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Environmental Engineering (EE); Electrical and electronic household and office equipment; Measurement of networked standby power consumption of Interconnecting equipment

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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° w061004871

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Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Environmental Engineering (EE).

The present document has been prepared under the Commission's standardisation request M/544, C(2015) 9468 final of 5 January 2016, to the European standardisation organizations as regards ecodesign requirements for networked standby in support of Regulation (EC) No 1275/2008 [i.1] and Regulation (EC) No 642/2009 [i.10] (see note 2), to provide one voluntary means of conforming to the ecodesign requirements on networked standby of the following:

- Commission Regulation (EC) No 1275/2008 [i.1] of 17 December 2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for standby and off mode, and networked standby, electric power consumption of electrical and electronic household and office equipment; and

- Commission Regulation (EC) No 642/2009 [i.10] of 22 July 2009, implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for televisions.

NOTE 1: Regulation (EC) No 1275/2008 [i.1] and Regulation (EC) No 642/2009 [i.10] were amended by Commission Regulation (EU) No 801/2013 [i.2] of 22 August 2013.

NOTE 2: Commission Regulation (EC) No 642/2009 [i.10] of 22 July 2009, implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for televisions is quoted in the introduction of annex A, but no relationship with the present document and the requirements of Commission Regulation (EC) No 642/2009 are provided because televisions are out of scope of the present document.

Once the present document is cited in the Official Journal of the European Union under that Regulation, compliance with the normative clauses of the present document given in table A.1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding ecodesign requirements of that Regulation and associated EFTA Regulations.

National transposition dates	
Date of adoption of this EN:	29 June 2021
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Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 March 2022
Date of withdrawal of any conflicting National Standard (dow):	31 March 2023

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Introduction

The methods defined in the present document are intended to define requirements for the measurement of the power consumed by the interconnecting equipment having one or more wired or wireless networked port(s) able to resume a function by way of a remotely initiated trigger or reactivation trigger from a network connection. The present document also provides a method to test power management and whether it is possible to deactivate wireless network connection(s).

For the measurement of low power modes, reference is made to EN 50564 [1].

1 Scope

1.1 Equipment in the scope of the present document

The present document specifies methods of measurement of electrical power consumption in networked standby and the reporting of the results for network interconnecting equipment.

Example of interconnecting equipment are in Annex B.

Power consumption in standby (other than networked standby) is covered by EN 50564 [1], including the input voltage range.

The present document also provides a method to test power management and whether it is possible to deactivate wireless network connection(s).

The present document applies to electrical products with a rated input voltage of 230 V a.c. for single phase products and 400 V a.c. for three phase products.

The present document is produced under the mandate M/544 and can be used to demonstrate compliance to the EU Regulation (EC) No 1275/2008 [i.1] amended by Regulation (EU) 801/2013 [i.2].

The present document does not apply to televisions as defined in Regulation (EC) No 642/2009 [i.10].

NOTE 1: The EU regulation 801/2013 [i.2] applies to equipment designed for use with a nominal voltage rating of 250 V and below.

NOTE 2: EU regulation 801/2013 [i.2] does not apply to electrical and electronic household and office equipment placed on the market with a low voltage external power supply to work as intended.

NOTE 3: *"Low voltage external power supply"* is the definition provided in EU regulation 278/2009 [i.3].

NOTE 4: The measurement of energy consumption and performance of equipment during intended use are generally specified in product standards and are not covered by the present document.

NOTE 5: Where the present document is referenced by more specific standards or procedures, these should define and name the relevant conditions to which this test procedure is applied.

1.2 Equipment not in the scope of the present document

The present document does not apply to the measurement of electrical power consumption in networked standby for edge equipment. The edge equipment is a networked equipment that can be connected to a network and interact with that network or other devices and that does not have, as its primary function, the passing of network traffic to provide a network. Edge equipment are covered in EN 50643 [i.8].

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at https://docbox.etsi.org/Reference/.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

[1] EN 50564:2011: "Electrical and electronic household and office equipment - measurement of low power consumption", produced by CENELEC.

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] Commission Regulation (EC) No 1275/2008 of 17 December 2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment.

[i.2] Commission Regulation (EU) No 801/2013 of 22 August 2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions.

[i.3] Commission Regulation (EC) No 278/2009 of 6 April 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies.

[i.4] ETSI EN 301 575 (05-2012): "Environmental Engineering (EE); Measurement method for energy consumption of Customer Premises Equipment (CPE)".

[i.5] European Commission Directorate-General, Joint Research Centre: "Code Of Conduct on Energy Consumption of Broadband Communication Equipment"; Final V5: 20 December 2013.

NOTE: Available at Broadband Communication Equipment Codes of Conduct | E3P (europa.eu).

[i.6] Cablelabs: "Data-Over-Cable Service Interface Specifications - DOCSIS® 2.0 Interface".

[i.7] Cablelabs: "Data-Over-Cable Service Interface Specifications- DOCSIS® 3.0 Interface".

[i.8] EN 50643: "Electrical and electronic household and office equipment - Measurement of networked standby power consumption of edge equipment", produced by CENELEC.

[i.9] IEC 60050: "International Electrotechnical Vocabulary".

[i.10] Commission Regulation (EC) No 642/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for televisions.

[i.11] IEC IEV ref 904-03-01: "Environmental standardization for electrical and electronic products and systems".

NOTE: Available at http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=904-03-01.

[i.12] IEEE 802.11™-2012: "IEEE Standard for Information technology -- Telecommunications and information exchange between systems Local and metropolitan area networks -- Specific requirements; Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications".