

Australian/New Zealand Standard™

Electromagnetic compatibility (EMC)

**Part 6.4: Generic standards—Emission
standard for industrial environments**



AS/NZS 61000.6.4:2007

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 15 April 2007 and on behalf of the Council of Standards New Zealand on 20 April 2007.

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The following are represented on Committee TE-003:

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Australian Chamber of Commerce and Industry
Australian Communications and Media Authority
Australian Electrical and Electronic Manufacturers Association
Australian Information Industry Association
Australian Subscription Television and Radio Association
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PREFACE

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

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.

This Standard is identical with, and has been reproduced from IEC 61000-6-4, Ed. 2.0 (2006), *Electromagnetic compatibility (EMC) – Part 6-4: Generic standards - Emission standard for industrial environments*.

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 'IEC 61000-6-4' should read 'AS/NZS 61000.6.4'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

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STANDARDS AUSTRALIA/STANDARDS/NEW ZEALAND

Australian/New Zealand Standard**Electromagnetic compatibility (EMC)
Part 6.4: Generic standards—Emission standard for industrial
environments**

1 Scope and object

This part of IEC 61000 for EMC emission requirements applies to electrical and electronic apparatus intended for use in industrial environments as described below.

Emission requirements in the frequency range 0 Hz to 400 GHz are covered. No measurement needs to be performed at frequencies where no requirement is specified.

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

This standard applies to a 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 examples:

- industrial, scientific and medical (ISM)¹⁾ apparatus;
- heavy inductive or capacitive loads that are frequently switched;
- high currents and associated magnetic fields.

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

The emission requirements have been selected so as to ensure that disturbances generated by apparatus operating normally in industrial locations do not exceed a level that could prevent other apparatus from operating as intended. Fault conditions of apparatus are not taken into account. 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 requirements represent essential electromagnetic compatibility emission requirements.

Requirements are specified for each port considered.

NOTE 1 Safety considerations are not covered by this standard.

NOTE 2 In special cases, situations will arise where the levels specified in this standard will not offer adequate protection; for example where a sensitive receiver is used in close proximity to an apparatus. In these instances, special mitigation measures may have to be employed.

¹⁾ As defined in CISPR 11.