Australian/New Zealand Standard™

Industrial, scientific and medical (ISM) radio-frequency equipment—Electromagnetic disturbance characteristics—Limits and methods of measurement (CISPR 11:1999, MOD)

Standards Australia

STANDARDS NEW ZEALAND
Paerewa Aotearoa

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-003, Electromagnetic Interference. It was approved on behalf of the Council of Standards Australia on 13 September 2002 and on behalf of the Council of Standards New Zealand on 3 September 2002. It was published on 1 November 2002.

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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

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Industrial, scientific and medical (ISM) radio-frequency equipment—Electromagnetic disturbance characteristics—Limits and methods of measurement (CISPR 11:1999, MOD)

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interference.

The objective of this Standard is to specify electromagnetic radiation disturbance limits for the purpose of protecting radiocommunication services and signal levels, as well as for taking frequency bands, signal levels and separation distances.

This Standard is an adoption with national modifications and has been reproduced from, CISPR 11:1999 Ed 3.1, *Industrial, scientific and medical (ISM) radio-frequency equipment—Electromagnetic disturbance characteristics—Limits and methods of measurement*, and has been varied as indicated to take account of Australian/New Zealand conditions. This consolidated version of CISPR 11 is based on the third edition (1997) [documents CISPR/B(BC)23 and CISPR/B(BC)25, CISPR/B(BC)25A; CISPR/B(BC)28 and CISPR/B(BC)30; CISPR/B(BC)31 and CISPR/B(BC)32A; CISPR/B(BC)35 and CISPR/B/132/RVD; CISPR/B/147/FDIS and CISPR/B/158/RVD; CISPR/B/148/FDIS and CISPR/B/159/RVD; CISPR/B/189/FDIS and CISPR/B/200/RVD] and its Amendment 1 (1999) [documents CISPR/B/222/FDIS and CISPR/B/228/RVD].

It bears the edition 3.1.

A vertical line in the margin shows where the base publication has been modified by Amendment 1.

Where Australian/New Zealand tables, figures or passages of text are added, each is set in its proper place and identified by shading (example). Modifications for Australia and New Zealand conditions are given in Table 1a *Restrictions and additional frequencies designated by Australia and New Zealand for use as fundamental ISM frequencies*, and Table 9a *Australian additional limits for electromagnetic radiation disturbances to protect specific safety services in particular areas*.

In this Standard, the following print types are used:

– requirements proper: in arial type;

– *test specifications: in italic type;*

– explanatory matter: in smaller arial type.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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Any IEC table, figure or passage of text that is struck-through is not part of this Standard. Any Australian/New Zealand table, figure or passage of text that is added (and identified by shading) is part of this Standard.

1 General

1.1 Scope and object

The limits and methods of measurement laid down in this International Standard apply to industrial, scientific and medical (ISM) equipment as defined in clause 2, and to spark erosion equipment.

NOTE The limits have been determined on a probabilistic basis taking into account the likelihood of interference. In cases of interference, additional provisions may be required.

Procedures are given for the measurement of radio-frequency disturbances and limits are laid down within the frequency range 9 kHz to 400 GHz.

Requirements for ISM lighting apparatus operating in the ISM frequency bands of 915 MHz (only allowed in region 2 as defined by the ITU Radio Regulations), 2,45 GHz and 5,8 GHz are contained in this standard.

Requirements for other types of lighting apparatus are covered in CISPR 15.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

A reference to an International Standard identified in the Normative References Clause by strikethrough (~~example~~) is replaced by a reference to the Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (example). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

CISPR 15:1996, *Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment*

CISPR 16-1:1993, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1: Radio disturbance and immunity measuring apparatus*