

SINGAPORE STANDARD
SS 337 : 2001
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SPECIFICATION FOR
**Safety of information
technology equipment**

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Safety of information technology equipment

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National Foreword

This Singapore Standard was prepared by the Technical Committee on Safety and Energy Efficiency of Information Technology Equipment under the direction of the Electrical and Electronic Product Standards Committee.

This standard is a modified adoption of the third edition of International Standard IEC 60950 : 1999-04 including IEC Corrigendum January 2000 published by the International Electrotechnical Commission.

The deviation to be applied is indicated by a left marginal bar adjacent to the affected text as follows:

Subclause	Modification
2.9.2	After the first paragraph, <i>insert</i> the following : Under tropical conditions, the duration of the humidity conditioning is 5 days (120h) at a temperature (t) of 40°C ± 2°C with relative humidity of 90% to 95%. <i>Explanation:</i> Conditions described in IEC Publications 60068-2-3 : 1969 – 'Test Ca: Damp Heat, Steady State' (temperature: 40°C ± 2°C, relative humidity: 90% to 95%) apply to insulation to be used under tropical conditions. The additional requirement on humidity conditioning is drawn from Clause 10.2 of IEC 60065 : 1998.
2.10.6.5	<i>Delete</i> '(48 h)' <i>Explanation:</i> To be consistent with 2.9.2.
3.2.8	<i>Replace</i> '23°C ± 2°C' by '27°C ± 2°C' <i>Explanation:</i> The recommended temperature for tropical countries is drawn from ISO 554 : 1976 – 'Standard atmospheres for conditioning and/or testing – Specifications'.

An editorial amendment is made as follows:

1.2.8.6	After NOTE 2, <i>insert</i> the following: NOTE 3 – This definition for SELV CIRCUIT differs from the term 'SELV system' as given in SS CP 5.
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Attention is also drawn to the following:

1. For a.c. power distribution systems, only TN-S and TT systems are allowed in the Republic of Singapore.
2. Where the phrase 'this standard' appears, it should be read as 'Singapore Standard SS 337'.
3. The comma has been used throughout as a decimal marker in IEC 60950, whereas in Singapore standards it is a practice to use a full-point on the baseline as the decimal marker.
4. The IEC standards referred to shall be replaced by Singapore Standards as follows:

International Standard	Corresponding Singapore Standard	
IEC 60065	SS 143 : 2000	Audio, video and similar electronic apparatus - Safety requirements
IEC 60227	SS 358 :-	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V

NOTE

1. *Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The revisions of Singapore Standards are announced through the issue of either amendment slips or revised editions.*
2. *Compliance with a Singapore Standard does not exempt users from legal obligations.*

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF INFORMATION TECHNOLOGY EQUIPMENT –

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60950 has been prepared by IEC Technical committee 74: Safety and energy efficiency of IT equipment.

This third edition cancels and replaces the second edition, issued in 1991, and its amendments 1 (1992), 2 (1993), 3 (1995) and 4 (1996) and constitutes a technical revision.

The contents of the corrigendum of January 2000 have been included in this copy.

The text of this standard is based on the following documents:

FDIS	Report on voting
74/498/FDIS	74/504/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

Annexes A, B, C, D, E, F, G, H, J, K, L, M, N, P, U and V form an integral part of this standard.

Annexes Q, R, S, T, W and X are for information only.

In this standard, the following print types are used:

- Requirements proper and normative annexes: in roman type.
- *Compliance statements and test specifications: in italic type.*
- Notes and other informative matter: in smaller roman type.
- Normative conditions within tables: in smaller roman type.
- Terms that are defined in 1.2: SMALL CAPITALS.

SAFETY OF INFORMATION TECHNOLOGY EQUIPMENT –

1 General

1.1 Scope

1.1.1 Equipment covered by this standard

This standard is applicable to mains-powered or battery-powered information technology equipment, including electrical business equipment and associated equipment, with a RATED VOLTAGE not exceeding 600 V.

This standard is also applicable to such information technology equipment designed and intended to be connected directly to a TELECOMMUNICATION NETWORK, regardless of the source of power.

It is also applicable to such information technology equipment designed to use the AC MAINS SUPPLY as a telecommunication transmission medium (see note 4 of clause 6).

This standard specifies requirements intended to reduce risks of fire, electric shock or injury for the OPERATOR and layman who may come into contact with the equipment and, where specifically stated, for SERVICE PERSONNEL.

This standard is intended to reduce such risks with respect to installed equipment, whether it consists of a system of interconnected units or independent units, subject to installing, operating and maintaining the equipment in the manner prescribed by the manufacturer.

Examples of equipment which is in the scope of this standard are:

accounting machines	motor-operated files
bookkeeping machines	PABX's
calculators	paper jogging machines
cash registers	paper trimmers (punchers, cutting machines, separators)
copying machines	pencil sharpeners
data circuit terminating equipment	personal computers
data preparation equipment	photoprinting equipment
data processing equipment	plotters
data terminal equipment	point of sale terminals including associated electronic scales
dictation equipment	postage machines
document shredding machines	public information terminals
duplicators	staplers
electrically operated drawing machines	telephone answering machines
erasers	telephone sets
facsimile equipment	text processing equipment
key telephone systems	typewriters
magnetic tape handlers	visual display units
mail processing machines	
micrographic office equipment	
modems	
monetary processing machines including automated teller (cash dispensing) machines	