
**Information technology — Automatic
identification and data capture
techniques — Data Carrier Identifiers
(including Symbology Identifiers)**

*Technologies de l'information — Techniques d'identification automatique et
de capture de données — Identificateurs de porteuses de données
(comprenant les identificateurs de symboles)*

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. 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 International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 15424 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*, in collaboration with CEN Technical Committee TC 225, *Bar coding*, and AIM International, Inc. It was based in part on the corresponding European Standard EN 796, *Bar Coding — Symbology Identifiers*, which is fully compatible with this International Standard.

Annexes A and B form a normative part of this International Standard. Annex C is for information only.

Introduction

The need exists to identify the data carrier 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 specification deals mostly with bar code symbologies, therefore the terms Symbology Identifier, symbology, and bar code are used throughout the document but 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 may be detected by the reading equipment, whereas others require the reader to be expressly configured to implement them.

This International Standard should be read in conjunction with the relevant symbology specifications.

Information technology — Automatic identification and data capture techniques — Data Carrier Identifiers (including Symbology Identifiers)

1 Scope

This International Standard applies to automatic identification device communication conventions and standardizes the reporting of data carriers from bar code readers and other automatic identification equipment. It specifies a 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.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 646:1991, *Information technology — ISO 7-bit Character Set for information interchange*.

EN 1556, *Bar coding — Terminology*.

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in EN 1556 and the following apply.

3.1

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

3.2

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

3.3

modifier characters

remaining characters following the code character in the symbology identifier string

3.4

FNC1

special function character used for specific purposes in certain symbologies