

**Specifikacija za merilne naprave in metode za merjenje radijskih motenj in odpornosti – 2-4. del: Metode za merjenje radijskih motenj in odpornosti – Merjenje odpornosti (CISPR 16-2-4:2003)**

## Specification for radio disturbance and immunity measuring apparatus and methods -- Part 2-4: Methods of measurement of disturbances and immunity - Immunity measurements

Anforderungen an Geräte und Einrichtungen sowie Festlegung der Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit -- Teil 2-4: Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit - Messungen der Störfestigkeit

ungen der Störfestigkeit  
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## Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques -- Partie 2-4: Méthodes de mesure des perturbations et de l'immunité - Mesures de l'immunité

**Ta slovenski standard je istoveten z: EN 55016-2-4:2004**

**ICS:**

17.220.20	T <sup>^</sup>  b} b <sup>^</sup>  dā} āā {æ} ^q āā} āā	Measurement of electrical and magnetic quantities
33.100.20	Imunost	Immunity

**SIST EN 55016-2-4:2005** **en**

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EUROPEAN STANDARD

**EN 55016-2-4**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2004

ICS 33.100.10; 33.100.20

English version

**Specification for radio disturbance and immunity  
measuring apparatus and methods  
Part 2-4: Methods of measurement of disturbances and immunity –  
Immunity measurements  
(CISPR 16-2-4:2003)**

Spécifications des méthodes  
et des appareils de mesure  
des perturbations radioélectriques  
et de l'immunité aux perturbations  
radioélectriques  
Partie 2-4: Méthodes de mesure  
des perturbations et de l'immunité –  
Mesures de l'immunité  
(CISPR 16-2-4:2003)

Anforderungen an Geräte und  
Einrichtungen sowie Festlegung der  
Verfahren zur Messung der  
hochfrequenten Störaussendung  
(Funkstörungen) und Störfestigkeit  
Teil 2-4: Verfahren zur Messung der  
hochfrequenten Störaussendung  
(Funkstörungen) und Störfestigkeit –  
Messungen der Störfestigkeit  
(CISPR 16-2-4:2003)

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This European Standard was approved by CENELEC on 2004-09-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and 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 16-2-4:2003, prepared by CISPR SC A, Radio-interference measurements and statistical methods, was submitted to the formal vote and was approved by CENELEC as EN 55016-2-4 on 2004-09-01 without any modification.

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) 2005-09-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2007-09-01

Annex ZA has been added by CENELEC.

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### Endorsement notice

The text of the International Standard CISPR 16-2-4:2003 was approved by CENELEC as a European Standard without any modification.

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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 60364-4	Series	Electrical installations of buildings Part 4: Protection for safety	HD 384.4/ HD 60364-4	Series
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	EN 55016-1-2	2004
CISPR 16-1-4	2003	Part 1-4: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Radiated disturbances	EN 55016-1-4	2004
ITU-R Recommendation BS.468-4	1994	Measurement of audio-frequency noise voltage level in sound broadcasting	-	-

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COMMISSION  
ÉLECTROTECHNIQUE  
INTERNATIONALE

**CISPR**  
**16-2-4**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

Première édition  
First edition  
2003-11

COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES  
INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

**Spécifications des méthodes et des appareils  
de mesure des perturbations radioélectriques  
et de l'immunité aux perturbations  
radioélectriques –**

**Partie 2-4:**

**Méthodes de mesure des perturbations  
et de l'immunité – Mesures de l'immunité**

(standards.iteh.ai)

**Specification for radio disturbance and immunity  
measuring apparatus and methods –**

**Part 2-4:**

**Methods of measurement of disturbances and  
immunity – Immunity measurements**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

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Pour prix, voir catalogue en vigueur  
For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION  
INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

**SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY  
MEASURING APPARATUS AND METHODS –**

**Part 2-4: Methods of measurement of disturbances and immunity –  
Immunity measurements**

**FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard CISPR 16-2-4 has been prepared by CISPR subcommittee A: Radio interference measurements and statistical methods.

This first edition of CISPR 16-2-4, together with CISPR 16-2-1, CISPR 16-2-2 and CISPR 16-2-3, cancels and replaces the second edition of CISPR 16-2, published in 2003. It contains the relevant clauses of CISPR 16-2 without technical changes.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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## INTRODUCTION

CISPR 16-1, CISPR 16-2, CISPR 16-3 and CISPR 16-4 have been reorganised into 14 parts, to accommodate growth and easier maintenance. The new parts have also been renumbered. See the list given below.

Old CISPR 16 publications		New CISPR 16 publications	
CISPR 16-1	Radio disturbance and immunity measuring apparatus	CISPR 16-1-1	Measuring apparatus
		CISPR 16-1-2	Ancillary equipment – Conducted disturbances
		CISPR 16-1-3	Ancillary equipment – Disturbance power
		CISPR 16-1-4	Ancillary equipment – Radiated disturbances
		CISPR 16-1-5	Antenna calibration test sites for 30 MHz to 1 000 MHz
CISPR 16-2	Methods of measurement of disturbances and immunity	CISPR 16-2-1	Conducted disturbance measurements
		CISPR 16-2-2	Measurement of disturbance power
		CISPR 16-2-3	Radiated disturbance measurements
		CISPR 16-2-4	Immunity measurements
CISPR 16-3	Reports and recommendations of CISPR	CISPR 16-3	CISPR technical reports
		CISPR 16-4-1	Uncertainties in standardised EMC tests
		CISPR 16-4-2	Measurement instrumentation uncertainty
		CISPR 16-4-3	Statistical considerations in the determination of EMC compliance of mass-produced products
CISPR 16-4	Uncertainty in EMC measurements	CISPR 16-4-4	Statistics of complaints and a model for the calculation of limits

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More specific information on the relation between the old CISPR 16-2 and the present 'new' CISPR 16-2-4 is given in the table after this introduction (TABLE RECAPITULATING CROSS REFERENCES).

Measurement instrumentation specifications are given in five new parts of CISPR 16-1, while the methods of measurement are covered now in four new parts of CISPR 16-2. Various reports with further information and background on CISPR and radio disturbances in general are given in CISPR 16-3. CISPR 16-4 contains information related to uncertainties, statistics and limit modelling.

CISPR 16-2 consists of the following parts, under the general title *Specification for radio disturbance and immunity measuring apparatus and methods – Methods of measurement of disturbances and immunity*:

- Part 2-1: Conducted disturbance measurements,
- Part 2-2: Measurement of disturbance power,
- Part 2-3: Radiated disturbance measurements,
- Part 2-4: Immunity measurements.

## TABLE RECAPITULATING CROSS-REFERENCES

Second edition of CISPR 16-2 Clauses, subclauses	First edition of CISPR 16-2-4 Clauses, subclauses
1.1	1
1.2	2
1.3	3
3.1	4
3.2	5
3.3	6
Figures	Figures
25, ... 31	1, ... 7

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