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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 55022:2006. Den svenska standarden innehåller den officiella engelska språkversionen av EN 55022:2006.

Nationellt förord

Europastandarden EN 55022:2006

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **CISPR 22, Fifth edition, 2005 - 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 2, 1998, SS-EN 55022/A1, utgåva 1, 2000, SS-EN 55022/A2, utgåva 1, 2003, SS-EN 55022 C4, utgåva 1, 2005, SS-EN 55022/A1 C2, utgåva 1, 2006, SS-EN 55022/A2 C1, utgåva 1, 2006, gäller ej fr o m 2009-10-01.

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

Svenska Elektriska Kommissionen, SEK, 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.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

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.

SEK

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English version

**Information technology equipment -
Radio disturbance characteristics -
Limits and methods of measurement
(CISPR 22:2005, modified)**

Appareils de traitement de l'information -
Caractéristiques des perturbations
radioélectriques -
Limites et méthodes de mesure
(CISPR 22:2005, modifiée)

Einrichtungen der Informationstechnik -
Funkstöreigenschaften -
Grenzwerte und Messverfahren
(CISPR 22:2005, modifiziert)

This European Standard was approved by CENELEC on 2005-09-13. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard CISPR 22:2003 as well as A1:2004 and CISPR/I/136/FDIS (Amendment 3) and CISPR/I/128/CDV (Amendment 2, fragment 17), prepared by CISPR SC I "Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers", together with the common modifications prepared by the Technical Committee CENELEC TC 210, Electromagnetic compatibility (EMC), was submitted to the CENELEC Unique Acceptance Procedure for acceptance as a European Standard.

In addition, the text of CISPR/I/135A/FDIS (future A2, fragment 1) to CISPR 22:2003, also prepared by CISPR SC I "Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers", was submitted to the CENELEC formal vote as prAD to prEN 55022:2005, with the intention of the two documents being merged and ratified together as a new edition of EN 55022.

During the period of voting on these CENELEC drafts, the amendments CISPR/I/135A/FDIS and CISPR/I/136/FDIS (Amendments 2 and 3 respectively) made to CISPR 22:2003, resulted in the publication of a new (fifth) edition of CISPR 22, in accordance with IEC rules. The resulting CISPR 22:2005 was published in April 2005.

This resulting version of EN 55022, which was ratified on 2005-09-13, is therefore identical to CISPR 22:2005 except for the common modifications that were included in the document submitted to the CENELEC Unique Acceptance Procedure. The common modifications include CISPR/I/128/CDV, as this draft was not implemented in the unamended CISPR 22:2005.

This European Standard supersedes EN 55022:1998 and its amendments A1:2000 and A2:2003.

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) 2007-04-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2009-10-01

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 89/336/EEC, 2004/108/EC and 1999/5/EC. See Annex ZZ.

The text of the International Standard CISPR 22:2005 was approved by CENELEC as a European Standard with agreed common modifications as given below.

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Annex ZA (normative)

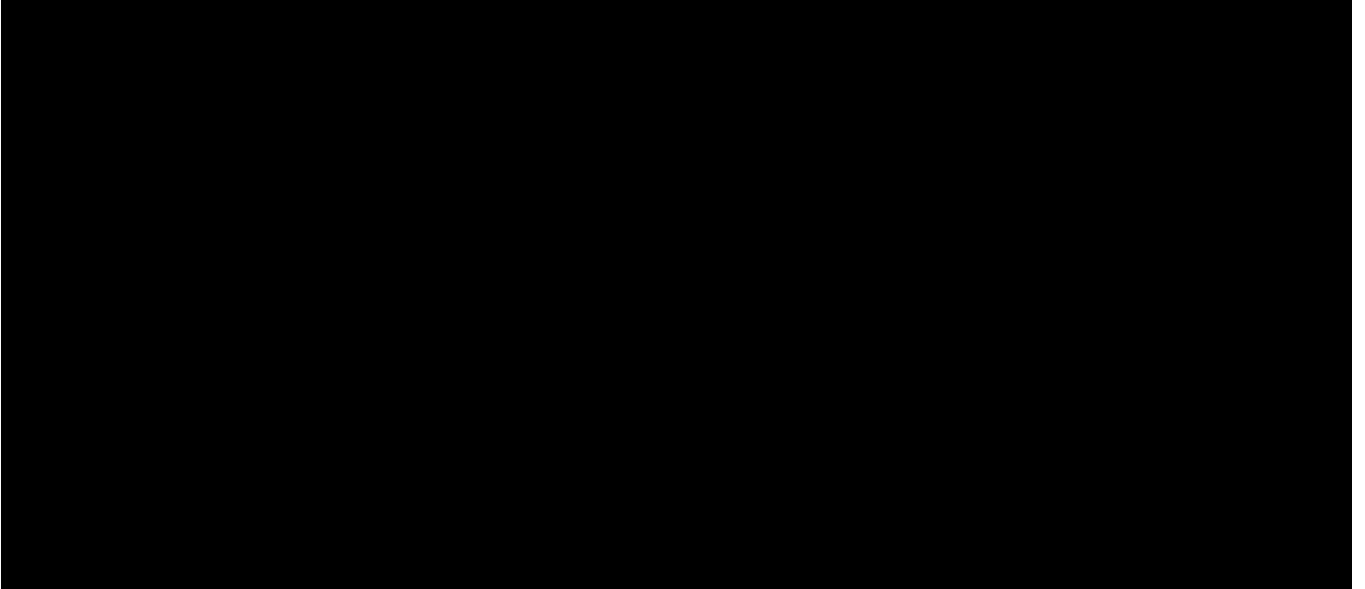
Normative references to international publications with their corresponding European publications

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 60083	1997	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	-	-
CISPR 11 (mod)	2003	Industrial scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement	EN 55011	200X ⁴⁾ -
CISPR 13 (mod)	2001	Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and methods of measurement	EN 55013	2001
CISPR 16-1-1	2003	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	2004
CISPR 16-1-2 A1	2003 2004	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	2004 2005
CISPR 16-1-4 A1	2003 2004	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	2004 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	EN 55016-4-2	2004

⁴⁾ At ratification stage.



CONTENTS

1	Scope and object.....	15
2	Normative references	15
3	Definitions	17
4	Classification of ITE	19
4.1	Class B ITE	19
4.2	Class A ITE	21
5	Limits for conducted disturbance at mains terminals and telecommunication ports.....	21
5.1	Limits of mains terminal disturbance voltage	21
5.2	Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports	23
6	Limits for radiated disturbance.....	23
7	Interpretation of CISPR radio disturbance limit.....	25
7.1	Significance of a CISPR limit	25
7.2	Application of limits in tests for conformity of equipment in series production.....	25
8	General measurement conditions.....	27
8.1	Ambient noise	27
8.2	General arrangement.....	29
8.3	EUT arrangement.....	33
8.4	Operation of the EUT.....	37
9	Method of measurement of conducted disturbance at mains terminals and telecommunication ports.....	41
9.1	Measurement detectors	41
9.2	Measuring receivers	41
9.3	Artificial mains network (AMN).....	43
9.4	Ground reference plane.....	43
9.5	EUT arrangement.....	43
9.6	Measurement of disturbances at telecommunication ports.....	49
9.7	Recording of measurements	55
10	Method of measurement of radiated disturbance	55
10.1	Measurement detectors	55
10.2	Measuring receivers	57
10.3	Antenna	57
10.4	Measurement site.....	57
10.5	EUT arrangement.....	59
10.6	Recording of measurements	61
10.7	Measurement in the presence of high ambient signals.....	61
10.8	User installation testing	61
11	Measurement uncertainty	63

Annex A (normative) Site attenuation measurements of alternative test sites	83
Annex B (normative) Decision tree for peak detector measurements.....	95
Annex C (normative) Possible test set-ups for common mode measurements	97
Annex D (informative) Schematic diagrams of examples of impedance stabilization networks (ISN)	111
Annex E (informative) Parameters of signals at telecommunication ports	129
Annex F (informative) Rationale for disturbance measurements and methods	135
 Bibliography	 149
 Figure 1 – Test site.....	 63
Figure 2 – Minimum alternative measurement site.....	65
Figure 3 – Minimum size of metal ground plane.....	65
Figure 4 – Test configuration: tabletop equipment (conducted measurement)	67
Figure 5 – Alternative test configuration: tabletop equipment (conducted measurement)	69
Figure 6 – Alternative test configuration: tabletop equipment (conducted measurement) – Plan view.....	69
Figure 7 – Test configuration: tabletop equipment (conducted measurement on a radiated test site).....	71
Figure 8 – Test configuration: floor-standing equipment (conducted measurement).....	73
Figure 9 – Test configuration: floor-standing and table-top equipment (conducted measurement)	75
Figure 10 – Test configuration: table-top equipment (radiated measurement)	75
Figure 11 – Test configuration: floor-standing equipment (radiated measurement).....	77
Figure 12 – Test configuration: floor-standing and table-top equipment (radiated measurement)	79
Figure 13 – Test configuration: floor-standing equipment (overhead cables, side view).....	81
Figure A.1 – Typical antenna positions for alternate site NSA measurements	89
Figure A.2 – Antenna positions for alternate site measurements for minimum recommended volume.....	91
Figure B.1 – Decision tree for peak detector measurements	95
Figure C.1 – Using CDNs described in IEC 61000-4-6 as CDN/ISNs.....	99
Figure C.2 – Using a 150 Ω load to the outside surface of the shield ("in situ CDN/ISN").....	101
Figure C.3 – Using a combination of current probe and capacitive voltage probe	101
Figure C.4 – Using no shield connection to ground and no ISN.....	103
Figure C.5 – Calibration fixture	107
Figure C.6 – Flowchart for selecting test method.....	109
Figure D.1 – ISN for use with unscreened single balanced pairs.....	111

Figure D.2 – ISN with high longitudinal conversion loss (LCL) for use with either one or two unscreened balanced pairs.....	113
Figure D.3 – ISN with high longitudinal conversion loss (LCL) for use with one, two, three, or four unscreened balanced pairs	115
Figure D.4 – ISN, including a 50 Ω source matching network at the voltage measuring port, for use with two unscreened balanced pairs	117
Figure D.5 – ISN for use with two unscreened balanced pairs	119
Figure D.6 – ISN, including a 50 Ω source matching network at the voltage measuring port, for use with four unscreened balanced pairs	121
Figure D.7 – ISN for use with four unscreened balanced pairs	123
Figure D.8 – ISN for use with coaxial cables, employing an internal common mode choke created by bifilar winding an insulated centre-conductor wire and an insulated screen-conductor wire on a common magnetic core (for example, a ferrite toroid)	123
Figure D.9 – ISN for use with coaxial cables, employing an internal common mode choke created by miniature coaxial cable (miniature semi-rigid solid copper screen or miniature double-braided screen coaxial cable) wound on ferrite toroids.....	125
Figure D.10 – ISN for use with multi-conductor screened cables, employing an internal common mode choke created by bifilar winding multiple insulated signal wires and an insulated screen-conductor wire on a common magnetic core (for example, a ferrite toroid)	125
Figure D.11 – ISN for use with multi-conductor screened cables, employing an internal common mode choke created by winding a multi-conductor screened cable on ferrite toroids.....	127
Figure F.1 – Basic circuit for considering the limits with defined TCM impedance of 150 Ω	141
Figure F.2 – Basic circuit for the measurement with unknown TCM impedance	141
Figure F.3 – Impedance layout of the components used in Figure C.2	145
Figure F.4 – Basic test set-up to measure combined impedance of the 150 Ω and ferrites .	147
Table 1 – Limits for conducted disturbance at the mains ports of class A ITE.....	21
Table 2 – Limits for conducted disturbance at the mains ports of class B ITE.....	23
Table 3 – Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports in the frequency range 0,15 MHz to 30 MHz for class A equipment	23
Table 4 – Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports in the frequency range 0,15 MHz to 30 MHz for class B equipment	23
Table 5 – Limits for radiated disturbance of class A ITE at a measuring distance of 10 m.....	25
Table 6 – Limits for radiated disturbance of class B ITE at a measuring distance of 10 m	25
Table 7 – Acronyms used in figures	63
Table A.1 – Normalized site attenuation (A_N (dB)) for recommended geometries with broadband antennas	87
Table F.1 – Summary of advantages and disadvantages of the methods described in Annex C	137

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 60083:1997, *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*

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

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

CISPR 16-1-1:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus*

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*¹
Amendment 1 (2004)

¹ There exists a consolidated edition 1.1 (2004) including edition 1.0 and its Amendment 1.