### INTERNATIONAL STANDARD

#### ISO/IEC 15438

Third edition 2015-09-15

# Information technology — Automatic identification and data capture techniques — PDF417 bar code symbology specification

Technologies de l'information — Techniques automatiques d'identification et de capture des données — Spécifications pour la symbologie de code à barres PDF417





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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 | TC 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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is 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 15438:2006), of which it constitutes a minor revision.

#### Introduction

The technology of bar coding is based on the recognition of patterns of bars and spaces of defined dimensions. There are various methods of encoding information in bar code form, known as symbologies, and the rules defining the translation of characters into bars and space patterns and other essential features are known as the symbology specification.

Manufacturers of bar code equipment and users of bar code technology require publicly available standard symbology specifications to which they can refer when developing equipment and application standards. It is the intent and understanding of ISO/IEC that the symbology presented in this International Standard is entirely in the public domain and free of all user restrictions, licences and fees.

## Information technology — Automatic identification and data capture techniques — PDF417 bar code symbology specification

#### 1 Scope

This International Standard specifies the requirements for the bar code symbology known as PDF417. It specifies PDF417 symbology characteristics, data character encodation, symbol formats, dimensions, error correction rules, reference decoding algorithm, and a number of application parameters.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

 ${\sf ISO/IEC}$  646, Information technology — ISO 7-bit coded character set for information interchange

ISO/IEC 15415, Information technology — Automatic identification and data capture techniques — Bar code symbol print quality test specification — Two-dimensional symbols

ISO/IEC 15424, Information technology — Automatic identification and data capture techniques — Data Carrier Identifiers (including Symbology Identifiers)

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

ISO/IEC 19762-2, Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary — Part 2: Optically readable media (ORM)

ISO/IEC 24723, Information technology — Automatic identification and data capture techniques — GS1 Composite bar code symbology specification