

Australian Standard[®]

**Information technology—Radio
frequency identification for item
management—Unique identification for
RF tags**

STANDARDS
Australia



This Australian Standard® was prepared by Committee IT-034, Automatic Identification and Data Capture Techniques. It was approved on behalf of the Council of Standards Australia on 15 November 2006.

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- Australian Custom Service
 - Australian Data Capture Association
 - Australian Electrical and Electronic Manufacturers Association
 - Australian Retailers Association
 - Australian Veterinary Association
 - Department of Communications, Information Technology and the Arts
 - Department of Defence
 - Department of Primary Industries, Vic
 - RFID Association of Australia
 - The University of Adelaide
 - GS1
-

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**Information technology—Radio
frequency identification for item
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RF tags**

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PREFACE

This Standard was prepared by the Standards Australia Committee IT-034, Automatic Identification and Data Capture Techniques.

The objective of this Standard is to provide a description of the numbering systems that are available for the identification of RF tags for Australian industry using radio frequency identification.

This Standard is identical with, and has been reproduced from ISO/IEC 15963:2004 *Information technology—Radio frequency identification for item management—Unique identification for RF tags*.

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 'ISO/IEC 15963' should read 'this Australian Standard'.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

| <i>Reference to International Standard</i> | <i>Australian Standard</i> |
|--|--|
| ISO | AS |
| 3166 Codes for the representation of names of countries and their subdivisions | 2632 Codes for the representation of names of countries and their subdivisions |
| 3166-1 Part 1: Country codes | 2632.1 Part 1: Country codes |
| 6346 Freight containers—Coding, identification and marking | 3711 Freight containers 3711.9 Part 9: Coding, identification and marking |
| ISO/IEC | AS ISO/IEC |
| 19762 Information technology—Automatic identification and data capture (AIDC) techniques—Harmonized vocabulary | 19762 Information technology—Automatic identification and data capture (AIDC) techniques—Harmonized vocabulary |
| 19762-1 Part 1: General terms relating to AIDC | 19762.1 Part 1: General terms relating to AIDC |
| 19762-3 Part 3: Radio frequency identification (RFID) | 19762.3 Part 3: Radio frequency identification (RFID) |

Only international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The term 'normative' has been used in this Standard to define the application of the annex to which it applies. A 'normative' annex is an integral part of a Standard.

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INTRODUCTION

ISO/IEC 15963 is one of a series of International Standards and Technical Reports developed by ISO/IEC JTC 1/SC 31 for the identification of items (Item Management) using radio frequency identification (RFID) technology.

ISO/IEC 15963 describes numbering systems for the unique identification of RF tags.

It is intended to be used in conjunction with other International Standards developed by SC 31 for "RFID for item management" such as ISO/IEC 18000 and ISO/IEC 15962.

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AUSTRALIAN STANDARD

Information technology — Radio frequency identification for item management — Unique identification for RF tags**1 Scope**

ISO/IEC 15963 describes numbering systems that are available for the identification of RF tags.

A unique ID is required as part of the write operation to RFID tags. The unique ID guarantees that the information written to a tag is unambiguously written to the correct data carrier (tag). A unique ID is also required in many read situations where the contents of the tag are tied to a specific item and that item needs to be unambiguously identified. Further discussion and explanation are given in Clause 5.

The unique ID may also be used

- for the traceability of the integrated circuit itself for quality control in the manufacturing process,
- for the traceability of the RF tag during its manufacturing process and along its lifetime,
- for the completion of the reading in a multi-antenna configuration,
- by the anti-collision mechanism to inventory multiple tags in the reader's field of view,
- for the traceability of the Item to which the RF tag is attached.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes*

ISO 6346, *Freight containers — Coding, identification and marking*

ISO/IEC 7816-6, *Identification cards — Integrated circuit cards — Part 6: Interindustry data elements for interchange*

ISO/IEC 11816, *Road transport and traffic telematics — Automatic vehicle and equipment identification — Numbering and data structure*

ISO/IEC 19762-1, *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary — Part 1: General terms relating to AIDC¹⁾*

ISO/IEC 19762-3, *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary — Part 3: Radio frequency identification (RFID)¹⁾*

1) To be published.