SVENSK STANDARD SS-EN 55013

Fastställd	Utgåva	Sida	Ansvarig kommitté
2013-08-14	3	1 (1+46)	SEK TK EMC

Rundradiomottagare, TV-mottagare och tillhörande utrustning – Radiostörningar – Gränsvärden och mätmetoder

Sound and television broadcast receivers and associated equipment – Radio disturbance characteristics – Limits and methods of measurement

Som svensk standard gäller europastandarden EN 55013:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 55013:2013.

Nationellt förord

Europastandarden EN 55013:2013

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **CISPR 13, Fifth edition, 2009 - Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and methods of measurement**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 55013, utgåva 2, 2001, SS-EN 55013/A1, utgåva 1, 2003, SS-EN 55013/A2, utgåva 1, 2006 och SS-EN 55013 IS 1, utgåva 1, 2009, gäller ej fr o m 2016-04-22.

ICS 33.100.10

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

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Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 55013

June 2013

ICS 33.100.10

Supersedes EN 55013:2001 + A1:2003 + A2:2006, EN 55013:2001/IS1:2009

English version

Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and methods of measurement

(CISPR 13:2009, modified)

Récepteurs de radiodiffusion et de télévision et équipements associés - Caractéristiques des perturbations radioélectriques - Limites et méthodes de mesure (CISPR 13:2009, modifiée)

Ton- und Fernseh-Rundfunkempfänger und verwandte Geräte der Unterhaltungselektronik - Funkstöreigenschaften - Grenzwerte und Messverfahren (CISPR 13:2009, modifiziert)

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 55013:2013 E

SEK Svensk Elstandard

Foreword

The text of document CISPR/I/296/FDIS, future edition 5 of CISPR 13, prepared by CISPR SC I "Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 55013:2013.

A draft amendment, which covers common modifications to CISPR 13:2009, was prepared by CLC/TC 210 "Electromagnetic Compatibility (EMC)" and approved by CENELEC.

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-04-22
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2016-04-22

This document supersedes EN 55013:2001 + IS1:2009 + A1:2003 + A2:2006.

EN 55013:2013 includes the following significant technical changes with respect to EN 55013:2001:

EN 55013:2013 constitutes the introduction of the RMS-average detector as an alternative to quasi-peak and average detector for conducted and radiated emission measurements.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard CISPR 13:2009 was approved by CENELEC as a European Standard with agreed common modifications.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

CISPR 11:2003 + A1:2004	NOTE	Harmonised as EN 55011:2007 (modified).
CISPR 16-2-1:2008	NOTE	Harmonised as EN 55016-2-1:2009 (not modified).
CISPR 16-2-3:2006	NOTE	Harmonised as EN 55016-2-3:2006 (not modified).

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.

Publication	Year	Title	EN/HD	Year
CISPR 16-1-1 + A1 + A2	2006 2006 2007	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	EN 55016-1-1 + A1 + A2	2007 2007 2008
CISPR 16-1-2 + corr. January + A1 + A2	2003 2009 2004 2006	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-2: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Conducted disturbances	EN 55016-1-2 + A1 + A2	2004 2005 2006
CISPR 16-1-3	2004	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-3: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Disturbance power	EN 55016-1-3	2006
CISPR 16-1-4 + A1 + A2	2007 2007 2008	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Radiated disturbances	EN 55016-1-4 + A1 + A2	2007 2008 2009
CISPR 16-2-2 + A1 + A2	2003 2004 2005	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-2: Methods of measurement of disturbances and immunity - Measurement of disturbance power	EN 55016-2-2 + A1 + A2	2004 2005 2005
CISPR 22 (mod)	2008	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	EN 55022 + AC:2011	2010 2011
IEC 60050-161 + A1 + A2	1990 1997 1998	International Electrotechnical Vocabulary (IEV) - Chapter 161: Electromagnetic compatibility	-	-
IEC 60728-2	2002	Cabled distribution systems for television and sound signals - Part 2: Electromagnetic compatibility for equipment	-	-
ITU-R BT.471-1	-	Nomenclature and description of colour bar signals	-	-

CONTENTS

INTRODUCTION

The CISPR recommends that the limits and methods of measurement of radio disturbance characteristics of sound and television receivers contained in the latest edition of CISPR 13, including amendments, be used, without regional or national addenda or modifications. The requirements are considered sufficient to reach adequate emission levels to protect radio broadcast and telecommunication services and to allow other apparatus to operate as intended at a reasonable distance.

SOUND AND TELEVISION BROADCAST RECEIVERS AND ASSOCIATED EQUIPMENT – RADIO DISTURBANCE CHARACTERISTICS – LIMITS AND METHODS OF MEASUREMENT

1 Scope and object

This International Standard applies to the generation of electromagnetic energy from sound and television receivers for the reception of broadcast and similar transmissions and from associated equipment. The frequency range covered extends from 9 kHz to 400 GHz.

No measurements need be performed at frequencies where no limits are specified.

Receiving systems for collective reception, in particular:

– cable distribution head ends (Community Antenna Television, CATV);
– community reception systems (Master Antenna Television, MATV)

are covered by IEC 60728-2.

Broadcast receivers for digital signals are covered by Annex A and Annex B.

Information technology equipment (ITE) is excluded, even if intended to be connected to a television broadcast receiver.

The telecommunication port of broadcast receivers, intended to be connected to a telecommunication network, is covered by CISPR 22.

In addition, measurements at the telecommunication port are performed with the broadcast reception functions, which are independent from the telecommunication function, disabled during the measurement.

PC tuner cards are measured according to the relevant clauses of this standard.

This standard describes the methods of measurement applicable to sound and television receivers or associated equipment and specifies limits for the control of disturbance from such equipment.

For multifunction equipment which is subjected simultaneously to different clauses of this standard and/or other standards, details are given in 4.1.

2 Normative references

The following referenced documents are indispensable for the application 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.

CISPR 16-1-1:2006, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus* [1]
Amendment 1 (2006)
Amendment 2 (2007)

CISPR 16-1-2:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Conducted disturbances* [2]
Amendment 1 (2004)
Amendment 2 (2006)

CISPR 16-1-3:2004, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-3: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Disturbance power*

CISPR 16-1-4:2007, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-4: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Radiated disturbances* [3]
Amendment 1 (2007)
Amendment 2 (2008)

CISPR 16-2-2:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-2: Methods of measurement of disturbances and immunity – Measurement of disturbance power* [4]
Amendment 1 (2004)
Amendment 2 (2005)

CISPR 22:2008, *Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement*

IEC 60050-161:1990, *International Electrotechnical Vocabulary (IEV) – Chapter 161: Electromagnetic compatibility*
Amendment 1 (1997)
Amendment 2 (1998)

IEC 60728-2:2002, *Cabled distribution systems for television and sound signals – Part 2: Electromagnetic compatibility for equipment* (only available in English)

ITU-R BT 471-1, *Nomenclature and description of colour bar signals*

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1 There exists a consolidated edition 2.2 (2007) including edition 2.0, its Amendment 1 (2006) and its Amendment 2 (2007).

2 There exists a consolidated edition 1.2 (2006) including edition 1.0, its Amendment 1 (2004) and its Amendment 2 (2006).

3 There exists a consolidated edition 2.1 (2008) including edition 2.0 and its Amendment 1 (2007).

4 There exists a consolidated edition 1.2 (2005) including edition 1.0, its Amendment 1 (2004) and its Amendment 2 (2005).