AS/NZS 61000.6.2:2006
IEC 61000-6-2:2005
Reconfirmed 2016

Australian/New Zealand Standard™

Electromagnetic compatibility (EMC)

Part 6.2: General standards—Immunity for industrial environments

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-003, Electromagnetic Interferences. It was approved on behalf of the Council of Standards Australia on 10 April 2006 and on behalf of the Council of Standards New Zealand on 19 May 2006.
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The following are represented on Committee TE-003:

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Australian Electrical and Electronic Manufacturers Association
Australian Information Industry Association
Consumer Electronics Supplier Association
Electrical Compliance Testing Association
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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 or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 06056.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION

OF
AS/NZS 61000.6.2:2006
Electromagnetic compatibility (EMC)
Part 6.2: General standards—Immunity for industrial environments

RECONFIRMATION NOTICE

Technical Committee TE-003 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

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Lighting Council New Zealand
Ministry of Business, Innovation and Employment (NZ)
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NOTES

Australian/New Zealand Standard™

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Part 6.2: General standards—Immunity for industrial environments

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interferences, to supersede AS/NZS 61000.6.2:2002, as one of a series of Standards intended to facilitate control of electromagnetic interference and the compatibility of electrical and electronic equipment.

This Standard is identical with, and has been reproduced from IEC 61000-6-2:2005, *Electromagnetic compatibility (EMC)* - Part 6-2: *General standards—Immunity industrial environments*.

The objective of this Standard is to provide designers, manufacturers, and testers of equipment incorporating electrical or electronic operation with methods of test for ascertaining immunity to electromagnetic disturbances.

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

(a) Its number appears on the cover and title page while the international standard number appears only on the cover

(b) In the source text 'this part of IEC 61000' should read 'this AS/NZS Standard'.

(c) 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:

Reference to International Standard		*Australian/New Zealand Standard*	
IEC		AS/NZS	
60050	International Electrotechnical Vocabulary (IEV)	—	
60050-161	Chapter 161: Electromagnetic compatibility	—	
61000	Electromagnetic compatibility (EMC)	61000	Electromagnetic compatibility (EMC)
61000-4	Part 4: Testing and measurement techniques		
61000-4-2	Section 2: Electrostatic discharge immunity test	61000.4.2	Part 4:2:Testing and measurement techniques—Electrostatic discharge immunity test
61000-4-3	Section 3: Radiated, radio-frequency, electromagnetic field immunity test	61000.4.3	Part 4.3: Testing and measurement techniques—Radiated radio-frequency electromagnetic field immunity test
61000-4-4	Section 4: Electrical fast transient/burst immunity test	61000.4.4	Part 4.4: Testing and measurement techniques—Electrical fast transient/burst immunity test.
61000-4-5	Section 5: Surge immunity test	61000.4.5	Part 4.5: Testing and measurement techniques—Surge immunity test
61000-4-6	Section 6: Immunity to conducted disturbances, induced by radio-frequency fields	61000.4.6	Part 4-6: Testing and measuring techniques—Immunity to conducted disturbances, induced by radio-frequency fields

IEC		AS/NZS	
61000-4-8,	Section 8: Power frequency magnetic field immunity test	61000.4.8	Part 4.8: Testing and measurement techniques—Power frequency magnetic field immunity test
61000-4-11	Section 11: Voltage dips, short interruptions and voltage variations immunity tests	61000.4.11	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)
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AUSTRALIAN/NEW ZEALAND STANDARD

Electromagnetic compatibility (EMC)

Part 6.2:
General standards—Immunity for industrial environments

1 Scope and object

This part of IEC 61000 for EMC immunity requirements applies to electrical and electronic apparatus intended for use in industrial environments, as described below. Immunity requirements in the frequency range 0 Hz to 400 GHz are covered. No tests need to be performed at frequencies where no requirements are specified.

This generic EMC immunity standard is applicable if no relevant dedicated product or product-family EMC immunity standard exists.

This standard applies to apparatus intended to be connected to a power network supplied from a high or medium voltage transformer dedicated to the supply of an installation feeding manufacturing or similar plant, and intended to operate in or in proximity to industrial locations, as described below. This standard applies also to apparatus which is battery operated and intended to be used in industrial locations.

The environments encompassed by this standard are industrial, both indoor and outdoor.

Industrial locations are in addition characterised by the existence of one or more of the following:

– industrial, scientific and medical (ISM) apparatus (as defined in CISPR 11);

– heavy inductive or capacitive loads are frequently switched;

– currents and associated magnetic fields are high.

The object of this standard is to define immunity test requirements for apparatus defined in the scope in relation to continuous and transient, conducted and radiated disturbances, including electrostatic discharges.

The immunity requirements have been selected to ensure an adequate level of immunity for apparatus at industrial locations. The levels do not, however, cover extreme cases, which may occur at any location, but with an extremely low probability of occurrence. Not all disturbance phenomena have been included for testing purposes in this standard, but only those considered as relevant for the equipment covered by this standard. These test requirements represent essential electromagnetic compatibility immunity requirements.

NOTE 1 Information on other disturbance phenomena is given in IEC 61000-4-1.

Test requirements are specified for each port considered.

NOTE 2 Safety considerations are not covered by this standard.

NOTE 3 In special cases, situations will arise where the level of disturbances may exceed the levels specified in this standard e.g. where an apparatus is installed in proximity to ISM equipment as defined in CISPR 11 or where a hand-held transmitter is used in close proximity to an apparatus. In these instances, special mitigation measures may have to be employed.