TECHNICAL REPORT

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Information technology — Radio frequency identification for item management — Implementation guidelines —

Part 3: Implementation and operation of UHF RFID Interrogator systems in logistics applications

Technologies de l'information — Identification par radiofréquence pour la gestion d'objets — Lignes directrices de mise en application —

Partie 3: Mise en application et fonctionnement des systèmes d'interrogation UHF RFID dans les applications logistiques

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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

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.

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.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

— type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;

— type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;

— type 3, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

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

ISO/IEC TR 24729-3, which is a Technical Report of type 3, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

ISO/IEC TR 24729 consists of the following parts, under the general title *Information technology — Radio frequency identification for item management — Implementation guidelines*:

— *Part 1: RFID-enabled labels and packaging supporting ISO/IEC 18000-6C*

— *Part 2: Recycling and RFID tags*

— *Part 3: Implementation and operation of UHF RFID Interrogator systems in logistics applications*

— *Part 4: Tag data security*

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Information technology — Radio frequency identification for item management — Implementation guidelines —

Part 3:
Implementation and operation of UHF RFID Interrogator systems in logistics applications

1 Scope

This part of ISO/IEC TR 24729 provides reference information and practical knowledge in the selection, installation and application of ISO/IEC 18000-6C RFID Readers. RFID Readers include fixed mounted (such as portal, conveyor, and wrap stations), handheld (tethered and wireless), and mobile mounted (such as those found on forklifts). This part of ISO/IEC TR 24729 presents guidelines to improve the performance of RFID data collection systems for more successful applications and to cover the approaches necessary to ensure that the operational requirements of the end user are met. Many of the techniques recommended are the result of practical tests in working environments. However, each application is different and thus the techniques recommended herein might not be applicable in all situations.

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 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)*

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