

INTERNATIONAL STANDARD

NORME INTERNATIONALE

INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES

Specification for radio disturbance and immunity measuring apparatus and methods –

Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements

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

Partie 2-1: Méthodes de mesure des perturbations et de l'immunité – Mesures des perturbations conduites



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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

XB

ICS 33.100.10; 33.100.20

ISBN 2-8318-1002-1

CONTENTS

FOREWORD.....	6
1 Scope.....	8
2 Normative references.....	8
3 Definitions	8
4 Types of disturbance to be measured.....	12
4.1 General	12
4.2 Types of disturbance	12
4.3 Detector functions	12
5 Connection of measuring equipment	13
5.1 General	13
5.2 Connection of ancillary equipment.....	13
5.3 Connections to RF reference ground.....	13
5.4 Connection between the EUT and the artificial mains network	14
6 General measurement requirements and conditions	15
6.1 General	15
6.2 Disturbance not produced by the equipment under test	15
6.2.1 General	15
6.2.2 Compliance testing	15
6.3 Measurement of continuous disturbance	15
6.3.1 Narrowband continuous disturbance.....	15
6.3.2 Broadband continuous disturbance.....	15
6.3.3 Use of spectrum analyzers and scanning receivers.....	16
6.4 Operating conditions of the EUT	16
6.4.1 General	16
6.4.2 Normal load conditions.....	16
6.4.3 Duration of operation	16
6.4.4 Running-in/Warm-up time	16
6.4.5 Supply	16
6.4.6 Mode of operation.....	16
6.5 Interpretation of measuring results.....	16
6.5.1 Continuous disturbance	16
6.5.2 Discontinuous disturbance	17
6.5.3 Measurement of the duration of disturbances	17
6.6 Measurement times and scan rates for continuous disturbance	17
6.6.1 General	17
6.6.2 Minimum measurement times	17
6.6.3 Scan rates for scanning receivers and spectrum analyzers	18
6.6.4 Scan times for stepping receivers	19
6.6.5 Strategies for obtaining a spectrum overview using the peak detector.....	20
7 Measurement of disturbances conducted along leads, 9 kHz to 30 MHz.....	23
7.1 Introduction	23
7.2 Measuring equipment (receivers, etc.)	23
7.2.1 General	23
7.2.2 Use of detectors for conducted disturbance measurements	23
7.3 Ancillary measuring equipment	24
7.3.1 General	24

7.3.2	Artificial networks (AN).....	24
7.3.3	Voltage probes.....	25
7.3.4	Current probes.....	25
7.4	Equipment under test configuration	25
7.4.1	Arrangement of the EUT and its connection to the AN	25
7.4.2	Procedure for the measurement of unsymmetric disturbance voltages with V-networks (AMNs).....	31
7.4.3	Measurement of common mode voltages at differential mode signal terminals.....	38
7.4.4	Measurements using voltage probes	39
7.4.5	Measurement using a capacitive voltage probe (CVP)	41
7.4.6	Measurements using current probes.....	41
7.5	System test configuration for conducted emissions measurements	42
7.5.1	General approach to system measurements	42
7.5.2	System configuration.....	42
7.5.3	Measurements of interconnecting lines.....	45
7.5.4	Decoupling of system components	45
7.6	<i>In situ</i> measurements	45
7.6.1	General	45
7.6.2	Reference ground	46
7.6.3	Measurement with voltage probes	46
7.6.4	Selection of measuring points	46
8	Automated measurement of emissions.....	47
8.1	Introduction: Precautions for automating measurements.....	47
8.2	Generic measurement procedure	47
8.3	Prescan measurements	48
8.4	Data reduction	49
8.5	Emission maximization and final measurement	49
8.6	Post processing and reporting.....	49
Annex A (informative)	Guidelines to connection of electrical equipment to the artificial mains network (see Clause 5)	50
Annex B (informative)	Use of spectrum analyzers and scanning receivers (see Clause 6)	57
Annex C (informative)	Decision tree for use of detectors for conducted measurements (see 7.2.2)	60
Annex D (informative)	Scan rates and measurement times for use with the average detector	62
Annex E (informative)	Guidelines for the improvement of the test setup with ANs.....	66
Bibliography	72
Figure 1	– Example of a recommended test setup with PE chokes with three AMNs and a sheath current absorber on the RF cable	14
Figure 2	– Measurement of a combination of a CW signal (“NB”) and an impulsive signal (“BB”) using multiple sweeps with maximum hold.....	20
Figure 3	– Example of a timing analysis.....	21
Figure 4	– A broadband spectrum measured with a stepped receiver	22
Figure 5	– Intermittent narrowband disturbances measured using fast short repetitive sweeps with maximum hold function to obtain an overview of the emission spectrum	22
Figure 6	– Test configuration: table-top equipment for conducted disturbance measurements on power mains	26

