



FINAL DRAFT International Standard

ISO/IEC FDIS 18047-6

Information technology — Radio frequency identification device conformance test methods —

Part 6: Test methods for air interface communications at 860 MHz to 930 MHz

*Technologies de l'information — Méthodes d'essai de conformité
du dispositif d'identification de radiofréquence —*

*Partie 6: Méthodes d'essai pour des communications d'une
interface d'air à 860 MHz et jusqu'à 930 MHz*

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

This third edition cancels and replaces the second edition (ISO/IEC 18047-6:2017), which has been technically revised.

The main changes are as follows:

- tests related to ISO/IEC 18000-63 have been removed from this document since these tests are described in ISO/IEC 18047-63;
- the frequency range is changed from 860-960 MHz to 860-930 MHz, as meanwhile all applicable global radio regulations are within this frequency range.

A list of all parts in the ISO/IEC 18047 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

Introduction

The ISO/IEC 18000 series defines the air interfaces for radio frequency identification (RFID) devices used in item management applications. ISO/IEC 18000-61, ISO/IEC 18000-62, ISO/IEC 18000-63 and ISO/IEC 18000-64 define the air interface for RFID devices operating at frequencies from 860 MHz to 930 MHz.

The ISO/IEC 18047 series provides test methods for conformance to the various parts of the ISO/IEC 18000 series.

Each part of the ISO/IEC 18047 series contains all measurements required to be made on a product in order to establish whether it conforms to the corresponding part of the ISO/IEC 18000 series. For this document, each interrogator and each tag shall support at least one of the types A or B or D.

NOTE Test methods for interrogator and tag performance are covered by the ISO/IEC 18046 series.

[Clause 6](#) describes all necessary conformance tests for ISO/IEC 18000-61.

[Clause 7](#) describes all necessary conformance tests for ISO/IEC 18000-62.

[Clause 8](#) describes all necessary conformance tests for ISO/IEC 18000-64.

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Information technology — Radio frequency identification device conformance test methods —

Part 6:

Test methods for air interface communications at 860 MHz to 930 MHz

1 Scope

This document specifies test methods for determining the conformance of radio frequency identification (RFID) devices (tags and interrogators) for item management with the specifications given in ISO/IEC 18000-61, ISO/IEC 18000-62 and ISO/IEC 18000-64. However, this document does not apply to the testing of conformance with regulatory or similar requirements.

The test methods require only that the mandatory functions, and any optional functions which are implemented, are verified. This can, 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 document are the following:

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

Parameters that are already included in regulatory test requirements are not included in this document.

Unless otherwise specified, the tests in this document are intended to be applied exclusively to RFID tags and interrogators defined in ISO/IEC 18000-61, ISO/IEC 18000-62 and ISO/IEC 18000-64.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 18000-61:2012, *Information technology — Radio frequency identification for item management — Part 61: Parameters for air interface communications at 860 MHz to 960 MHz Type A*

ISO/IEC 18000-62:2012, *Information technology — Radio frequency identification for item management — Part 62: Parameters for air interface communications at 860 MHz to 960 MHz Type B*

ISO/IEC 18000-64, *Information technology — Radio frequency identification for item management — Part 64: Parameters for air interface communications at 860 MHz to 960 MHz Type D*

ISO/IEC 19762, *Information technology — Automatic identification and data capture (AIDC) techniques — Vocabulary*