

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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

**Appareils audio, vidéo et matériel connexe – Détermination de la consommation  
de puissance –  
Partie 6: Matériel audio**



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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

### **Part 6: Audio equipment**

#### **FOREWORD**

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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.

## 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*

### 3 Terms, definitions and abbreviations

#### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions in IEC 62087-1:2015, IEC 62087-2:2015, and the following apply.

##### 3.1.1

##### **additional functions**

functions that are not required for the basic operation of the device

Note 1 to entry: Functions other than a main function.