Figure 7 – Arrangement of EUT and AMN at 40 cm distance with a) vertical RGP and b) horizontal RGP	27
Figure 8 – Optional example test configuration for an EUT with only a power cord attached	28
Figure 9 – Test configuration: floor-standing equipment (see 7.4.1 and 7.5.2.2)	29
Figure 10 – Example Test configuration: floor-standing and table-top equipment (see 7.4.1 and 7.5.2.2)	30
Figure 11 – Schematic of disturbance voltage measurement configuration (see also 7.5.2.2)	32
Figure 12a – Schematic for measurement and power circuit	33
Figure 12b – Equivalent voltage source and measurement circuit	33
Figure 12 – Equivalent circuit for measurement of common mode disturbance voltage for class I (grounded) EUT	33
Figure 13a – Schematic for power and measurement circuit	34
Figure 13b – Equivalent RFI source and measurement circuit	34
Figure 13 – Equivalent circuit for measurement of common mode disturbance voltage for class II (ungrounded) EUT	34
Figure 14 – RC element for artificial hand	36
Figure 15 – Portable electric drill with artificial hand	36
Figure 16 – Portable electric saw with artificial hand	36
Figure 17 – Measuring example for voltage probes	40
Figure 18 – Measurement arrangement for two-terminal regulating controls	40
Figure A.1	50
Figure A.2	51
Figure A.3	51
Figure A.4	51
Figure A.5	52
Figure A.6	52
Figure A.7	53
Figure A.8 – AMN configurations	55
Figure C.1 – Decision tree for optimizing speed of conducted disturbance measurements with peak, quasi-peak and average detectors	60
Figure D.1 – Weighting function of a 10 ms pulse for peak (“PK”) and average detections with (“CISPR AV”) and without (“AV”) peak reading; meter time constant 160 ms	64
Figure D.2 – Weighting functions of a 10 ms pulse for peak (“PK”) and average detections with (“CISPR AV”) and without (“AV”) peak reading; meter time constant 100 ms	64
Figure D.3 – Example of weighting functions (of a 1 Hz pulse) for peak (“PK”) and average detections as a function of pulse width: meter time constant 160 ms	65
Figure D.4 – Example of weighting functions (of a 1 Hz pulse) for peak (“PK”) and average detections as a function of pulse width: meter time constant 100 ms	65
Figure E.1 – Parallel resonance of enclosure capacitance and ground strap inductance	66
Figure E.2 – Connection of an AMN to RGP using a wide grounding sheet for low inductance grounding	67
Figure E.3 – Impedance measured with the arrangement of Figure E.2 both with reference to the front panel ground and to the grounding sheet	67

Figure E.4 – VDF in the configuration of Figure E.2 measured with reference to the front panel ground and to the grounding sheet. (The AMN used has a flat frequency response of the VDF, which may be different for other AMNs).....	67
Figure E.5 – Arrangement showing the measurement grounding sheet (shown with dotted lines) when measuring the impedance with reference to RGP. The impedance measurement cable ground is connected to the measurement grounding sheet, whereas the inner conductor is connected to the EUT port pin.	68
Figure E.6 – Impedance measured with the arrangement of Figure E.5 with reference to the RGP.	68
Figure E.7 – VDF measured with parallel resonances in the AMN grounding	69
Figure E.8 – Attenuation of a sheath current absorber measured in a 150-Ω test arrangement	70
Figure E.9 – Arrangement for the measurement of attenuation due to PE chokes and sheath current absorbers.....	70
Table 1 – Minimum scan times for the three CISPR bands with peak and quasi-peak detectors.....	18
Table A.1	56
Table A.2	56
Table D.1 – Pulse suppression factors and scan rates for a 100 Hz video bandwidth.....	63
Table D.2 – Meter time constants and the corresponding video bandwidths and maximum scan rates	64

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY MEASURING APPARATUS AND METHODS –

Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements

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International Standard CISPR 16-2-1 has been prepared by CISPR subcommittee A: Radio interference measurements and statistical methods.

This second edition of CISPR 16-2-1 cancels and replaces the first edition (2003) and its Amendment 1 (2005) and constitutes a technical revision.

This edition includes significant technical changes with respect to the previous edition. In general, this new edition aims at reducing compliance uncertainty in correspondence with findings in CISPR 16-4-1. Guidelines are given on

- resonance-free connection of the AMN to reference ground,
- avoidance of ground loops, and

- avoidance of ambiguities of the test setup of EUT and AMN with respect to the reference ground plane.

In addition, terms are clarified, a new type of ancillary equipment (CVP) is applied, and a clarification for the use of the AAN and AMN on the same EUT is provided.

The text of this standard is based on the following documents:

FDIS	Report on Voting
CISPR/A/798/FDIS	CISPR/A/809/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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

A list of all parts of CISPR 16 series under the general title *Specification for radio disturbance and immunity measuring apparatus and methods*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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- amended.

SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY MEASURING APPARATUS AND METHODS –

Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements

1 Scope

This part of CISPR 16 is designated a basic standard, which specifies the methods of measurement of disturbance phenomena in general in the frequency range 9 kHz to 18 GHz and especially of conducted disturbance phenomena in the frequency range 9 kHz to 30 MHz.

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 60364-4 (all parts), *Electrical installations of buildings – Part 4: Protection for safety*

CISPR 14-1, *Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission*

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 16-1-2, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Conducted disturbances*

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

3 Definitions

For the purposes of this part of CISPR 16, the definitions of IEC 60050-161 apply, as well as the following.

3.1

ancillary equipment

transducers (e.g., current and voltage probes and artificial networks) connected to a measuring receiver or (test) signal generator and used in the disturbance signal transfer between the EUT and the measuring or test equipment

3.2

associated equipment

AE

apparatus, which is not part of the system under test, but needed to help exercise the EUT