

Australian Standard™

Telecommunication overvoltages

Part 2: Protection of equipment

This Australian Standard was prepared by Committee TE/20, Telecommunications Overvoltage Protection. It was approved on behalf of the Council of Standards Australia on 30 March 1999 and published on 5 June 1999.

The following interests are represented on Committee TE/20:

Australian Chamber of Commerce and Industry
Australian Communications Authority
Australian Electrical and Electronic Manufacturers Association
Australian Information Industry Association
Broadcast Industry Technical Advisory Group
Electricity Supply Association of Australia
Telecom, New Zealand
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First published as AS 4262.2—1999.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE/20, Telecommunications Overvoltage Protection, and is the result of consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard.

The objective of this Standard is to provide telecommunication consultants and the owners and installers of telecommunication equipment with information on—

- (a) the principles involved in the protection of telecommunication equipment from the effects of electrical disturbances; and
- (b) how the effect of these electrical disturbances can be significantly reduced by the use of protective measures.

This will allow informed decisions to be made regarding both the need for and the type of protective measures that should be adopted.

This Standard is Part 2 of the two-part AS 4262 series on telecommunication overvoltages. AS 4262.1 provides information for the protection of users of telecommunications equipment from overvoltages associated with telecommunication systems.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out guidelines and specifies requirements for the protection from overvoltages and overcurrents of equipment connected over twisted pair to telecommunication networks. It provides a means of assessing the need for protection, information on protection techniques and the methods of implementing these techniques.

This Standard is not intended for the protection of persons and does not apply within the carriers' networks.

1.2 APPLICATION This Standard is intended for use by telecommunication consultants and by the owners and installers of telecommunication equipment.

The protection provided by compliance with this Standard is through the reduction of damage or mis-operation from overvoltages and overcurrents. Although the probability and severity of damage or mis-operation may be reduced, the risk of such damage or mis-operation occurring cannot be eliminated.

Depending upon the location of the protection, it may require installation by carriers, licensed electricians or licensed cablers in accordance with regulations.

1.3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS	
1768	Lightning protection
2420	Fire test methods for solid insulating materials and non-metallic enclosures used in electrical equipment
3000	Electrical installations—Buildings, structures and premises (known as the SAA Wiring Rules)
4070	Recommended practices for protection of low-voltage electrical installations and equipment in MEN systems from transient overvoltages
4262	Telecommunication overvoltages
4262.1	Part 1: Protection of persons
AS/NZS	
3080	Telecommunications installations—Integrated telecommunications cabling systems for commercial premises
3260	Approval and test specification—Safety of information technology equipment including electrical business equipment
4117	Surge suppression devices for telecommunication applications