommended in IEC 62005.

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