## Australian/New Zealand Standard™

Performance of external power supplies

Part 1: Test method and energy performance mark





#### AS/NZS 4665.1:2005

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-001, Safety of Electronic Equipment. It was approved on behalf of the Council of Standards Australia on 17 October 2005 and on behalf of the Council of Standards New Zealand on 28 October 2005.

This Standard was published on 10 November 2005.

The following are represented on Committee TE-001:

Australian Chamber of Commerce and Industry

Australian Communications Authority

Australian Electrical and Electronic Manufacturers Association

Australian Greenhouse Office, Department of the Environment and Heritage

Australian Information Industry Association

Australian Subscription Television and Radio Association

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This Standard was issued in draft form for comment as DR 04528.

AS/NZS 4665.1:2005 (Incorporating Amendment No. 1)

## Australian/New Zealand Standard™

## Performance of external power supplies

# Part 1: Test method and energy performance mark

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### **PREFACE**

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-001, Safety of Electronic Equipment.

This Standard incorporates Amendment No. 1 (February 2009). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide designers, manufacturers, importers, test laboratories, regulators and users of mains input external power supplies having a single extra low voltage output with a test method to assess the energy efficiency of these devices. It also includes information on the energy performance mark.

This Standard was prepared in response to the publication of a plan for the regulation of external power supplies under the National Appliance and Equipment Energy Efficiency Program (NAEEEP) in 2004. This Standard draws upon a test method published in 2003 by the US Environmental Protection Agency (EPA) as part of the ENERGY STAR program, following input from several countries including Australia. The EPA test method is the de-facto standard in the United States and China. This AS/NZS Standard is technically similar to the EPA standard.

It is intended that this Standard should be proposed as the basis for an IEC Standard once it has been published in Australia.

This series consists of 2 parts. These are:

### AS/NZS

4665 Performance of external power supplies

Part 1: Test method and energy performance mark (this Standard)

Part 2: Minium energy performance standard (MEPS) requirements

Part 1 contains the test method for assessing the efficiency of external power supplies and includes information on the energy performance mark. It applies to power supplies with either d.c. or a.c. output up to 250 W or 250 VA respectively.

Part 2 specifies minimum energy performance standard (MEPS) requirements and 'high efficiency' levels for external power supplies. Regulatory authorities have advised that it is intended to mandate Part 2 of the Standard (AS/NZS 4465.2:2005) in regulations in Australia and New Zealand no earlier than 1 December 2008, except for marking requirements, which are intended to be mandated no earlier than 1 April 2009.

The terms 'normative' and 'informative' are used to define the application of the appendix to which they apply. A normative appendix is an integral part of a standard, whereas an informative appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to figures, are deemed to be requirements of this Standard. 'Shall' indicates a requirement is mandatory, while 'should' indicates a recommendation and good practice.

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