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Utrustning för informationsbehandling – Radiostörningar – Gränsvärden och mätmetoder

*Information technology equipment –
Radio disturbance characteristics –
Limits and methods of measurement*

Som svensk standard gäller europastandarden EN 55022:2010. Den svenska standarden innehåller den officiella engelska språkversionen av EN 55022:2010.

Nationellt förord

Europastandarden EN 55022:2010^{*)}

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **CISPR 22, Sixth edition, 2008 - Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 55022, utgåva 3, 2006, SS-EN 55022/A1, utgåva 1, 2007 och SS-EN 55022/A2, utgåva 1, 2011, gäller ej fr o m 2013-12-01.

^{*)} Corrigendum, October 2011, till EN 55022:2010 ingår i standarden.

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English version

**Information technology equipment -
Radio disturbance characteristics -
Limits and methods of measurement**
(CISPR 22:2008, modified)

Appareils de traitement de l'information -
Caractéristiques des perturbations
radioélectriques -
Limites et méthodes de mesure
(CISPR 22:2008, modifiée)

Einrichtungen der Informationstechnik -
Funkstöreigenschaften -
Grenzwerte und Messverfahren
(CISPR 22:2008, modifiziert)

This European Standard was approved by CENELEC on 2010-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

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

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Foreword

The text of the International Standard CISPR 22:2008, prepared by CISPR SC I, "Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers", together with common modifications prepared by the Technical Committee CENELEC TC 210, "Electromagnetic compatibility (EMC)", was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 55022 on 2010-12-01.

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

This document supersedes EN 55022:2006 + A1:2007 + FprA2:2009.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2011-12-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2013-12-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directives 2004/108/EC and 1999/5/EC. See Annex ZZ.

Annexes ZA and ZZ have been added by CENELEC.

Endorsement notice

The text of the International Standard CISPR 22:2008 was approved by CENELEC as a European Standard with agreed common modifications as given below.

Corrigendum to EN 55022:2010

English version

In the common modifications regarding 8.4, replace on page 3 "2nd paragraph" with "3rd paragraph" to read: "Replace the last sentence of original 3rd paragraph by:".

Replace the entire Annex ZA with the following:

"

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

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.

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>
IEC/TR 60083	2006	Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC	-	-
IEC 61000-4-6 + A1 + A2	2003 2004 2006	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6 + corr. August ^{1) 2)}	2007 2007
CISPR 11 (mod) + A1	2003 2004	Industrial scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement	EN 55011 ³⁾	2007
CISPR 13 (mod)	2001	Sound and television broadcast receivers and	EN 55013	2001

¹⁾ EN 61000-4-6 includes A1 + A2 to IEC 61000-4-6.

²⁾ EN 61000-4-6 is superseded by EN 61000-4-6:2009, which is based on IEC 61000-4-6:2008.

³⁾ EN 55011 includes A1 to CISPR 11 (mod).

+ A1 + A2	2003 2006	associated equipment - Radio disturbance characteristics - Limits and methods of measurement	+ A1 + A2	2003 2006
CISPR 16-1-1 + A1	-	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	+ A1	-
CISPR 16-1-2 + A1 + A2 + corr. January	2003 2004 2006 2009	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-2: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Conducted disturbances	+ A1 + A2	2004 2005 2006
CISPR 16-1-4	-	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Radiated disturbances		-
CISPR 16-2-3 + A1 + A2	2003 2005 2005	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	+ A1 + A2	2004 2005 2005
CISPR 16-4-2	2003	Specification for radio disturbance and immunity measuring apparatus and methods - Part 4-2: Uncertainties, statistics and limit modelling - Uncertainty in EMC measurements		2004

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October 2011

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INTRODUCTION

The scope is extended to the whole radio-frequency range from 9 kHz to 400 GHz, but limits are formulated only in restricted frequency bands, which is considered sufficient to reach adequate emission levels to protect radio broadcast and telecommunication services, and to allow other apparatus to operate as intended at reasonable distance.

INFORMATION TECHNOLOGY EQUIPMENT – RADIO DISTURBANCE CHARACTERISTICS – LIMITS AND METHODS OF MEASUREMENT

1 Scope and object

This International Standard applies to ITE as defined in 3.1.

Procedures are given for the measurement of the levels of spurious signals generated by the ITE and limits are specified for the frequency range 9 kHz to 400 GHz for both class A and class B equipment. No measurements need be performed at frequencies where no limits are specified.

The intention of this publication is to establish uniform requirements for the radio disturbance level of the equipment contained in the scope, to fix limits of disturbance, to describe methods of measurement and to standardize operating conditions and interpretation of results.

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.

IEC 60083:2006, *Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC*

IEC 61000-4-6:2003, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*¹

Amendment 1 (2004)

Amendment 2 (2006)

CISPR 11:2003, *Industrial, scientific, and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement*²

Amendment 1 (2004)

CISPR 13:2001, *Sound and television broadcast receivers and associated equipment – Radio disturbance characteristics – Limits and methods of measurement*³

Amendment 1 (2003)

Amendment 2 (2006)

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*⁴

Amendment 1 (2006)

Amendment 2 (2007)

¹ There exists a consolidated edition 2.2 (2006) including edition 2.0, its Amendment 1 (2004) and its Amendment 2 (2006).

² There exists a consolidated edition 4.1 (2004) including edition 4.0 and its Amendment 1 (2004).

³ There exists a consolidated edition 4.2 (2006) including edition 4.0, its Amendment 1 (2003) and its Amendment 2 (2006).

⁴ There exists a consolidated edition 2.2 (2007) including edition 2.0, its Amendment 1 (2006) and its 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* ⁵

Amendment 1 (2004)

Amendment 2 (2006)

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* ⁶

CISPR 16-2-3:2006, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurements*

CISPR 16-4-2:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-2: Uncertainties, statistics and limit modelling – Uncertainty in EMC measurements*