International Standard

ISO/IEC 15424

Information technology — Automatic identification and data capture techniques — Data carrier identifiers (including symbology identifiers)

Technologies de l'information — Techniques automatiques d'identification et de capture des données — Identifiants de porteuses de données (y compris les identifiants de symbologie)

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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 15424:2008), which has been technically revised.

The main changes are as follows:

— several new symbologies have been added;

— references to AIM as a registration authority have been removed;

— the extension method has been simplified.

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.

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Introduction

There is a need to identify the data carrier that a reader detects in autodiscrimination environments. The symbology identifier concept provides a standardized way for a device receiving data from a reader to differentiate between the data carriers. This document deals mostly with bar code symbologies; the terms symbology identifier, symbology and bar code are therefore used throughout this document although they are intended to apply to other data carriers as well.

This identification is achieved by the addition of an optional feature to readers enabling the reader to prefix a standard string of characters to data messages. This preamble contains information about the decoded symbol (or other data carrier) and any processing the reader has done. The information is not encoded or otherwise explicitly or implicitly represented in the symbol, except that the presence of some optional features can be detected by the reading equipment, whereas others require the reader to be expressly configured to implement them.

This document identifies symbologies for which a symbology specification

— is published in international standardization organisations, such as ISO, IEC and AIM Inc., or

— is proprietary but used in public applications.

In addition, there is a fixed number of symbologies which do not have a full standard but do have a reference document available from AIM Inc. These symbologies are included in this document because of their historical usage.

This document is intended to be read in conjunction with the relevant symbology specifications.

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Information technology — Automatic identification and data capture techniques — Data carrier identifiers (including symbology identifiers)

1 Scope

This document specifies the preamble message generated by the reader and interpretable by the receiving system, which indicates the bar code symbology or other origin of transmitted data, together with details of certain specified optional processing features associated with the data message.

This document applies to automatic identification device communication conventions and standardizes the reporting of data carriers from bar code readers and other automatic identification equipment.

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 19762, *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 19762 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1.1
code character
second character in the symbology identifier string, which usually indicates to the host the bar code symbology of the symbol which has been read

3.1.2
flag character
first character in the symbology identifier string, which indicates to the host that it and the characters following are the symbology identifier characters

3.1.3
modifier character
character following the *code character* (3.1.1) in the symbology identifier string, indicating optional features or processing applied to the symbol

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