SLOVENSKI STANDARD
oSIST prEN IEC 63474:2023

01-januar-2023

Električna in elektronska gospodinjska in pisarniška oprema - Merjenje porabe električne energije v stanju omrežne pripravljenosti na robu omrežja

Electrical and electronic household and office equipment - Measurement of networked standby power consumption of edge equipment

Ta slovenski standard je istoveten z: **prEN IEC 63474:2022**

ICS:

17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities
33.160.01	Avdio, video in avdiovizualni sistemi na splošno	Audio, video and audiovisual systems in general
97.030	Električni aparati za dom na splošno	Domestic electrical appliances in general

oSIST prEN IEC 63474:2023 **en,fr,de**

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OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT	☐ QUALITY ASSURANCE ☐ SAFETY
☐ SUBMITTED FOR CENELEC PARALLEL VOTING	☒ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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TITLE:

**Electrical and electronic household and office equipment – Measurement of networked standby power consumption of edge equipment
**

(Fast track - Origin CENELEC)

PROPOSED STABILITY DATE: 2026

NOTE FROM TC/SC OFFICERS:

Contents

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRICAL AND ELECTRONIC HOUSEHOLD AND OFFICE EQUIPMENT - MEASUREMENT OF NETWORKED STANDBY POWER CONSUMPTION OF EDGE EQUIPMENT

FOREWORD

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IEC 6XXXX has been adopted under the fast-track procedure by technical area 19: Environmental and energy aspects for multimedia systems and equipment, of IEC technical committee 100: Audio, video and multimedia systems and equipment. It is an International Standard.

This publication is based on EN 50643:2018

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

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under 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.

Introduction

The methods defined in this Standard are intended to define requirements for the measurement of the power consumed by the equipment having one or more wired or wireless network port(s) able to resume a function by way of a remotely initiated trigger or reactivation trigger from a network connection.

For the measurement of low power, reference is made to EN 50564:2011. This standard also provides a method to test power management and whether it is possible to deactivate wireless network connection(s).

ELECTRICAL AND ELECTRONIC HOUSEHOLD AND OFFICE EQUIPMENT - MEASUREMENT OF NETWORKED STANDBY POWER CONSUMPTION OF EDGE EQUIPMENT

1 Scope

This Standard specifies methods of measurement of electrical power consumption in networked standby and the reporting of the results for edge equipment.

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

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

NOTE 1 This standard 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.

NOTE 2 The measurement of energy consumption and performance of products during intended use are generally specified in product standards and are not covered by this standard.

NOTE 3 The term “products” in this standard includes household appliances or information technology products, consumer electronics, audio, video and multimedia systems; however the measurement methodology could be applied to other products.

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

This Standard does not apply to the measurement of electrical power consumption in networked standby for interconnecting equipment.

NOTE 4 Measurement of electrical power consumption in networked standby for interconnecting equipment is the subject of ETSI standard EN 303 423 “Environmental Engineering (EE) - Electrical and electronic household and office equipment; Measurement of networked standby power consumption for interconnecting equipment”.

2 Normative references

The following documents are referred to in the text in such 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.

EN 50564:2011, *Electrical and electronic household and office equipment - Measurement of low power consumption*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50564:2011 as well as in the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

3.1.1
edge equipment
networked equipment that can be connected to a network and interact with that network or other equipment and that does not have, as its primary function, the passing of network traffic to provide a network

Note 1 to entry: Examples of edge equipment are given in Annex B.

3.1.2
interconnecting equipment
networked equipment that has, as its primary function, the passing of network traffic to provide a network

Note 1 to entry: Examples of interconnecting equipment are given in Annex B.

3.1.3
network
communication infrastructure with a topology of links, an architecture, including the physical components, organisational principles, communication procedures and formats (protocols)

3.1.4
network availability
capability of the equipment to resume functions after a remotely initiated trigger has been detected by a network port

3.1.5
network port
wired or wireless physical interface of the network connection located on the equipment through which the equipment can be remotely activated

Note 1 to entry: International Electrotechnical Vocabulary (IEC 60050) defines “port (of a network)” as: “a termination through which signals can enter or leave a network”.

3.1.6
networked equipment
equipment that can connect to a network and has one or more network ports

3.1.7
networked standby
condition in which the equipment is able to resume a function by way of a remotely initiated trigger from a network connection

3.1.8
networked television
television that can connect to a network and has one or more network ports

3.1.9
reactivation trigger
signal that brings the EUT back to an active mode

Note 1 to entry: The reactivation is remotely initiated by a signal that comes from outside the equipment via a network.

3.1.10
logical network port
network technology running over a physical network port

3.1.11
physical network port
physical (hardware) medium of a network port that can host two or more network technologies

Note 1 to entry: A “physical network port” can consist of multiple “logical network ports”.

3.1.12
power management
automatic control mechanism that achieves the smallest input power consistent with a pre-determined level of functionality

[SOURCE: IEV 904-03-01, modified by omission of the Note to entry]

3.2 Abbreviations

For the purposes of this document, the following abbreviations apply.

CPU central processing unit

DOCSIS[1]	Data Over Cable Service Interface Specification
EUT	equipment under test
HDMI®[2]	High Definition Multimedia Interface
HiNA	high network availability
LAN	local area network
MoCA®[3]	Multimedia over Coax Alliance
PLC	power line communication
USB[4]	Universal Serial Bus (IEC 62280 series)
WAN	wide area network

4 Information required for testing purposes

4.1 Information about network port(s)

For each type of physical and associated **logical network port**, the following information shall be provided by the manufacturer:

a) The default time after which the power management function, or a similar function, automatically switches the equipment into networked standby, and if available, the procedure for:

   1) setting a time other than the default time; and/or

   2) manually switching the equipment into networked standby;

NOTE 1 The word 'manually' in the above context refers to any user operation intervention such as pushing a button on the EuT itself, sending a message from another machine.

b) the characteristics of the reactivation trigger (message, signal…) that is used to reactivate the equipment when in networked standby and how to remotely initiate it;

c) the maximum performance specifications, e.g. the maximum speed or data rate supported by that network port;

d) the (maximum) power consumption of the equipment in a condition providing networked standby into which power management function, or a similar function, will switch the equipment, if only this port is used for remote activation, e.g. the declared power consumption of the equipment under defined conditions for a type of port;

e) the communication protocol used by equipment, except for networked televisions;

f) the radio frequency range at which each radio wireless logical network port operates;

g) the characteristics of wireless logical network ports other than radio wireless logical network ports.

NOTE 2 Annex D describes examples of product information for networked equipment.

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[1] The DOCSIS specifications are the result of a cooperative effort undertaken at the direction of Cable Television Laboratories, Inc. for the benefit of the cable industry and its customers. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named. Equivalent products may be used if they can be shown to lead to the same results.

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[3] MoCA® is a global member-driven, non-profit Alliance developing multi-gigabit coax connectivity standards. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named. Equivalent products may be used if they can be shown to lead to the same results.

[4] USB Implementers Forum, Inc. takes the position that the terms "USB" and "Universal Serial Bus" are generic terms. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named. Equivalent products may be used if they can be shown to lead to the same results.