
**Information technology — Automatic
identification and data capture
techniques — GS1 Composite bar code
symbology specification**

*Technologies de l'information — Techniques automatiques
d'identification et de capture des données — Spécifications de la
symbologie des codes à barres du Composant GS1*

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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.

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 24723 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

This second edition cancels and replaces the first edition (ISO/IEC 24723:2006), which has been technically revised.

Introduction

Composite symbologies are a class of bar code symbology, the principal distinguishing feature of which is that they comprise two, or more, components, each of which is a distinct symbol, but which contain a set of related data. Typically one component is a linear symbol containing primary data, which can be read on its own in some areas of the application. The other component(s) is a two-dimensional symbol containing supplementary data which qualifies the primary message, and requiring all components to be read to extract the complete message. The GS1 Composite symbology is one such symbology. The use of the symbology is intended to comply with the GS1 General Specifications.

A GS1 Composite symbol consists of a linear component (encoding the item's primary identification) associated with an adjacent 2D component (encoding supplementary data, such as a batch number or expiration date). The GS1 Composite symbol always includes a linear component so that the primary identification is readable by all scanning technologies, and so that 2D imagers can use the linear component as a finder pattern for the adjacent 2D component. The GS1 Composite symbol always includes a multi-row 2D component, for compatibility with linear and 2D imagers, and with linear and rastering laser scanners.

GS1 Composite symbols are intended for encoding identification numbers and data supplementary to the identification in accordance with the GS1 General Specifications. The administration of the numbering system by GS1 ensures that identification codes assigned to particular items are unique world-wide and that they and the associated supplementary data are defined in a consistent way.

Information technology — Automatic identification and data capture techniques — GS1 Composite bar code symbology specification

1 Scope

This International Standard defines the requirements for the GS1 Composite symbology. It specifies the GS1 Composite symbology characteristics, data character encodation, symbol formats, dimensions and print quality requirements, error correction rules, and reference decoding algorithms. For those linear and 2D components of GS1 Composite symbols with published symbology specifications, those published specifications apply, except as specifically noted in this International Standard.

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

ISO/IEC 15416, *Information technology — Automatic identification and data capture techniques — Bar code print quality test specification — Linear symbols*

ISO/IEC 15417, *Information technology — Automatic identification and data capture techniques — Code 128 bar code symbology specification*

ISO/IEC 15420, *Information technology — Automatic identification and data capture techniques — EAN/UPC bar code symbology specification*

ISO/IEC 15438, *Information technology — Automatic identification and data capture techniques — PDF417 bar code symbology specification*

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 24728, *Information technology — Automatic identification and data capture techniques — MicroPDF417 bar code symbology specification*

GS1 *General Specifications* (GS1, Brussels, Belgium)