

Australian/New Zealand Standard™

**Information technology equipment—
Energy performance of computer
monitors**

**Part 2: Minimum energy performance
standards (MEPS) and energy rating
labels**



AS/NZS 5815.2:2013

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-001 and TE-021, Safety of Electronic Equipment and Energy Performance for Audio/Video, Information and Communication Technology and Associated Equipment. It was approved on behalf of the Council of Standards Australia on 17 January 2013 and on behalf of the Council of Standards New Zealand on 23 January 2013.

This Standard was published on 8 February 2013.

The following are represented on Committee TE-001 and TE-021:

Australian Chamber of Commerce and Industry
Australian Communications and Media Authority
Australian Industry Group
Australian Information Industry Association
Australian Subscription Television and Radio Association
CHOICE
Communications Alliance
Consumer Electronics Association of New Zealand
Consumer Electronics Suppliers Association
Curtin University of Technology
Department of Climate Change and Energy Efficiency
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Energy Efficiency and Conservation Authority of New Zealand
Engineers Australia
Free TV Australia
Ministry of Economic Development, New Zealand
Telstra Corporation

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the online catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

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 DR3 AS/NZS 5815.2.

Australian/New Zealand Standard[™]

**Information technology equipment—
Energy performance of computer
monitors**

**Part 2: Minimum energy performance
standards (MEPS) and energy rating
labels**

First published as AS/NZS 5815.2:2013.
Reissued incorporating Amendment No. 1 (January 2014).

COPYRIGHT

© Standards Australia Limited/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Technical Committee TE-001, Safety of Electronic Equipment and TE-021, Energy Performance for Audio/Video, Information and Communication Technology and Associated Equipment.

This Standard incorporates Amendment No. 1 (January 2014). 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 computer monitors with the minimum energy performance standards (MEPS) and energy rating label requirements for computer monitors.

A1 | The energy labelling and MEPS requirements set out in the legislative instruments for computer monitors came into force in Australia and New Zealand on 1 October 2013.

This Standard is published with the approval of Australian and New Zealand regulatory authorities and is structured to be suitable for reference in regulations.

A1 | This series consists of the following parts:

AS/NZS

5815 Information technology equipment—Energy performance of computer monitors

5815.1 Part 1: Methods of measurement of energy performance

5815.2 Part 2: Minimum energy performance standards (MEPS) and energy rating labels

The terms ‘normative’ and ‘informative’ are used in this Standard 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.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	5
1.2 EXCLUSIONS.....	5
1.3 APPLICATION	6
1.4 REFERENCED DOCUMENTS.....	7
1.5 DEFINITIONS.....	7
SECTION 2 DETERMINING THE MINIMUM ENERGY PERFORMANCE OF COMPUTER MONITORS	
2.1 GENERAL.....	9
2.2 ON MODE MEPS POWER REQUIREMENTS	9
2.3 STANDBY ACTIVE MODE POWER REQUIREMENTS	10
2.4 OFF MODE POWER REQUIREMENTS.....	10
SECTION 3 DETERMINATION OF ENERGY RATING FOR COMPUTER MONITORS	
3.1 MEASURING CONDITIONS	11
3.2 PROJECTED ANNUAL ENERGY CONSUMPTION (PAEC).....	11
3.3 DETERMINATION OF STANDBY ACTIVE (SLEEP) MODE.....	11
3.4 COMPARATIVE ENERGY CONSUMPTION (CEC).....	11
3.5 ENERGY EFFICIENCY LABEL VALIDITY	12
SECTION 4 DETERMINATION OF STAR RATING INDEX AND REQUIREMENTS FOR ENERGY LABELS FOR COMPUTER MONITORS	
4.1 STAR RATING INDEX (SRI)	13
4.2 LABEL TYPE AND SIZE.....	14
4.3 LABEL POSITIONING AND ATTACHMENT.....	14
APPENDICES	
A FORMAT OF APPLICATION FOR REGISTRATION OF COMPUTER MONITORS FOR MEPS.....	17
B PHYSICAL LABEL SPECIFICATION FOR COMPUTER MONITORS.....	22
C SAMPLE TEST REPORT	29

A1

FOREWORD

In Australia, specific product requirements are set out in a legislative instrument called the Greenhouse and Energy Minimum Standards (Computer Monitors) Determination. The Determination may contain different requirements to those specified in this Standard and, if any conflict arises, the Determination takes precedence over this Standard.

All computer monitors within the scope of the Determination that are supplied, offered for supply, or commercially used in Australia are required by the Determination to be registered, unless they are covered by the grandfathering provisions of the *Greenhouse and Energy Minimum Standards Act 2012*; this will, in general, be products that met the legal requirements in place at the time that they were manufactured or imported, but do not meet the requirements of the current Determination. Section 5 of this Standard specifies registration requirements; however, it should be noted that the approved application form may contain different requirements to those specified in Section 5. Further information and the latest version of the Determination are available on the Energy Rating website: <http://www.energyrating.gov.au>.

In New Zealand, requirements from this Standard have been incorporated by reference into New Zealand regulations. Specific details may be obtained from the Energy Rating website: <http://www.energyrating.gov.au>, and the Energy Efficiency and Conservation (EECA) website: <http://www.eeca.govt.nz>.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Information technology equipment—Energy performance of computer monitors****Part 2: Minimum energy performance standards (MEPS) and energy rating labels**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies the minimum energy performance standards (MEPS) and energy rating label requirements for computer monitors. The power consumption of the computer monitors is measured according to the current version of AS/NZS 5815.

A1

NOTES:

- 1 In Australia, specific product requirements are set out in a legislative instrument called the Greenhouse and Energy Minimum Standards (Computer Monitors) Determination. The Determination may contain different requirements to those specified in this Standard and, if any conflict occurs, the Determination takes precedence over this Standard.
- 2 In New Zealand, requirements from this Standard have been incorporated by reference into New Zealand regulations.

1.2 EXCLUSIONS

This Standard does not apply to the following:

- (a) Electronic displays used exclusively for digital signage or digital picture frames.
- (b) Electronic displays used exclusively for advertising.
- (c) *High performance electronic displays*—An electronic display using in plane switching (IPS) or vertical alignment (VA) technology and offering—
 - (i) native pixel resolution greater than or equal to 2.3 (1920 × 1200) MP; and
 - (ii) viewing angle greater than or equal to 178° (at contrast ratio of min. 1:10); and
 - (iii) colour gamut greater than or equal to 72% of NTSC; and
 - (iv) diagonal size greater than or equal to 61 cm (24 inches).
- (d) *Specialized electronic displays* Intended for use primarily in commercial, professional fields, engineering, medicine, graphic arts, etc., and not intended for sale to the general public. Examples include the following:
 - (i) Those defined as professional products that are in the scope of EN 55103.
 - (ii) Medical products as set out in the IEC 60601 series.