# INTERNATIONAL STANDARD

ISO/IEC 24770

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Information technology — Real-time locating system (RTLS) device performance test methods — Test methods for air interface communication at 2,4 GHz

Technologies de l'information — Système de localisation en temps réel (RTLS) méthodes dispositif de performance du test — Méthodes d'essai pour l'interface de communication de l'air à 2,4 GHz



ISO/IEC 24770:2012(E)



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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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# **Foreword**

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 24770 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

ISO/IEC 24770 cancels and replaces ISO/IEC TR 24770:2008.

# Introduction

ISO/IEC 24730 defines the air interfaces and an application programming interface for Real Time Locating Systems (RTLS) devices used in asset management applications.

This International Standard provides test methods for measuring performance of equipment compliant with ISO/IEC 24730-2.

ISO/IEC 24769 contains all measurements required to be made on a product in order to establish whether it conforms to the corresponding part of ISO/IEC 24730.

# Information technology — Real-time locating system (RTLS) device performance test methods — Test methods for air interface communication at 2,4 GHz

# 1 Scope

This International Standard defines the test methods for determining the performance characteristics of 2,4 GHz real time locating system (RTLS) equipment including tags, readers, and exciters which are applicable to the selection of equipment that conforms to ISO/IEC 24730-2 for specific applications. This International Standard does not apply to the testing in relation to regulatory or similar requirements.

The RTLS equipment performance parameters included in this International Standard include the mandatory direct sequence spread spectrum (DSSS) 2,4 GHz radio frequency beacon link between tags and readers. It includes the optional on–off keyed/frequency shift keyed (OOK/FSK) short range radio frequency link between tags and programmers. It also includes the optional magnetic air-interface between exciters and tags and between programmers and tags.

Unless otherwise specified, the tests in this International Standard apply exclusively to RTLS equipment defined in ISO/IEC 24730-2.

# 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 24730-2:2006, Information technology — Real-time locating systems (RTLS) — Part 2: 2,4 GHz air interface protocol

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

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