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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 960 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 960 MHz*



Reference number  
ISO/IEC 18047-6:2017(E)

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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. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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](http://www.iso.org/directives)).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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

This second edition cancels and replaces the first edition (ISO/IEC 18047-6:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

- Tag demodulation test setup now includes a monostatic setup with the use of a circulator;
- new tests for Tag link timings T5, T6 and T7 (defined in ISO/IEC 18000-63:2015 and related to delayed and in-process tag reply); and
- new tests related to ISO/IEC 18000-63:2015 like Tag memory overruns, Kill command, unauthorized write commands and optional commands that involve C-flag, ResponseBuffer, security features and untraceability.

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## Introduction

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 these devices operating at frequencies from 860 MHz to 960 MHz.

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

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

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

[Clause 5](#) describes all necessary conformance tests for ISO/IEC 18000-61.

[Clause 6](#) describes all necessary conformance tests for ISO/IEC 18000-62.

[Clause 7](#) describes all necessary conformance tests for ISO/IEC 18000-63.

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

[Clause 9](#) describes all necessary conformance tests for ISO/IEC 18000-63:2015, Clause 7.

[Clause 10](#) describes all necessary conformance tests for ISO/IEC 18000-63:2015, 7.5.