



NSAI
Standards

Irish Standard
I.S. EN 62623:2013

Desktop and notebook computers - Measurement of energy consumption (IEC 62623:2012 (EQV))

I.S. EN 62623:2013

Incorporating amendments/corrigenda issued since publication:

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EUROPÄISCHE NORM

ICS 35.160

English version

**Desktop and notebook computers -
Measurement of energy consumption
(IEC 62623:2012)**

Ordinateurs de bureau et ordinateurs
portables -
Mesure de la consommation d'énergie
(CEI 62623:2012)

Desktop- und Notebook-Computer –
Messung des Energieverbrauchs
(IEC 62623:2012)

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

I.S. EN 62623:2013

EN 62623:2013

- 2 -

Foreword

The text of document 108/490/FDIS, future edition 1 of IEC 62623, prepared by IEC/TC 108 "Safety of electronic equipment within the field of audio/video, information technology and communication technology" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62623:2013.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2013-09-04
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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62075	NOTE	Harmonized as EN 62075.
IEC 62301	NOTE	Harmonized as EN 62301.

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 When 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>
ECMA-389	-	Procedure for the Registration of Categories for ECMA-383 2nd edition	-	-

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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references.....	7
3 Terms, definitions and abbreviations.....	7
3.1 Terms and definitions.....	7
3.2 Abbreviations.....	10
4 Specifications for EUT.....	11
4.1 Computer descriptions.....	11
4.1.1 Desktop computer.....	11
4.1.2 Notebook computer.....	11
4.1.3 Integrated desktop computer.....	11
4.2 Power modes.....	11
4.2.1 Off mode.....	11
4.2.2 P_{off}	12
4.2.3 Sleep mode.....	12
4.2.4 P_{sleep}	12
4.2.5 P_{sleepWoL}	12
4.2.6 On mode.....	12
4.2.7 P_{on}	12
4.2.8 Idle modes.....	12
4.2.9 Active (work) mode.....	13
4.2.10 P_{work}	13
4.3 Profile attributes.....	13
4.3.1 Profile.....	13
4.3.2 Majority profile.....	13
4.3.3 Minority profile.....	13
4.3.4 Profile study.....	13
4.3.5 Product active power ratio.....	14
4.3.6 PAPR.....	14
4.3.7 PAWR.....	14
4.3.8 Product TEC error.....	14
4.3.9 Profile TEC error.....	14
4.4 Categorisation attributes.....	14
4.4.1 General.....	14
4.4.2 Cores.....	14
4.4.3 Channels of memory.....	14
4.4.4 System memory.....	14
4.4.5 System fan.....	14
4.4.6 TEC adders.....	15
5 Test procedure and conditions, categorisation, TEC formula, meter specifications and results reporting.....	15
5.1 General.....	15
5.2 Test setup.....	15
5.3 Test procedure.....	17
5.3.1 General.....	17

5.3.2	Measuring off mode	17
5.3.3	Measuring sleep mode.....	17
5.3.4	Measuring long idle mode.....	17
5.3.5	Measuring short idle mode.....	17
5.3.6	Measuring active mode (optional, see 5.6).....	18
5.4	Test conditions	18
5.5	Categorisation	19
5.5.1	General	19
5.5.2	ULE category.....	19
5.5.3	TEC adders	19
5.6	Annualised energy consumption formulas.....	20
5.6.1	General	20
5.6.2	Estimated annualised energy consumption formula (estimated active workload).....	20
5.6.3	Measured annualised energy consumption formula (with an active workload).....	20
5.6.4	Criteria for an active workload	21
5.7	True RMS watt meter specification	22
5.8	True RMS watt meter accuracy.....	22
5.9	Ambient light meter specification	24
5.10	Reporting of results	24
Annex A (informative)	Overview of profile methodology.....	26
Annex B (informative)	Majority profile	28
Annex C (informative)	Method for conducting a profile study.....	30
Annex D (informative)	Sample TEC calculations	34
Annex E (informative)	ENERGY STAR V5 compliant testing methodology.....	37
Annex F (informative)	Power measurement methodology.....	39
Annex G (normative)	Procedure for the registration of categories for IEC 62623	43
Bibliography	45
Figure 1	– Typical test setup.....	16
Figure 2	– Example of estimated annualised energy consumption formula (estimated active workload).....	20
Figure 3	– Measured annualised energy consumption formula (with an active workload).....	21
Figure A.1	– Example of a typical profile	27
Figure B.1	– TEC error summary chart.....	29
Table 1	– Test conditions.....	18
Table B.1	– Duty cycle attributes for the enterprise majority profile duty cycle study	28
Table B.2	– Summary of the enterprise energy study	29
Table C.1	– Profile study 1.....	31
Table C.2	– ENERGY STAR® V5 computer study	31
Table C.3	– Profile study, duty cycles	32
Table C.4	– Profile study, TEC _{actual} and TEC _{estimated} calculations	32
Table E.1	– Duty cycle attributes for V5 compliant testing.....	38

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DESKTOP AND NOTEBOOK COMPUTERS –
MEASUREMENT OF ENERGY CONSUMPTION**
FOREWORD

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International Standard IEC 62623 has been prepared by IEC technical committee 108: Safety of electronic equipment within the field of audio/video, information technology and communication technology.

This standard is based on ECMA-383.

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

FDIS	Report on voting
108/490/FDIS	108/500/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.

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

In this standard, the following print types or formats are used:

- requirements proper and normative annexes: in roman type;
- notes/explanatory matter: in smaller roman type;
- terms that are defined in 3.1: **bold**.

The committee has decided that the contents of this 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,
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- replaced by a revised edition, or
- amended.

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INTRODUCTION

This standard is based on ECMA-383 and complements the guidance given in IEC 62075. It includes the definitions of energy saving modes and generic energy saving guidance for designers of desktop and notebook computers, by defining a methodology on how to measure the energy consumption of a product whilst providing categorisation criteria that enable energy consumption comparisons of similar products.

DESKTOP AND NOTEBOOK COMPUTERS – MEASUREMENT OF ENERGY CONSUMPTION

1 Scope

This International Standard covers personal computing products. It applies to desktop and notebook computers as defined in 4.1 that are marketed as final products and that are hereafter referred to as the equipment under test (EUT) or product.

This standard specifies:

- a test procedure to enable the measurement of the power and/or energy consumption in each of the EUT's power modes;
- formulas for calculating the **typical energy consumption (TEC)** for a given period (normally annual);
- a majority profile that should be used with this standard which enables conversion of average power into energy within the **TEC** formulas;
- a system of categorisation enabling like for like comparisons of energy consumption between EUTs;
- a pre-defined format for the presentation of results.

This standard does not set any pass/fail criteria for the EUTs. Users of the test results should define such criteria.

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.

ECMA-389, *Procedure for the Registration of Categories for ECMA-383 2nd edition*

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

active workload

simulated amount of productive or operative activity that the EUT performs as represented in the P_{work} (see 4.2.10) and T_{work} (see 3.1.13.6) attributes of the **TEC** equation (see 5.6)

3.1.2

category

grouping of EUT configurations

3.1.3

duty cycle

divisions of time the EUT spends in each of its individual power modes

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