

Australian/New Zealand Standard™

**Electromagnetic compatibility—
Requirements for household appliances,
electric tools and similar apparatus**

**Part 2: Immunity—Product family
standard**



AS/NZS CISPR 14.2:2015

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-003, Electromagnetic Compatibility. It was approved on behalf of the Council of Standards Australia on 26 October 2015 and on behalf of the Council of Standards New Zealand on 22 October 2015.

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Australian/New Zealand Standard™

Electromagnetic compatibility— Requirements for household appliances, electric tools and similar apparatus

Part 2: Immunity—Product family standard

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Compatibility, to supersede AS/NZS CISPR 14.2:2013.

The objective of this Standard is to establish uniform requirements for the electromagnetic immunity of the equipment mentioned in the scope, to fix test specifications of immunity, to refer to basic standards for methods of testing, and to standardize operating conditions, performance criteria and interpretation of results.

This Standard is identical with, and has been reproduced from CISPR 14-2, Ed. 2.0 (2015), *Electromagnetic compatibility—Requirements for household appliances, electric tools and similar apparatus, Part 2: Immunity—Product family standard*.

The principal differences between this and the previous edition are found in sections—

- (a) Clause 5.1 in regard to ESD tests on contacts, and also indirect discharges on HCP and VCP;
- (b) Clauses 5.3 and 5.4 in regard to conducted immunity tests on d.c. ports (now aligned with the generic standards) and also for EUTs with single mains cable and no other cable;
- (c) Clause 5.5 in regard to radiated immunity tests, introducing alternative method as per IEC 61000-4-22; and
- (d) Clause 5.6 in regard to surges for EUTs with no provision for earth connection.

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

- (i) In the source text ‘this part of CISPR 14’ should read ‘Australian/New Zealand Standard’.
- (ii) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
IEC		AS/NZS IEC	
61000	Electromagnetic compatibility (EMC)	61000	Electromagnetic compatibility (EMC)
61000-4-2:2008	Part 4-2: Testing and measurement techniques— Electrostatic discharge immunity test	61000.4.2:2013	Part 4.2: Testing and measurement techniques— Electrostatic discharge immunity test
61000-4-3:2006 AMD1:2007 AMD2:2010	Part 4-3: Testing and measurement techniques— Radiated, radio-frequency, electromagnetic field immunity test	61000.4.3:2013	Part 4.3: Testing and measurement techniques— Radiated, radio-frequency, electromagnetic field immunity test
61000-4-4: 2012	Part 4-4: Testing and measurement techniques— Electrical fast transient/burst immunity test	61000.4.4:2013	Part 4.4: Testing and measurement techniques— Electrical fast transient/burst immunity test

IEC 61000-4-11:2004	Part 4-11: Testing and measurement techniques—Voltage dips, short interruptions and voltage variations immunity tests	AS/NZS 61000.4.11:2005	Part 4.11: Testing and measurement techniques—Voltage dips, short interruptions and voltage variations immunity tests (IEC 61000-4-11, Ed. 2.0 (2004) MOD)
CISPR 14	Electromagnetic compatibility—Requirements for household appliances, electric tools and similar apparatus	AS/NZS CISPR 14	Electromagnetic compatibility—Requirements for household appliances, electric tools and similar apparatus
14-1:2005 AMD1:2008 AMD2:2011	Part 1: Emission	14.1:2013	Part 1: Emission

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The term ‘informative’ has been used to define the application of the annex to which it applies. An ‘informative annex’ is only for information and guidance.

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INTRODUCTION

The intention of this standard is to establish uniform requirements for the electromagnetic immunity of the equipment mentioned in the scope, to fix test specifications of immunity, to refer to basic standards for methods of testing, and to standardize operating conditions, performance criteria and interpretation of results.

Keywords: Immunity, household appliances, electric apparatus, electromagnetic compatibility.

AUSTRALIAN/NEW ZEALAND STANDARD

Electromagnetic compatibility—Requirements for household appliances, electric tools and similar apparatus**Part 2:
Immunity—Product family standard****1 Scope**

1.1 This part of CISPR 14 deals with the electromagnetic immunity of appliances and similar apparatus for household and similar purposes that use electricity, as well as electric toys and electric tools, the rated voltage of the apparatus being not more than 250 V for single-phase apparatus to be connected to phase and neutral, and 480 V for other apparatus.

Apparatus may incorporate motors, heating elements or their combination, may contain electric or electronic circuitry, and may be powered by the mains, by transformer, by batteries, or by any other electrical power source.

Apparatus not intended for household use, but which nevertheless may require the immunity level, such as apparatus intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard, as far as they are included in CISPR 14-1. In addition, the following are also included in the scope of this standard:

- microwave ovens for domestic use and catering;
- cooking hobs and cooking ovens, heated by means of r.f. energy;
- (single- and multiple-zone) induction cooking appliances;
- appliances for personal care equipped with radiators in the range from UV to IR, inclusive (this includes visible light);
- power supplies and battery chargers provided with or intended for apparatus within the scope of this standard.

1.2 This standard does not apply to:

- equipment for lighting purposes;
- apparatus designed exclusively for heavy industrial purposes;
- apparatus intended to be part of the fixed electrical installation of buildings (such as fuses, circuit breakers, cables and switches);
- apparatus intended to be used in locations where special electromagnetic conditions prevail, such as the presence of high electromagnetic fields (for example in the vicinity of a broadcast transmitting station), or where high pulses occur on the power network (such as in a power generator station);
- radio and television receivers, audio and video equipment, and electronic music instruments other than toys;
- medical electrical appliances;
- personal computers and similar equipment other than toys;
- radio transmitters;
- apparatus designed to be used exclusively in vehicles;
- babies surveillance systems.