

# INTERNATIONAL STANDARD

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**Audio, video, and related equipment – Methods of measurement for power  
consumption  
Part 7: Computer monitors**





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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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INTERNATIONAL  
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COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**AUDIO, VIDEO, AND RELATED EQUIPMENT –  
METHODS OF MEASUREMENT FOR POWER CONSUMPTION**
**Part 7: Computer monitors****FOREWORD**

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International Standard IEC 62087-7 has been prepared by technical area 12: AV Energy 14 efficiency and smart grid applications of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this International Standard is based on the following documents:

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100/2916/CDV	100/2988/RVC

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

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

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document 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- withdrawn,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 measurement for the power consumption of computer monitors for use with computers. The test method includes power measurement using static patterns and both the broadcast and web-based dynamic test loops.

The test method also includes testing with the automatic brightness control (ABC) function where it is incorporated into a computer monitor.

The test method has also been made consistent with the test method for televisions in IEC 62087-3.

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

## Part 7: Computer monitors

### 1 Scope

This part of IEC 62087 specifies the determination of the power consumption of computer monitors including, but is not limited to, those with CRT, LCD, PDP or OLED technologies. Computer monitors that include touch screen functionality are included in the scope of this document. This document is limited to computer monitors that are powered from a main power source other than a battery. Computer monitors that are powered from a battery source are not covered by this document. However mains-powered computer monitors may include any number of auxiliary batteries.

Computer monitors connected by digital inputs such as DisplayPort, HDMI, DVI, or by analogue VGA input, are considered in this document. This document does not apply to network- and wirelessly connected computer monitors.

A computer monitor is a display device that does not include a TV tuner and is intended to be used to display the video signals from a computer. These video signals are produced from software programs that are operating within the computer and can consist of static and moving images. As such, test procedures using static patterns, dynamic video and web-based video are specified.

The test methods specified in this document can be applied to computer monitors of any size, however, this document is not applicable to specialized monitors associated with medical equipment, publishing and other professional, commercial or industrial uses.

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

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

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 62087-1, *Audio, video, and related equipment – Determination of power consumption – Part 1: General*

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

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