



INTERNATIONAL STANDARD

INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

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

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INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

**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**

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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CISPR 16-1-4 has been prepared by CISPR subcommittee A: Radio-interference measurements and statistical methods. It is an International Standard.

This fifth edition cancels and replaces the fourth edition published in 2019, Amendment 1:2020 and Amendment 2:2023. This edition constitutes a technical revision.

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edition:

- a) revision of the definition 3.1.7 and of the general introduction 8.1.1 for CMAD;
- b) introduction of a new cable termination device, the very high frequency line impedance stabilization network (VHF-LISN) in 8.2;
- c) addition of definition 3.1.34 for VHF-LISN, 3.1.20 for reference ground, 3.1.21 for reference ground plane and 3.1.31 for TN-C-S power system;
- d) various non-technical editorial, style, and wording adjustments for consistency with drafting rules.

The text of this International Standard is based on the following documents:

Draft	Report on voting
CIS/A/1466/FDIS	CIS/A/1475/RVD

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

The language used for the development of this International Standard is English.

It has the status of a basic EMC publication in accordance with IEC Guide 107 [1], *Electromagnetic compatibility – Guide to the drafting of electromagnetic compatibility publications*.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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 document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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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 [1],¹ 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 cooperate 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 CISPR 16-2-3, further information on radio disturbance is given in CISPR TR 16-3 [2], and uncertainties, statistics, and limit modelling are covered in CISPR 16-4 series [3].

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 16-1-1:2019, *Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus*

CISPR 16-1-2:2014, *Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-2: Radio disturbance and immunity measuring apparatus - Coupling devices for conducted disturbance measurements*
CISPR 16-1-2:2014/AMD1:2017

CISPR 16-1-5:2014, *Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-5: Radio disturbance and immunity measuring apparatus - Antenna calibration sites and reference test sites for 5 MHz to 18 GHz*
CISPR 16-1-5:2014/AMD1:2016

CISPR 16-1-6:2014, *Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-6: Radio disturbance and immunity measuring apparatus - EMC antenna calibration*
CISPR 16-1-6:2014/AMD1:2017
CISPR 16-1-6:2014/AMD2:2022

CISPR 16-2-3:2016, *Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements*
CISPR 16-2-3:2016/AMD1:2019
CISPR 16-2-3:2016/AMD2:2023

IEC 60050-161:2014, *International Electrotechnical Vocabulary (IEV) - Part 161: Electromagnetic compatibility*

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