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## **Audio- och videoutrustning – Mätning av elförbrukning**

*Methods of measurement for the power consumption of audio, video and related equipment*

Som svensk standard gäller europastandarden EN 62087:2012. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62087:2012.

### **Nationellt förord**

Europastandarden EN 62087:2012

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62087, Third edition, 2011 - Methods of measurement for the power consumption of audio, video and related equipment**

utarbetad inom International Electrotechnical Commission, IEC.

Till IEC 62087, third edition, 2011 hör tre skivor (DVD och Blu-ray) med filer med testbilder, se bibliografin på sid 50. Dessa filer ingår dock inte i IEC-standarden, utan är avsedda som komplement, och de ingår inte heller i denna svenska standard. Den som önskar beställa de tre skivorna med testbilder, gör det genom att beställa IEC-standarden som då också levereras på skiva.

Tidigare fastställd svensk standard SS-EN 62087, utgåva 2, 2010, gäller ej fr o m 2015-02-13.

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ICS 33.160.10

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 62087**

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ICS 33.160.10

Supersedes EN 62087:2009

English version

**Methods of measurement for the power consumption of audio, video and related equipment**  
(IEC 62087:2011)

Méthodes de mesure de la consommation de puissance des appareils audio, vidéo et du matériel connexe  
(CEI 62087:2011)

Messverfahren für die Leistungsaufnahme von Audio-, Video- und verwandten Geräten  
(IEC 62087:2011)

This European Standard was approved by CENELEC on 2012-02-13. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

This document (EN 62087:2012) consists of the text of IEC 62087:2011 prepared by technical area 12, "AV energy efficiency and smart grid applications", of IEC/TC 100, "Audio, video and multimedia systems and equipment".

The following dates are fixed:

- latest date by which the document has to be implemented (dop) 2013-02-13  
at national level by publication of an identical  
national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2015-02-13  
with the document have to be withdrawn

This document supersedes EN 62087:2009.

EN 62087:2012 includes the following significant technical changes with respect to EN 62087:2009:

- Clause 8 is expanded.
- Annex D and Annex E are added.

Furthermore, methods for measuring power consumption of set top boxes mainly in the modes of on mode and standby-active, high mode are revised.

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

## Endorsement notice

The text of the International Standard IEC 62087:2011 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 62087:2002 | NOTE Harmonized as EN 62087:2003 (not modified). |
| IEC 62087:2008 | NOTE Harmonized as EN 62087:2009 (not modified). |
| IEC 62301:2005 | NOTE Harmonized as EN 62087:2005 (modified).     |

**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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>
-	-	Domestic and similar electronic equipment interconnection requirements: Peritelevision connector	EN 50049-1	-
IEC 60107-1	1997	Methods of measurement on receivers for television broadcast transmissions - Part 1: General considerations - Measurements at radio and video frequencies	EN 60107-1	1997
IEC 61938	1996	Audio, video and audiovisual systems - Interconnections and matching values - Preferred matching values of analogue signals	EN 61938 + corr. February	1997
IEC 62216	2009	Digital terrestrial television receivers for the DVB-T system	EN 62216	2011

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## INTRODUCTION

This standard specifies methods of measurement for the power consumption of television sets, video recording equipment, set top boxes, audio equipment and multifunction equipment for consumer use.

This International Standard gives methods of measuring On (average) mode power consumption of television sets (see Clause 11). The power consumption of television sets varies depending upon the video signal being displayed. Clause 11 includes three different video signals: static, dynamic broadcast-content, and Internet-content. For information about the three video signals and guidance on which signal(s) to use, see Annex C. For additional considerations regarding average television power consumption, see Annex B.

This IEC standard is planned to be subdivided into parts. Some clauses and subclauses of this third edition may therefore be superseded by future parts of the IEC 62087 series of standards.

## METHODS OF MEASUREMENT FOR THE POWER CONSUMPTION OF AUDIO, VIDEO AND RELATED EQUIPMENT

### 1 Scope

This International Standard specifies methods of measurement for the power consumption of television sets, video recording equipment, set top boxes, audio equipment and multifunction equipment for consumer use. Television sets include, but are not limited to, those with CRT, LCD, PDP or projection technologies.

Moreover, the different modes of operation which are relevant for measuring power consumption are defined.

The methods of measurement are only applicable for equipment which can be connected to the mains.

The measuring conditions in this standard represent the normal use of the equipment and may differ from specific conditions, for example as specified in safety standards.

### 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 60107-1:1997, *Methods of measurement on receivers for television broadcast transmissions – Part 1: General considerations – Measurements at radio and video frequencies*

IEC 61938:1996, *Audio, video and audiovisual systems – Interconnections and matching values – Preferred matching values of analogue signals*

IEC 62216:2009, *Digital terrestrial television receivers for the DVB-T system*

EN 50049-1, *Domestic and Similar Electronic Equipment Interconnection Requirements: Peritelevision Connector*