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ELECTROMAGNETIC INTERFERENCE— LIMITS AND METHODS OF MEASUREMENT OF INFORMATION TECHNOLOGY EQUIPMENT

This Australian Standard was prepared by Committee TE/3, Electromagnetic Interference. It was approved on behalf of the Council of the Standards Association of Australia on 31 March 1988 and published on 17 June 1988.

The following interests are represented on Committee TE/3:

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AUSSAT

Australian Broadcasting Corporation

Confederation of Australian Industry

Consumer Electronics Suppliers Association

CSIRO

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ELECTROMAGNETIC INTERFERENCE— LIMITS AND METHODS OF MEASUREMENT OF INFORMATION TECHNOLOGY EQUIPMENT

AS 3548—1988

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PREFACE

This Standard was prepared by the Association's Committee on Electromagnetic Interference. It is identical with and has been reproduced from IEC/CISPR 22, *Limits and methods of measurement of radio interference characteristics of information technology equipment*, drawn up by CISPR Subcommittee B, but does not cover immunity of the equipment to interference.

This Standard applies to information technology equipment (ITE), e.g. computers. Procedures for the measurement of levels of spurious signals generated by ITE and limits for the frequency range 0.15 MHz to 1000 MHz are specified.

For the purpose of this Australian Standard, the text of IEC/CISPR 22 should be modified as follows:

(a) *Terminology:* The words 'Australian Standard' should replace the words 'IEC Publication' wherever they appear.

(b) *Page number references:* The text references apply to the IEC page numbers at the bottom left-hand corner of each page.

(c) *Cross-references:* The references to IEC Publications should be replaced by references to Australian Standards as follows:

Reference to IEC Publication		*Appropriate Australian Standard*	
CISPR 11	*Limits and methods of measurement of radio interference characteristics of industrial, scientific and medical (ISM) radio-frequency equipment (excluding surgical diathermy apparatus)*	AS 2064	*Limits of electromagnetic interference generated by industrial, scientific, medical and similar radio-frequency equipment*
CISPR 16	*Specification for radio interference measuring apparatus and measurement methods*	AS 1052	*Electromagnetic interference—Measuring apparatus and measurement method*
IEC 83	*Plugs and socket-outlets for domestic and similar general use*	AS 3112	*Approval and Test Specification—Plugs and plug sockets*
IEC 625	*An interface system for programmable measuring instruments (byte serial, bit parallel)*		No Australian equivalent

Other publications quoted:

CCITT Publication: Yellow book, Volume VIII, Fascicle VIII.1, *Data communication over the telephone network*, Recommendations V.24: *List of definitions for interchange circuits between data terminal equipment and data circuit-terminating equipment.*

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Australian Standard

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INTRODUCTION

Information technology equipment (ITE), which predominantly generates a multiplicity of periodic, binary pulsed electrical/electronic waveforms which can be unintentionally coupled via the mains cable, signal or other leads or by direct radiation, can constitute a potential source of interference to radio reception.

1. Scope

This publication applies to ITE as defined in Sub-clause 2.1.

Procedures are given for the measurement of the levels of spurious signals generated by the ITE and limits are specified for the frequency range 0.15 MHz to 1 000 MHz for both Class A and Class B equipment.

2. Definitions

2.1 *Information technology equipment (ITE)*

Equipment designed for the purpose of:

a) receiving data from an external source (such as a data input line or via a keyboard);

b) performing some processing functions on the received data (such as computation, data transformation or recording, filing, sorting, storage, transfer of data);

c) providing a data output (either to other equipment or by the reproduction of data or images).

Note. – This definition includes electrical/electronic units or systems which predominantly generate a multiplicity of periodic binary pulsed electrical/electronic waveforms and are designed to perform data processing functions such as word processing, electronic computation, data transformation, recording, filing, sorting, storage, retrieval and transfer, and reproduction of data as images.

2.2 *Test unit*

A representative ITE or functionally interactive group of ITE (i.e. system) which includes one or more host unit(s) and is used for evaluation purposes.

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