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## Audio- och videoutrustning – Mätning av elförbrukning – Del 6: Audioutrustning

*Audio, video, and related equipment –  
Determination of power consumption –  
Part 6: Audio equipment*

Som svensk standard gäller europastandarden EN 62087-6:2015. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62087-6:2015.

### Nationellt förord

Europastandarden EN 62087-6:2015

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62087-6, First edition, 2015 - Audio, video, and related equipment - Determination of power consumption - Part 6: Audio equipment**

utarbetad inom International Electrotechnical Commission, IEC.

SS-EN 62087-6, utgåva 1, 2015 ersätter delvis SS-EN 62087, utgåva 3, 2014.

Tidigare fastställd svensk standard SS-EN 62087, utgåva 3, 2014, gäller ej fr o m 2018-07-10.

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English Version

**Audio, video and related equipment - Determination of power  
consumption - Part 6: Audio equipment  
(IEC 62087-6:2015)**

Matériels audio, vidéo et matériel connexe - Détermination  
de la consommation de puissance - Partie 6 : Matériel audio  
(IEC 62087-6:2015)

Messverfahren für die Leistungsaufnahme von Audio-,  
Video- und verwandten Geräten - Teil 6: Audiogeräte  
(IEC 62087-6:2015)

This European Standard was approved by CENELEC on 2015-07-10. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

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

## **European foreword**

The text of document 100/2471/FDIS, future edition 1 of IEC 62087-6, prepared by Technical Area 12 "AV energy efficiency and smart grid applications" of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62087-6:2015.

The following dates are fixed:

- latest date by which the document has to be (dop) 2016-04-10  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2018-07-10  
standards conflicting with the  
document have to be withdrawn

This document supersedes EN 62087:2012 (partially).

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 62087-6:2015 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 60065:2014	NOTE	Harmonized as EN 60065:2014 (modified).
IEC 60268-1:1985+A1:1988	NOTE	Harmonized as HD 483.1 S2:1989 (not modified).
IEC 60268-2:1987+A1:1991	NOTE	Harmonized as HD 483.2 S2:1993 (not modified).
IEC 60268-3:2013	NOTE	Harmonized as EN 60268-3:2013 (not modified).
IEC 60958-1:2008	NOTE	Harmonized as EN 60958-1:2008 (not modified).
IEC 60958-1:2008/A1:2014	NOTE	Harmonized as EN 60958-1:2008/A1:2014 (not modified).
IEC 61672 Series	NOTE	Harmonized as EN 61672 Series.
IEC 61938:2013	NOTE	Harmonized as EN 61938:2013 (not modified).
IEC 62087 Series	NOTE	Harmonized as EN 62087 Series.
IEC 62301:2011	NOTE	Harmonized as EN 50564:2011 (modified).
IEC 62368-1:2014	NOTE	Harmonized as EN 62368-1:2014 (modified).
IEC 62542:2013	NOTE	Harmonized as EN 62542:2013 (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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60268-5	2003	Sound system equipment - Part 5: Loudspeakers	EN 60268-5	2003
+A1	2007		+A1	2009
IEC 62087-1	2015	Audio, video, and related equipment - Determination of power consumption - Part 1: General	EN 62087-1 <sup>1)</sup>	-
IEC 62087-2	2015	Audio, video, and related equipment - Determination of power consumption - Part 2: Signals and media	EN 62087-2 <sup>2)</sup>	-
IEC 62301 (mod)	2011	Household electrical appliances - Measurement of standby power	EN 50564	2011

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<sup>1)</sup> At draft stage.

<sup>2)</sup> To be published.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**AUDIO, VIDEO AND RELATED EQUIPMENT –  
DETERMINATION OF POWER CONSUMPTION –****Part 6: Audio equipment**

## 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 62087-6 has been prepared by technical area 12: AV energy efficiency and smart grid applications, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This first edition of IEC 62087-6 cancels and replaces Clause 9 of IEC 62087:2011. This standard together with IEC 62087-1 to IEC 62087-5 cancels and replaces IEC 62087:2011. This International Standard constitutes a technical revision.

This edition includes the following significant technical changes with respect to Clause 9 of IEC 62087:2011.

- The definition of the input signal is changed.
- The output power measurement of amplifiers is changed.
- The measurement method for compact audio systems including loudspeakers is added.



- Methods for measuring On-decoding, idle and auto power down functions are added.
- Portions of the document related to general measuring conditions and procedures are now contained in IEC 62087-1:2015.
- Portions of the document related to signals and media are now in IEC 62087-2:2015.
- The titles have changed in order to comply with the current directives and to accommodate the new multipart structure of IEC 62087.

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

FDIS	Report on voting
100/2471/FDIS	100/2501/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.

A list of all parts in the IEC 62087 series, published under the general title *Audio, video, and related equipment – Determination of power consumption*, can be found on the IEC website.

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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.

A bilingual version of this publication may be issued at a later date.

## INTRODUCTION

This part of IEC 62087 specifies methods of measurements for the power consumption of audio equipment for consumer use. It is used in conjunction with IEC 62087-2, which specifies signals and media. This International Standard includes measurements in the On mode (operation), which was previously identified as “On (average) mode” and adds methods for measuring power consumption in the On-play, On-decoding, and idle sub-modes. These methods consider the effects of the auto power down function. Additionally, this standard includes determination of power consumption in the Partial On mode.

This standard has been divided into multiple parts. At the time of publication of this part, the following parts are planned or published.

- Part 1: General
- Part 2: Signals and media
- Part 3: Television sets
- Part 4: Video recording equipment
- Part 5: Set-top boxes (STB)
- Part 6: Audio equipment

# **AUDIO, VIDEO AND RELATED EQUIPMENT – DETERMINATION OF POWER CONSUMPTION –**

## **Part 6: Audio equipment**

### **1 Scope**

This part of IEC 62087 specifies the determination of the power consumption of audio equipment for consumer use.

The various modes of operation which are relevant for measuring power consumption are defined.

This standard is limited to audio equipment which can be connected to the mains. Audio equipment that includes a non-removable, main battery is not covered by this standard. Audio equipment may include any number of auxiliary batteries.

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

### **2 Normative references**

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.

IEC 60268-5:2003, *Sound system equipment – Part 5: Loudspeakers*  
IEC 60268-5:2003/AMD1:2007

IEC 62087-1:2015, *Audio, video, and related equipment – Determination of power consumption – Part 1: General*

IEC 62087-2:2015, *Audio, video, and related equipment – Determination of power consumption – Part 2: Signals and media*

IEC 62301:2011, *Household electrical appliances – Measurement of standby power*