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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 62087:2009. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62087:2009.

Nationellt förord

Europastandarden EN 62087:2009

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62087, Second edition, 2008 - Methods of measurement for the power consumption of audio, video and related equipment**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 62087, utgåva 1, 2003, gäller ej fr o m 2012-08-01.

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English version

**Methods of measurement for the power consumption
of audio, video and related equipment
(IEC 62087:2008)**

Méthodes de mesure de l'énergie
consommée des appareils audio,
vidéo et analogues
(CEI 62087:2008)

Messverfahren für die Leistungsaufnahme
von Audio-, Video- und
verwandten Geräten
(IEC 62087:2008)

This European Standard was approved by CENELEC on 2009-08-01. 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 the International Standard IEC 62087:2008, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 62087 on 2009-08-01 without any modification.

This European Standard supersedes EN 62087:2003.

The main changes with respect to EN 62087:2003 are listed below.

- Clause 2 is expanded to include references to video content to be used for On (average) mode measurements;
- Clause 3 is expanded to include additional definitions and abbreviations;
- Clause 4 is expanded to include On (average) mode for measuring average television power consumption;
- Clause 5 is modified to require reporting of the power supply voltage and frequency, and the ambient temperature. Clause 5 also includes updated requirements regarding the power measurement instrument;
- Subclause 6.7 is updated to indicate that it is maintained for backward compatibility;
- Clause 11 is newly added. It describes the methods for measuring On (average) mode television power;
- Annex B is newly added. It describes considerations for measuring On (average) mode television power;
- Annex C is newly added. It describes the video signals to be used for measuring On (average) mode television power.

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) | 2010-08-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2012-08-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

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

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 Where 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	- 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 1997

¹⁾ Undated reference.

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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 multi-function equipment for consumer use.

This edition adds methods for measuring On (average) mode power consumption of television sets as defined in Clause 11. The power consumption of many televisions 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.

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 (STBs), audio equipment and multi-function 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 conditions – Measurements at radio and video frequencies*

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

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

