

STN	Environmentálne inžinierstvo (EE) Elektrické a elektronické zariadenia určené pre domácnosti a kancelárie Merania spotreby elektrickej energie v pohotovostnom režime pri pripojení na sieť u prepojovacích zariadení Harmonizovaná norma pokrývajúca metódu merania pre nariadenie ES 1275/2008 pozmenené nariadením EU 801/2013	STN EN 303 423 V1.2.1 87 3423
------------	--	---

Environmental Engineering (EE); Electrical and electronic household and office equipment; Measurement of networked standby power consumption of Interconnecting equipment; Harmonised Standard covering the measurement method for EC Regulation 1275/2008 amended by EU Regulation 801/2013

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/19

Obsahuje: EN 303 423 V1.2.1:2018

128022

ETSI EN 303 423 V1.2.1 (2018-08)



**Environmental Engineering (EE);
Electrical and electronic household and office equipment;
Measurement of networked standby power consumption
of Interconnecting equipment;
Harmonised Standard covering the measurement method
for EC Regulation 1275/2008 amended by
EU Regulation 801/2013**

Reference

REN/EE-EEPS34

Keywordscustomer premises networks, energy efficiency,
network, power measurement**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 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from:

<http://www.etsi.org/standards-search>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

<https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx>

If you find errors in the present document, please send your comment to one of the following services:

<https://portal.etsi.org/People/CommitteeSupportStaff.aspx>

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2018.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members.

3GPP™ and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

oneM2M logo is protected for the benefit of its Members.

GSM® and the GSM logo are trademarks registered and owned by the GSM Association.

Contents

Intellectual Property Rights	5
Foreword.....	5
Modal verbs terminology.....	5
Introduction	6
1 Scope	7
1.1 Equipment in the scope of the present document	7
1.2 Equipment not in the scope of the present document	7
2 References	7
2.1 Normative references	7
2.2 Informative references.....	8
3 Definitions and abbreviations.....	9
3.1 Definitions.....	9
3.2 Abbreviations	10
4 Information required for testing purposes	11
4.1 Information about networked port(s).....	11
4.2 Power management function - periods & conditions	11
4.3 Activation and deactivation of wireless network connections.....	11
5 Measurement conditions.....	12
5.1 Common requirements	12
5.2 Test room.....	12
5.3 Power supply	12
5.4 Power measuring instruments.....	12
5.5 Configuration of network ports	12
5.6 Measurement uncertainty	15
6 Measurement procedures.....	15
6.1 General	15
6.2 Wireless network port management	15
6.2.0 General.....	15
6.2.1 Test sequence.....	15
6.2.2 Verifying that wireless connections are deactivated.....	15
6.2.3 Verifying that wireless logical network port is active.....	16
6.3 Preparation of the EUT and general testing aspects	16
6.4 Power management, reactivation and networked standby power consumption	16
6.5 Measurement of standby power consumption with all network ports disconnected	17
6.6 Measurement of networked standby power consumption with all network ports connected	17
7 Test report	18
7.1 Test and laboratory details.....	18
7.2 Details of product under test.....	18
7.3 Test parameters and network configuration	18
7.4 Measured and documented data	18
Annex A (informative): Relationship between the present document and the ecodesign requirements of the Commission Regulation (EU) n° 801/2013	19
Annex B (informative): Equipment classification	21
B.1 General	21
Annex C (informative): General information on network technologies and network configurations with respect to power consumption	24
C.1 Examples of network port configuration.....	24

Annex D (informative):	Information to be provided to the user and other interested parties	25
D.1	Information to be provided to the user and other interested parties	25
D.1.1	Information available on-line	25
D.1.2	Information available in the user manual	25
Annex E (informative):	Example of a test report template	26
Annex F (informative):	Bibliography	28
Annex G (informative):	Change history	29
History		30

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<https://ipr.etsi.org/>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

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 M/544 to provide one voluntary means of conforming to the ecodesign requirements of Commission Regulation (EU) n° 801/2013 [i.2] of 22 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment (EC No 1275/2008 [i.1]) and ecodesign requirements for televisions (EC No 642/2009 [i.10]).

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:	6 August 2018
Date of latest announcement of this EN (doa):	30 November 2018
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 May 2019
Date of withdrawal of any conflicting National Standard (dow):	31 May 2020

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 CENELEC 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 CENELEC 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 801/2013 [i.2].

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 CENELEC EN 50643 [i.8].

2 References

2.1 Normative references

References are specific, identified by date of publication and/or edition number or version number. Only the cited version 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] CENELEC EN 50564 (2011): "Electrical and electronic household and office equipment - measurement of low power consumption".

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 http://iet.jrc.ec.europa.eu/energyefficiency/sites/energyefficiency/files/files/documents/ICT_CoC/cocv5-broadband_final.pdf.

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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN