

**Multimeediaseadmete elektromagnetiline ühilduvus.
Emissiooni piiramise nõuded**

**Electromagnetic compatibility of multimedia equipment -
Emission requirements**

EESTI STANDARDI EESSÕNA

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**Electromagnetic compatibility of multimedia equipment -
Emission requirements
(CISPR 32:2012)**

Compatibilité électromagnétique des
équipements multimédia -
Exigences d'émission
(CISPR 32:2012)

Elektromagnetische Verträglichkeit von
Multimediageräten und -einrichtungen -
Anforderungen an die Störaussendung
(CISPR 32:2012)

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document CISPR/I/391/FDIS, future edition 1 of CISPR 32, 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 55032:2012.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2012-12-05
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-03-05

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 see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard CISPR 32:2012 was approved by CENELEC as a European Standard without any modification.

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

CISPR 16 series	NOTE Harmonized in EN 55016 series.
CISPR 22:2008	NOTE Harmonized as EN 55022:2010 (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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
CISPR 16-1-1 + corr. October + corr. October + A1	2010 2010 2011 2010	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	2010 2010
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 16-1-4 + corr. December	2010 2010	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements	EN 55016-1-4	2010
CISPR 16-2-1 + A1	2008 2010	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements	EN 55016-2-1 + A1	2009 2011
CISPR 16-2-3 + A1	2010 2010	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	EN 55016-2-3 + A1	2010 2010
CISPR 16-4-2	2011	Specification for radio disturbance and immunity measuring apparatus and methods - Part 4-2: Uncertainties, statistics and limit modelling - Measurement instrumentation uncertainty	EN 55016-4-2	2011
CISPR 16-4-3 + A1	2004 2006	Specification for radio disturbance and immunity measuring apparatus and methods - Part 4-3: Uncertainties, statistics and limit modeling - Statistical considerations in the determination of EMC compliance of mass-produced products	-	-
IEC 61000-4-6	2008	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2009

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-161	1990	International Electrotechnical Vocabulary (IEV) - Chapter 161: Electromagnetic compatibility	-	-
ISO/IEC 17025	2005	General requirements for the competence of testing and calibration laboratories	EN ISO/IEC 17025	2005
ANSI C63.5	2006	American National Standard (for) Electromagnetic Compatibility - Radiated Emission Measurements in Electromagnetic Interference (EMI) Control - Calibration of Antennas (9 kHz to 40 GHz)	-	-
IEEE 802.3	-	IEEE Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications	-	-

Annex ZZ
(informative)

Coverage of Essential Requirements of EU Directives

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers protection requirements of Annex I, Article 1(a) of the EU Directive 2004/108/EC, and essential requirements of Article 3.1(b) (emission only) of the EU Directive 1999/5/EC.

Compliance with this standard provides presumption of conformity with the specified essential requirements of the Directive concerned.

WARNING Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

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ELECTROMAGNETIC COMPATIBILITY OF MULTIMEDIA EQUIPMENT –

Emission requirements

1 Scope

NOTE *Blue* coloured text within this document indicates text aligned with CISPR 35.

This International Standard applies to multimedia equipment (MME) as defined in 3.1.23 and having a rated r.m.s. AC or DC supply voltage not exceeding 600 V.

Equipment within the scope of CISPR 13 or CISPR 22 is within the scope of this publication.

MME intended primarily for professional use is within the scope of this publication.

The radiated emission requirements in this standard are not intended to be applicable to the intentional transmissions from a radio transmitter as defined by the ITU, nor to any spurious emissions related to these intentional transmissions.

Equipment, for which emission requirements in the frequency range covered by this publication are explicitly formulated in other CISPR publications (except CISPR 13 and CISPR 22), are excluded from the scope of this publication.

This document does not contain requirements for in-situ assessment. Such testing is outside the scope of this publication and may not be used to demonstrate compliance with it.

This publication covers two classes of MME (Class A and Class B). The MME classes are specified in Clause 4.

The objectives of this publication are:

- 1) to establish requirements which provide an adequate level of protection of the radio spectrum, allowing radio services to operate as intended in the frequency range 9 kHz to 400 GHz;
- 2) to specify procedures to ensure the reproducibility of measurement and the repeatability of results.

2 Normative references

The following reference documents are indispensable for the application of this publication. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CISPR 16-1-1:2010, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus*
Amendment 1 (2010)

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*
Amendment 1 (2004)
Amendment 2 (2006)

CISPR 16-1-4:2010, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-4: Radio disturbance and immunity measuring apparatus – Antennas and test sites for radiated disturbance measurements*

CISPR 16-2-1:2008, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements*
Amendment 1 (2010)

CISPR 16-2-3:2010, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurements*
Amendment 1 (2010)

CISPR 16-4-2:2011, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-2: Uncertainties, statistics and limit modelling – Measurement instrumentation uncertainty*

CISPR/TR 16-4-3:2004, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-3: Uncertainties, statistics and limit modelling – Statistical considerations in the determination of EMC compliance of mass-produced products*
Amendment 1 (2006)

IEC 60050-161:1990, *International Electrotechnical Vocabulary – Chapter 161: Electromagnetic compatibility*

IEC 61000-4-6:2008, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*

ISO/IEC 17025:2005, *General requirements for the competence of testing and calibration laboratories*

IEEE Std 802.3, *IEEE Standard for Information technology – Specific requirements – Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications*

ANSI C63.5-2006, *American National Standard (for) Electromagnetic Compatibility - Radiated Emission Measurements in Electromagnetic Interference (EMI) Control - Calibration of Antennas (9 kHz to 40 GHz)*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE Terms and definitions related to EMC and to relevant phenomena are given in IEC 60050-161. It should be noted that a common set of definitions has been written for both CISPR 32 and CISPR 35 (to be published). It is noted that some terms and definitions will only be used in one of these two publications but for purposes of consistency they are intentionally included in both.

3.1.1

AC mains power port

port used to connect to the mains supply network

NOTE Equipment with a DC power port which is powered by a dedicated AC/DC power converter is defined as AC mains powered equipment.