AS ISO/IEC 18047.7—2006

Australian Standard®

# Information technology—Radio frequency identification device conformance test methods

## Part 7: Test methods for active air interface communications at 433 MHz

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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The following are represented on Committee IT-034:

- 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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This Standard was issued in draft form for comment as DR 06527.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard, through their representation on the Committee and through public comment period.

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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 standardization in the reporting of data carriers from bar code readers and other automatic identification equipment for the Retail industry.

This Standard is identical with, and has been reproduced from ISO/IEC 15424:2000, *Information technology—Automatic identification and data capture techniques—Data Carrier Identifiers (including Symbology Identifiers)*.

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 International Standard' should read 'this Australian Standard'.

(c) A full point substitutes for a comma when referring to a decimal marker.

The normative reference documents listed in Clause 2 have not been adopted as Australian Standards.

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.

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# INTRODUCTION

ISO/IEC 18000-7 defines the air interface for radio frequency identification (RFID) devices operating in the 433,92 MHz Industrial, Scientific, and Medical (ISM) band used in item management applications. The purpose of this part of ISO/IEC TR 18047 is to provide a test method for ISO/IEC 18000-7.

This part of ISO/IEC TR 18047 contains all compliance measurements required to be fulfilled by a product in order to be compliant to ISO/IEC 18000-7.

AUSTRALIAN STANDARD

# Information technology — Radio frequency identification device conformance test methods —

# Part 7:
# Test methods for active air interface communications at 433 MHz

## 1 Scope

This part of ISO/IEC TR 18047 defines test methods for determining the conformance of radio frequency identification devices (tags and interrogators) for item management with the specifications given in ISO/IEC 18000-7, but does not apply to the testing of conformity with regulatory or similar requirements.

The test methods require only that the mandatory functions and any optional functions which are implemented, be verified. This may, in appropriate circumstances, be supplemented by further, application-specific functionality criteria that are not available in the general case.

The interrogator and tag conformance parameters in this part of ISO/IEC TR 18047 are the following:

- mode-specific conformance parameters including nominal values and tolerances;
- parameters that apply directly affecting system functionality and inter-operability.

The following are not included in this part of ISO/IEC TR 18047:

- parameters that are already included in regulatory test requirements;
- high-level data encoding conformance test parameters (these are specified in ISO/IEC 15962).

Unless otherwise specified, the tests in this part of ISO/IEC TR 18047 apply exclusively to RFID tags and interrogator defined in ISO/IEC 18000-7.

## 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/IEC 18000-7:2004, *Information technology — Radio frequency identification for item management — Part 7: Parameters for active air interface communications at 433 MHz*

ISO/IEC 19762 (all parts), *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary*

ISBN 92-67-10188-9, 1993, *ISO Guide to the expression of uncertainty in measurement*