## SVENSK STANDARD SS-EN 55016-1-4



Fastställd 2010-08-23

Utgåva 3

1 (1+102)

Ansvarig kommitté SEK TK EMC

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## EMC – Utrustning och metoder för mätning av radiostörningar och immunitet – Del 1-4: Utstrålade störningar

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

Som svensk standard gäller europastandarden EN 55016-1-4:2010. Den svenska standarden innehåller den officiella engelska språkversionen av EN 55016-1-4:2010.

#### Nationellt förord

Europastandarden EN 55016-1-4:2010

består av:

- europastandardens ikraftsättningsdokument, utarbetat inom CENELEC
- CISPR 16-1-4, Third edition, 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

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 55016-1-4, utgåva 2, 2007, SS-EN 55016-1-4/A1, utgåva 1, 2008 och SS-EN 55016-1-4/A2, utgåva 1, 2009, gäller ej fr o m 2013-06-01.

ICS 33.100.10; 33.100.20

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SEK Svensk Elstandard

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## **EUROPEAN STANDARD**

## EN 55016-1-4

## NORME EUROPÉENNE EUROPÄISCHE NORM

June 2010

ICS 33.100.10; 33.100.20

Supersedes EN 55016-1-4:2007 + A1:2008 + A2:2009

English version

# 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 16-1-4:2010)

Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Partie 1-4: Appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Antennes et emplacements d'essa

radioélectriques -Antennes et emplacements d'essai pour les mesures des perturbations rayonnées (CISPR 16-1-4:2010) Anforderungen an Geräte und Einrichtungen sowie Festlegung der Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit - Teil 1-4: Geräte und Einrichtungen zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit - Zusatz-/Hilfseinrichtungen - Gestrahlte Störaussendung (CISPR 16-1-4:2010)

This European Standard was approved by CENELEC on 2010-06-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, 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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

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Ref. No. EN 55016-1-4:2010 E

## **Foreword**

The text of document CISPR/A/885/FDIS, future edition 3 of CISPR 16-1-4, prepared by CISPR SC A, Radio-interference measurements and statistical methods, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 55016-1-4 on 2010-06-01.

This European Standard supersedes EN 55016-1-4:2007 + A1:2008 + A2:2009.

This EN 55016-1-4:2010 includes the following significant technical change with respect to EN 55016-1-4:2007 + A1:2008 + A2:2009: provisions are added to address evaluation of a set-up table in the frequency range above 1 GHz.

It has the status of a basic EMC publication in accordance with IEC Guide 107, *Electromagnetic compatibility – Guide to the drafting of electromagnetic compatibility publications*.

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.

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) 2011-03-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2013-06-01

Annex ZA has been added by CENELEC.

## **Endorsement notice**

The text of the International Standard CISPR 16-1-4:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

[1] IEC 61169-8 NOTE Harmonized as EN 61169-8.

## 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>	EN/HD	<u>Year</u>
CISPR 16-1-1	-	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 -	-
CISPR 16-1-5	2003	Specification for radio disturbance and immunity measuring apparatus and methods Part 1-5: Radio disturbance and immunity measuring apparatus - Antenna calibration test sites for 30 MHz to 1 000 MHz	EN 55016-1-5 -	2004
CISPR 16-2-3	-	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 -	-
CISPR/TR 16-3 + A1 + A2	2003 2005 2006	Specification for radio disturbance and immunity measuring apparatus and methods - Part 3: CISPR technical reports	-	-
CISPR 16-4-2	-	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 -	-
IEC 60050-161	-	International Electrotechnical Vocabulary (IEV) - Chapter 161: Electromagnetic compatibility	-	-
IEC 61000-4-20	-	Electromagnetic compatibility (EMC) - Part 4-20: Testing and measurement techniques - Emission and immunity testing in transverse electromagnetic (TEM) waveguides	EN 61000-4-20	-

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## 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

## 1 Scope

This part of CISPR 16 specifies the characteristics and performance of equipment for the measurement of radiated disturbances in the frequency range 9 kHz to 18 GHz. Specifications for antennas and test sites are included.

NOTE In accordance with IEC Guide 107, CISPR 16-1-4 is a basic EMC publication for use by product committees of the IEC. As stated in Guide 107, product committees are responsible for determining the applicability of the EMC standard. CISPR and its sub-committees are prepared to co-operate with product committees in the evaluation of the value of particular EMC tests for specific products.

The requirements of this publication apply at all frequencies and for all levels of radiated disturbances within the CISPR indicating range of the measuring equipment.

Methods of measurement are covered in Part 2-3, and further information on radio disturbance is given in Part 3 of CISPR 16. Uncertainties, statistics and limit modelling are covered in Part 4 of CISPR 16.

## 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, Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus

CISPR 16-1-5:2003, Specification for radio disturbance and immunity measuring apparatus and methods — Part 1-5: Radio disturbance and immunity measuring apparatus — Antenna calibration test sites for 30 MHz to 1 000 MHz

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

 ${\it CISPR/TR~16-3:2003,~Specification~for~radio~disturbance~and~immunity~measuring~apparatus~and~methods-Part~3:~CISPR~technical~reports}$ 

Amendment 1(2005)

Amendment 2(2006)

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

IEC 60050-161, International Electrotechnical Vocabulary (IEV) – Chapter 161: Electromagnetic compatibility

IEC 61000-4-20, Electromagnetic compatibility (EMC) – Part 4-20: Testing and measurement techniques – Emission and immunity testing in transverse electromagnetic (TEM) waveguides

