

Australian Standard™

**Identification cards—Contactless  
integrated circuit(s) cards—Vicinity  
cards**

**Part 2: Air interface and initialization**

This Australian Standard was prepared by Committee IT-012, Information Systems, Security and Identification Technology. It was approved on behalf of the Council of Standards Australia on 4 March 2003 and published on 31 March 2003.

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## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee IT-012, Information Systems, Security and Identification Technology. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian rather than an Australian/New Zealand Standard.

It is identical with, and has been reproduced from ISO/IEC 15693-2:2000, *Identification cards—Contactless integrated circuit(s) cards—Vicinity, Part 2: Air interface and initialization* and Technical Corrigendum 1:2001 which is bound at the back of this Standard.

The objective of this Standard is to describe the electrical characteristics of the contactless interface between a vicinity card and a vicinity coupling device.

This Standard is Part 2 of AS 15693, *Identification cards—Contactless integrated circuit(s) cards—Vicinity cards*, which is published in parts as follows:

Part 1: Physical characteristics

Part 2: Air interface and initialization (this Standard)

Part 3: Anticollision and transmission protocol

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text ‘this part of ISO/IEC 15693’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

The normative reference in the source document has not been adopted as an Australian or Australian/New Zealand Standard.

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## AUSTRALIAN STANDARD

**Identification cards — Contactless integrated circuit(s) cards — Vicinity cards —****Part 2:  
Air interface and initialization****1 Scope**

This part of ISO/IEC 15693 specifies the nature and characteristics of the fields to be provided for power and bi-directional communications between vicinity coupling devices (VCDs) and vicinity cards (VICCs).

This part of ISO/IEC 15693 shall be used in conjunction with other parts of ISO/IEC 15693.

This part of ISO/IEC 15693 does not specify the means of generating coupling fields, nor the means of compliance with electromagnetic radiation and human exposure regulations which can vary according to country regulations and/or standards.

**2 Normative reference**

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 15693. For dated references, subsequent amendments to, or revision of, any of these publications do not apply. However, parties to agreements based on this part of ISO/IEC 15693 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 10373-7:—<sup>1)</sup>, *Identification cards — Test methods — Vicinity cards*.

**3 Terms and definitions**

For the purposes of this part of ISO/IEC 15693, the terms and definitions given in ISO/IEC 15693-1 and the following apply.

**3.1****modulation index**

index equal to  $[a-b]/[a+b]$  where a and b are the peak and minimum signal amplitude respectively.

NOTE The value of the index may be expressed as a percentage.

**3.2****subcarrier**

a signal of frequency  $f_s$  used to modulate the carrier of frequency  $f_c$

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<sup>1)</sup> To be published.