

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

Part 2: Optically readable media (ORM)

ICS 01.040.35; 35.040

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Summary of pages

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Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary — Part 2: Optically readable media (ORM)

*Technologies de l'information — Techniques d'identification
automatique et de capture de données (AIDC) — Vocabulaire
harmonisé —*

Partie 2: Médias lisibles optiquement (ORM)



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Documents

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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.

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ISO/IEC 19762-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

ISO/IEC 19762 consists of the following parts, under the general title *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary*:

- *Part 1: General terms relating to AIDC*
- *Part 2: Optically readable media (ORM)*
- *Part 3: Radio frequency identification (RFID)*

Introduction

ISO/IEC 19762 is intended to facilitate international communication in information technology, specifically in the area of automatic identification and data capture (AIDC) techniques. It provides a listing of terms and definitions used across multiple AIDC techniques.

Abbreviations used within each part of ISO/IEC 19762 and an index of all definitions used within each part of ISO/IEC 19762 are found at the end of each document.

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

Part 2: Optically readable media (ORM)

Scope

This part of ISO/IEC 19762 provides terms and definitions unique to optically readable media (ORM) in the field of automatic identification and data capture techniques. This glossary of terms enables the communication between non-specialist users and specialists in optically readable media through a common understanding of basic and advanced concepts.

Classification of entries

The numbering system employed within ISO 19762 is in the format nn.nn.nnn, in which the first two numbers (nn.nn.nnn) represent the “Top Level” reflecting whether the term is related to 01 = Common to All AIDC Techniques, 02 = Common to All Optically Readable Media, 03 = Linear Bar Code Symbols, 04 = Two-dimensional Symbols, and 05 = Radio Frequency Identification. The second two numbers (nn.nn.nnn) represent the “Mid Level” reflecting whether the term is related to 01 = Basic Concepts/Data, 02 = Technical Features 03 Symbolology, 04 = Hardware, and 05 = Applications. The third two or three numbers (nn.nn.nnn) represent the “Fine” reflecting a sequence of terms.

The numbering in this part of ISO/IEC 19762 employs “Top Level” numbers (nn.nn.nnn) of 02, 03 and 04.

Terms and definitions

02.01.01

pixel

picture element

smallest element of a display surface that can be independently assigned attributes such as color and intensity

02.01.02

element

⟨symbol character or symbol⟩ single **bar** or space in a bar code **symbol** or a polygonal or circular single cell in a matrix symbol, which according to symbolology rules form a symbol **character**

NOTE The width of individual elements may be expressed in **modules**, or in multiples of the **X dimension**.

02.01.03

resolution(1)

smallest distance between indications of a measure's attribute that can be meaningfully distinguished

NOTE The attribute may be amplitude, color, distance, etc.

02.01.04

resolution(2)

width of the narrowest **element** capable of being read by the scanner equipment under test

02.01.05

X dimension

specified width of the narrow **elements** in a bar code **symbol** or the specified width of a single element in a two-dimensional **symbol**

cf. **Z dimension**

02.01.06

Y dimension

specified height of the **elements** in a linear bar code **symbol** or a **row** in a multi-row **symbolology**

cf. **bar height**

02.01.07

decoding

process of restoring information from its coded representation to the original form

[IEC 60050-702 702705-15]

02.01.08

decodability

measurement of relations from combinations of **bars** and spaces together or alone according the reference decode **algorithm**

NOTE The value gives a measurement of how well a bar code **symbol** can be **decoded**.

02.01.09

effective aperture

apparent **field of view** of a scanner or similar device determined by the smaller of the **spot** size and the physical **aperture** of the scanner for reception of reflected light

02.01.10

reading distance

distance (or range of distances) from the exit window of a scanner at which the scanner can reliably **read** a **symbol**

NOTE The minimum reading distance is equal to the **optical throw** and the maximum reading distance is equal to the **range** of the scanner.

cf. **depth of field, optical throw, range**

02.01.11

depth of field(1)

range between the minimum and maximum distances from the **sensor** at which the focused image is acceptably shaped

02.01.12

depth of field(2)

range of distances over which a scanner can reliably **read** a **symbol** of given characteristics which is equal to the range of the scanner minus its **optical throw**

cf. **optical throw, range, reading distance**

02.01.13**optical throw**

distance from the face of a scanning device to the beginning of the **depth of field**, for a **symbol** of given characteristics

cf. **depth of field, range, reading distance**

02.01.14**read rate**

percentage representing the number of good **reads** per 100 attempts to read a particular **symbol**

02.01.15**character**

member of a set of elements used by agreement for the organization, representation or control of information

NOTE Characters may be letters, digits, punctuation marks or other symbols and, by extension, function controls such as space shift, carriage return or line feed contained in a message.

[IEC 60050-702 702-05-10]

02.01.16**auxiliary character/pattern**

non-data **character**

EXAMPLE **start character, stop character**, center pattern, **delineator** pattern, **latch character** mode indicator, **shift character** code subset change characters, and function characters.

cf. **overhead**

02.01.17**data character**

single **numeric** digit, alphabetic **character** or punctuation mark, or control **character**, which represents information

cf. **symbol character**

02.01.18**font**

set of characters of a specific style and size of graphic type

NOTE 1 In text processing, a font is a set of **characters** of the same size and style; for example, 9-point Helvetica.

NOTE 2 Also used analogously to refer to the set of **bar code symbol** characters for a **symbolology** in on-demand printing equipment.

02.01.19**human readable character**

eye-readable character

representation of a **bar code, data character, or data check character** in a standard eye-readable alphabet or numerals, as distinct from its machine-readable representation

02.01.20**symbol**

graphic representation of a concept that has meaning in a specific context

[ISO/IEC 2382-1, 01.02.07]