

Australian Standard[®]

Uninterruptible power systems (UPS)

**Part 2: Electromagnetic compatibility
(EMC) requirements**



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The following are represented on Committee EL-027:

- Australian Communications and Media Authority
 - Australian Electrical and Electronic Manufacturers Association
 - Bureau of Steel Manufacturers of Australia
 - Energy Networks Association
 - Monash University
-

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**Part 2: Electromagnetic compatibility
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PREFACE

This Standard was prepared by the Standards Australia Committee EL-027, Power Electronics, to supersede AS 62040.2—2001.

The objective of this Standard is to provide manufacturers, users and regulators with requirements for electromagnetic compatibility (EMC) for uninterruptible power systems (UPS).

This Standard is identical with, and has been reproduced from IEC 62040-2, Ed. 2.0 (2005), *Uninterruptible power systems (UPS)—Part 2: Electromagnetic compatibility (EMC) requirements*.

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- (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 part of IEC 62040’ should read ‘this part of AS 62040’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

The terms ‘normative’ and ‘informative’ are used 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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STANDARDS AUSTRALIA

Australian Standard**Uninterruptible power systems (UPS)
Part 2: Electromagnetic compatibility (EMC) requirements**

1 Scope

This part of IEC 62040 applies to UPS units intended to be installed

- as a unit or in UPS systems comprising a number of interconnected UPS and associated control/switchgear forming a single power system; and
- in any operator accessible area or in separated electrical locations, connected to low-voltage supply networks for either industrial or residential, commercial and light industrial environments.

This part of IEC 62040 is intended as a product standard allowing the EMC conformity assessment of products of categories C1, C2 and C3 as defined in this part of IEC 62040, before placing them on the market.

Equipment of category 4 is treated as a fixed installation. Checking is generally done after installation in its final place of use. Sometimes partial checking may be done before. See Annex E.

The requirements have been selected so as to ensure an adequate level of electromagnetic compatibility (EMC) for UPS at public and industrial locations. These levels cannot, however, cover extreme cases, which may occur in any location but with extremely low probability of occurrence.

This part of IEC 62040 takes into account the differing test conditions necessary to encompass the range of physical sizes and power ratings of UPS.

A UPS unit or system shall meet the relevant requirements of this part of IEC 62040 as a stand-alone product. EMC phenomena produced by any customers' load connected to the output of the UPS equipment shall not be taken into account.

Special installation environments are not covered, nor are fault conditions of UPS taken into account.

This part of IEC 62040 does not cover d.c. supplied electronic ballast or UPS based on rotating machines.

This part of IEC 62040 states:

- EMC requirements;
- test methods;
- minimum performance levels.