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Australian Standard™

The international system of units (SI) and its application

[ISO title: SI units and recommendations for the use of their multiples and of certain other units]

This Australian Standard was prepared by Committee ME/71, Quantities, Units and Conversions. It was approved on behalf of the Council of Standards Australia on 14 August 1998 and published on 5 November 1998.

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Australian Standard™

The international system of units (SI) and its application

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PREFACE

This Standard was prepared by the Standards Australia Committee ME/71, Quantities, Units and Conversions, to supersede AS 1000—1979.

This Standard is identical with, and has been reproduced from, ISO 1000:1992, *SI units and recommendations for the use of their multiples and of certain other units*, with the addition of Appendix AA to reflect the Australian situation. Appendix AA is given for information only and does not form part of the Standard.

The objective of this Standard is to provide users with the standardization of units and symbols for quantities and units (and mathematical symbols) used within the different fields of science and technology, giving, where necessary, definitions of these quantities and units.

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(a) *Terminology* The words 'this Australian Standard' should replace the words 'this International Standard' wherever they appear.

(b) *Decimal marker* Substitute a full point for a comma where it appears as a decimal marker.

(c) *References* The reference to the International Standards should be replaced by reference to the following Australian Standard:

Reference to International Standard or other Publication		*Australian Standard*	
ISO/IEC		AS	
27.1	Letter symbols to be used in electrical technology	1046	Letter symbols for use in electrotechnology
27.1	Part 1: General	1046.1	Part 1: General

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NOTES

AUSTRALIAN STANDARD

The international system of units (SI) and its application

1 Scope

This International Standard

a) describes the International System of Units[1)] (in clauses 3, 4 and 6);

b) recommends selected decimal multiples and submultiples of SI units for general use and gives certain other units which may be used with the international System of Units (in clauses 5 and 7, and annex A);

c) quotes the definitions of the SI base units (in annex B).

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 27-1:1971,[2)] *Letter symbols to be used in electrical technology — Part 1: General*

3 SI units

The name International System of Units (Système International d'Unités), with the international abbreviation SI, was adopted by the 11th General Conference on Weights and Measures (Conférence Générale des Poids et Mesures, CGPM) in 1960.

This system includes:

— base units

— derived units including supplementary units

which together form the coherent system of SI units.

3.1 Base units

The International System of Units is based on the seven base units listed in table 1.

1) Full information about the International System of Units is given in a publication by the International Bureau of Weights and Measures (Bureau International des Poids et Mesures, BIPM): *Le Système International d'Unités* (*SI*), including an authorized English translation.

2) 5th edition, currently being revised.

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