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**Semiconductor optoelectronic devices for fibre optic system applications - Part 1: Specification template for essential ratings and characteristics**

## EESTI STANDARDI EESSÕNA

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Käesolev Eesti standard EVS-EN 62007-1:2009 sisaldb Euroopa standardi EN 62007-1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 62007-1:2009 consists of the English text of the European standard EN 62007-1:2009.
Standard on kinnitatud Eesti Standardikeskuse 30.04.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kätesaadavaks tegemise kuupäev on 20.02.2009.	Date of Availability of the European standard text 20.02.2009.
Standard on kätesaadav Eesti standardiorganisatsionist.	The standard is available from Estonian standardisation organisation.

**ICS** 31.080.01, 31.260, 33.180.01

**Võtmesõnad:** electric measurements, electronic equ, light emission, mathematics, optical fibres, photosensitive devices, phototransist, ratings, semiconductor devices, semiconductor diodes, semiconductors, solid state diodes, specification (approval), specifications, transistors

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ICS 33.180.01; 31.260; 31.080.01

Supersedes EN 62007-1:2000

English version

**Semiconductor optoelectronic devices  
for fibre optic system applications -  
Part 1: Specification template for essential ratings and characteristics  
(IEC 62007-1:2008)**

Dispositifs optoélectroniques  
à semiconducteurs pour application  
dans les systèmes à fibres optiques -  
Partie 1: Modèle de spécification  
relatif aux valeurs  
et caractéristiques essentielles  
(CEI 62007-1:2008)

Optoelektronische Halbleiterbauelemente  
für Anwendungen  
in Lichtwellenleitersystemen -  
Teil 1: Vorlage  
für Leistungsspezifikationen  
für wesentliche Grenz- und Kennwerte  
(IEC 62007-1:2008)

This European Standard was approved by CENELEC on 2008-12-01. 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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Central Secretariat: avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 86C/849/FDIS, future edition 2 of IEC 62007-1, 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 62007-1 on 2008-12-01.

This European Standard supersedes EN 62007-1:2000.

EN 62007-1:2009 includes the following significant technical changes with respect to EN 62007-1:2000.

- the title has been changed to indicate that this is a template;
- the definitions of some symbols and terms in EN 62007-1:2000 are revised in order to harmonize them with those in other SC 86C documents. A dated part in EN 62007-1:2000 is removed and the other dated parts are updated.

NOTE The field of this standard will henceforth be placed under the responsibility of IEC technical committee 86: Fibre optics.

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) 2009-09-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-12-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 62007-1:2008 was approved by CENELEC as a European Standard without any modification.

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60747-5-1	- <sup>1)</sup>	Discrete semiconductor devices and integrated circuits - Part 5-1: Optoelectronic devices - General	EN 60747-5-1	2001 <sup>2)</sup>
IEC 60825	Series	Safety of laser products	EN 60825	Series

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

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## SEMICONDUCTOR OPTOELECTRONIC DEVICES FOR FIBRE OPTIC SYSTEM APPLICATIONS –

### Part 1: Specification template for essential ratings and characteristics

#### 1 Scope and object

This part of IEC 62007 is a specification template for essential ratings and characteristics of the following categories of semiconductor optoelectronic devices to be used in the field of fibre optic systems and subsystems:

- semiconductor photoemitters;
- semiconductor photoelectric detectors;
- monolithic or hybrid integrated optoelectronic devices and their modules.

The object of this performance specification template is to provide a frame for the preparation of detail specifications for the essential ratings and characteristics.

Detail specification writers may add specification parameters and/or groups of specification parameters for particular applications. However, detail specification writers may not remove specification parameters specified in this standard.

#### 2 Normative references

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.

IEC 60825 (all parts), *Safety of laser products*

IEC 60747-5-1, *Discrete semiconductor devices and integrated circuits – Part 5-1: Optoelectronic devices – General*