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REDLINE VERSION

colour inside

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

Méthodes de mesure de la consommation de puissance des appareils audio, vidéo et du matériel connexe



IEC 62087:2011

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

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This Redline version provides you with a quick and easy way to compare all the changes between this standard and its previous edition. A vertical bar appears in the margin wherever a change has been made. Additions and deletions are displayed in red, with deletions being struck through.

International Standard IEC 62087 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 third edition cancels and replaces the second edition, published in 2008, and constitutes a technical revision.

The main changes with respect to the previous edition are listed below.

– 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.

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

CDV	Report on voting
100/1685/CDV	100/1763/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

The French version of this International Standard has not been voted upon.

This publication contains attached files in the form of DVDs and Blu-ray, as indicated in the Bibliography. These files are intended to be used as a complement and do not form an integral part of this standard.

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site 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- withdrawn;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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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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 ~~many~~ 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.

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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, ~~(STBs)~~ 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*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1
additional functions
functions that are not required for the basic operation of the device

NOTE In the case of a television set, examples of additional functions include, but are not limited to, a VCR unit, a DVD unit, a HDD unit, a FM-radio unit, a memory card-reader unit, or an ambient lighting unit.

3.1.2
audio equipment
stand-alone equipment or a system of separable or non-separable components for one or more audio functions

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